



**National Institute of Technology
Tiruchirappalli - 620 015**

Institute Day 2015

20th April, 2015

Annual Report 2014 -15



INSTITUTE DAY 2015



April 20, 2015



National Institute of Technology
Tiruchirappalli - 620 015, Tamilnadu, India.

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Report on Academic Excellence

-Dr. S. Arul Daniel

The Chief Guest of the Institute Day 2015, **Mr. P. Srikar Reddy**, MD & CEO, Sonata Software, **Dr. Srinivasan Sundarrajan**, Director, NIT Tiruchirappalli, Deans, Heads of the Department, Faculty, Staff, Mr. Sudhan Subramani, President, Students' Association, Ms. Niroshni Subramanian, Vice President, Invited guests, the Press and the other media representatives

GOOD EVENING AND A WARM WELCOME

National Institute of Technology, Trichy has carved a mark on this academic year 2014-2015 by registering a solid progress and remarkable achievements throughout the year. The Institute proudly recognizes the significant contributions of the faculty members and the students' in taking this Institute forward.

Among the top reputed technical institutes of the country, NITT is in a leading position in terms of academic reforms and research. Inter-disciplinary education and state-of-art research drive our institute to be at a par with the global bench-marks. Industry-institute interaction is evident with the participation of experts from Industry delivering lectures for students at all levels. The Institute has consistently worked for up-gradation of academic curriculum, delivery and evaluation. There has been a persistent effort from the teams initiated with members from various disciplines to work along with reputed institutions and leading Research and Development establishments in the major thrust areas such as energy, electronic packaging, automobiles and construction technology. Students had undergone summer internships in leading universities in USA, Germany, Canada, Singapore, and other research organizations through various agencies such as DAAD, MiTACs etc.

A major shift in evaluation practice was introduced this year by the Senate of this Institute. Alternate evaluation models apart from conventional examination patterns were thereby introduced. Formative Assessment introduced for B.Tech. programme in NITT is a first of its kind in Indian Technical Education. By this scheme, a student who has difficulty in few courses with the conventional examination model, is permitted to undergo 30 hours of rigorous engagement in lab exercises, field visit, assignments and open book test and

thereby allowed to successfully complete the course. NITT is the first Institute in our Country to introduce a Student Senate in this academic year. Students who are Class representatives and Student Council office bearers are the members of this body. This senate holds a signature brand by involving the students in academic decision making activities. This engagement in due course will provide a natural environment for the faculty and students to promote collaborative research and consultancy, and several MoUs partnered with industries and research Institutes will be reaped.

To be certain of the uniqueness that we hold, NBA accreditation for all under graduate programmes has been sought to ensure that our excellence stands on par with the Institutes worldwide. Through this process, the programmes are critically appraised to ascertain that the institute or the programme continues to meet and exceed the norms and standards prescribed by international agencies. B.Tech. Programmes in EEE, Production Engineering, Civil Engineering and MME were accredited for five years while B.Tech. Programmes in Chemical and ECE were accredited for two years.

The students of NITT had proved their mettle this year also by sustaining their placement records at higher percentages despite global sluggishness. The overall percentage of placements as on 10.04.2015 for under graduate programme is 86.6% and Post Graduate Programme is 64.6%. The placement process is still in progress. International placements have enriched our position this year with many multinationals like Facebook and Microsoft providing job placements for our students in the United States. With the placement season still going on, we aim to end the year with 100 % UG and 70 % PG placements.

I now bring out the contributions of various disciplines that has flaunted its ability to bring numerous laurels for our prestigious institute.

Department of Architecture had a phenomenal increase in the research phase, publishing number of articles in international and other national and international conferences publications. The department has organised various workshops on painting and other related arts in reputed colleges. With students of extreme excellence, they have bagged prizes in NASA 2015, NCC CATC2 and Inter NIT swimming meet.

Department of Chemical Engineering has made a solid progress by taking up research projects worth Rs.88.69 lakhs from SCSP/TSP and the Asia Foundation. Faculty Members of Chemical Engineering have bagged prestigious laurels from Engineering Watch, NIT Trichy.

This department has so far recorded the highest number of papers published in various renowned national and international journals. Two scholars were awarded doctorate degree this year. To add more, they have organized various technical workshops on creative concepts.

Faculties and students in the Department of Chemistry have contributed their efforts together in publishing papers in reputed international and national journals, organising lectures, workshops, attending guest lectures, winning laurels and have undertaken research projects worth 78 lakhs sponsored by CSIR, DAE-BRNS and DST-SERC(Major research project). It brings pride to our institute, when Dr.R. Karvembu's contribution is appreciated as the top cited author in a Journal of organometallic Chemistry(Elsevier). Department of chemistry had produced 5 doctorate degree and had 3 books authored by their faculty and published by reputed publishers.

Faculty and Students in Civil Engineering have been won laurels in Vista India, ICI Ultra Tech and International Academy of Science, Engineering & Technology. They have published their works of excellence in prominent international and national journals, authored a book and have equipped themselves by attending and organizing various guest lectures, workshops and conferences. The Department has produced 6 Ph.D. s. earned MHRD, Govt. of India sponsored projects worth Rs. 1.78 crore and have equipped their laboratory with equipment's worth Rs. 37, 99,950.

Students were acknowledged and appreciated for their significant efforts by IIT Kanpur, NIT Warangal, IIT Madras, IEE, and other reputed institutions. The Department has undertaken various research projects worth 373.16 lakhs from MHRD, BHEL, SERB, TNCSC, DST and Southern Railway. The Department had published research papers in various reputed journals and have brought pride to the institute by winning patent rights for their enormous efforts.

IIT Kharagpur, Robotics and Embedded System of USA and other prestigious institutions have appreciated and awarded the students of Electronics and Communication Engineering for their unbeaten contributions. Faculty have been awarded for presenting Best Paper in International Conferences. They have published numerous articles in high impact factor journals, invited for guest lectures and have organized various workshops to sharpen the knowledge of students. Has produced 6 Ph.Ds and authored 2 books published by Springer publications.

Department of Instrumentation and Control Engineering have organized various workshops on Intelligent Systems for Flight Control, Product Design Technologies and Entrepreneurship Awareness Program and other such technical workshops. Students have bagged numerous laurels in their areas of interest in IIT Kharagpur, IIT Madras and other institutions. Industrial Experts from top tier companies and renowned professors from well known institutions were made to interact with students and faculties to enrich their knowledge and share their experience in that domain. Many such efforts were published in the form of articles in established international and national journals.

Department of Mathematics had organized national conferences on Analysis And Applied Mathematics (NCAAM 2014) and FACT'15. Research Papers were contributed by the students and faculties in high impact factor journals. Seminars, workshops were conducted to bring together all the talents under one roof. Dr. K. Murugesan won the TamilNadu Scientist award for his research contributions by the Tamilnadu State Council for Science and Technology.

Dr. Suresh of the Department of Mechanical Engineering has been awarded the Young Scientist by DST and Dr. Anand of the Department has been awarded 2015 Endeavour Executive Fellowship by the Australian Government. Students have also won laurels in Canadian Commonwealth Scholarship by the Canadian Government. Department had organized various workshops, seminars, conferences in the national and international level. Students and faculty had published quality papers in reputed journals. 9 Research project has been undertaken by the department worth more than 2 crores sponsored by DST, MHRD, UGC-DAE and such prominent sponsors.

Dr. K. Sivaprasad of the Department of Metallurgical and Materials engineering has received prestigious TR Anantharaman Faculty Fellowship. Students have won Best Paper Award, Summer Internship Award and other such legendary awards. The department works on projects worth 168 lakhs from ISRO, DST, MHRD and UGC- DAE. There were numerous seminars, conferences, workshops organized by the department. Faculty along with students had published their research works in top journals.

Faculty of Physics Department along with their research scholars won laurels from BARC, Mumbai, NDE2014 (ISNT), India and Slovak Academy Information Agency (SAIA). Their works had been published in top ranked journals in national and international level and workshops, seminars, international conferences were conducted during this academic year.

Many industrial experts were invited to share their knowledge with students and faculty. Research projects were sponsored by Council of Scientific and Industrial Research, Human Resource Development Group and by DST for Rs. 38, 27,200. Higher end equipment's like Atomic Force Microscope, Nd-YAG laser (SIF), Micro Raman spectrometer (SIF) and others were purchased for Rs. 2.84 crore. Department of Physics had produced 5 doctorate degree.

Faculty & Students of Production Engineering had published papers in high impact factor journals in international level. Had organised and attended various workshops, seminars and conferences. Research projects worth Rs. 25 lakhs were sponsored by Science and Engineering Research Board, New Delhi, Gas Turbine Research Establishment and (GTRE), Bangalore. Department of Production had purchased Laser micromachining workstation, Roller and Roller wear tester and other high demanding equipment worth Rs. 1.59 crores.

Department of Energy & Environment had organized conferences, seminars, symposium, special lectures, summer school, winter school and workshops. Has undertaken project sponsored by BHEL worth Rs. 15 lakhs. Faculty and students have published their research papers in reputed national and international journals. Faculties have authored 3 books which were published by Taylor & Francis Group of publishers.

Centre of Excellence in Corrosion and Surface Engineering (CECASE) is progressing with their efforts to achieve international Collaboration with R&D Centres situated in US, UK, Australia, Spain, Belgium and Denmark, working on the theme of Corrosion and Surface Engineering. Faculties and students have presented papers in International and national conferences in top renowned institutions and have published papers in international journals. Sponsored project proposal is submitted to CMPDI, Govt. of India, worth of Rs. 3.0 Crores is under active consideration. Results are awaited.

The Computer Support Group has enabled a campus agreement with Microsoft for 1 year worth 10.20 lakhs, has upgraded MATLAB Base License with additional tools worth 5.07 lakhs and has purchased other equipment's and software's worth 77.29 lakhs. Department had organised various workshops on Windows & Linux System Administration, Cloud Computing, AJAX.

The Institute has a Modern Central Library with more than 2.5 lakhs of documents consisting of Technical books, Reports, Standards, CD-ROMS, AV Educational DVDs and

back volumes of Journals. Digital Knowledge Centre has been established and Wi-Fi facility has been provided for laptop users. RFID Technology of Document Identification and Library Security System have been implemented in the Central Library for providing better circulation service to the users. Various workshops, seminars have been conducted and papers have been published in reputed journals.

NITT has proved its mettle not only in academics but also in sports and games. Students have won many laurels in Basket Ball, Shuttle Badminton, Table Tennis, and Volley Ball in IIT Kharagpur, IIT Kanpur , IIT Madras, NIT Warangal, NIT Surat and in various other reputed institutions.

‘A’ flight has started regular parades from August 8, 2014 with total strength 50. 40 minutes of foot & weapon drill followed by 80 minutes of theory classes on the subjects like General Service Knowledge, Aero-modeling, Air Frame, Aero-engine, Principles of Flight, Health and Hygiene, First aid etc. were conducted during the two hours of Parade. ‘A’ Flight had also organized Interaction drive by the Indian Air Force on 5th Sep'2014 in NITT campus, where students had a chance to interact with the Indian Air Force Officials. NCC cadets had initiated campaign on "NO TO PLASTIC BAG" and distributed paper bags to the shops near the 3(TN) Air Sqn (Tech) NCC, Crawford nagar, Trichy as an awareness campaign on 25th Oct'2014.

The World Bank is in the phase of revolution for systemic transformation of country’s technical education system making it globally competitive and willing to assist the Government of India to launch a Technical Education Improvement Programme (TEQIP) as a long term programme of 10-12 years and in three phases. Ministry of Human Resource Development, Government of India through NPIU have competitively selected 127 institutions including 18 centrally funded institutions, 68 State funded institutions, 22 private unaided institutions and 19 Polytechnics spread across 13 States of India to participate in the first phase of TEQIP during 2003-09. On par, a sequel project is planned as TEQIP-II, which focusses on scaling up PG education and demand driven R & D and innovation, strengthening institutions to produce high quality engineers for better employability and also to enhance Institutional and system management effectiveness. NITT is at the peak of ecstasy that under TEQIP II, our faculty members have been appointed as the office bearers as Director, advisor, coordinator, and Nodal Officer for procurement, academic, equity plan, finance and MIS.

Equipments worth INR 5.63 crore and learning resources worth Rs. 0.30 crore were purchased. Purchase of ICT enabled classroom equipment's (Virtual class room) for 10 TEQIP-II sponsored PG departments worth Rs. 1.34 crore. As a result of which Students and faculty are highly benefitted and the results are published in renowned journals.

Prime concern towards our girl students has resulted in training them for martial arts and yoga for self defense and motivation. In order to enhance the mettle of students TEQIP had an equity plan to set up a counselling and guidance cell through MoU with Sowmanasya Hospitals and Institute of Psychiatry, Tiruchirappalli. Students are further encouraged to build their inner self with self-determination and to stand up exceptionally distinctive among the whole crowd. Financial Status as on 31.3.2015 is Rs. 11.5 crore (Total Fund Allocation + Grant Received).

To end with, this academic year has gyrated NITT to reach greater heights. We are all delighted for the faculties and the students who hold a virtuous relationship in accomplishing triumph together. We would further keep flourishing in all our endeavours with a focus to cultivate fraternal spirit among the students and faculties and to bring about effective linkage between technical institutions industry & society.

INSTITUTE DAY PRIZE WINNERS LIST – APRIL 2015

PRIZE WINNERS (UG)

B.Tech. CHEMICAL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	102110002	A MONICA ROY	9.47
	2	102110048	PULKIT SRIVASTAVA	9.44
	3	102110014	SRIRAM C	9.3
2011	1	102111008	ANIRUDH RAJARAM	9.72
	2	102111036	RAJAT SUBHRA GHOSH	9.19
	2	102111031	NIRUPAMA M RADHAKRISHNAN	9.19
	3	102111064	VIKRAM RAGHAVENDHAR R	9.14
2012	1	102112041	N HARINI	9.82
	2	102112052	R BHARATH VENKATESH	9.71
	3	102112010	ASHWIN G	9.09

B.Tech. CIVIL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	103110092	S SVETHA	9.73
	2	103110089	TUMMALAPALLI NAGA SRINIVAS	9.59
	2	103110005	AKSHAY SUKHWANI	9.59
	3	103110035	KARTHIKA RAMESH	9.51
2011	1	103111054	P S CIBI PRANAV	9.72
	1	103111057	PIYUSH AGARWAL	9.72
	2	103111062	RAHUL JALAN	9.67

	3	103111052	NIKITAA SIVAAKUMAR	9.39
2012	1	103112083	S GIRISH	9.83
	2	103112092	SIDDHANT CHANDRA	9.72
	3	103112043	KEERTHI VASAN V	9.5
	3	103112071	PAVITHRAA S	9.5

B.Tech. COMPUTER SCIENCE AND ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	106110013	BHARADWAJ MANASA	9.93
	2	106110006	ANGELYN ARPUTHA B	9.67
	3	106110019	DEV AGARWAL	9.65
2011	1	106111037	HARISH K	9.82
	2	106111007	AKSHAY UTTAMANI	9.77
	3	106111095	T SRI ARAVINDA KRISHNAN	9.68
2012	1	106112033	HARI NARAYANAN S	10
	2	106112012	ARJUN B	9.93
	3	106112051	L CHARUMATHI	9.66

B.Tech. ELECTRICAL AND ELECTRONICS ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	107110069	RAMESH K GOVINDARAJAN	9.53
	2	107110059	P DINESH	9.47
	3	107110103	VIVEKANANDAN B	9.44
	1	107111029	D SUZITH	9.61

2011	2	107111047	M J RAGHUNATHAN	9.52
	3	107111061	PARIKSHIT DEY	9.41
2012	1	107112030	GURU PRAANESH R	10
	2	107112031	GURU RAGHAV R	9.94
	3	107112074	ROUNAK MEYUR	9.88

B.Tech. ELECTRONICS AND COMMUNICATION ENGINEERING

Batch	Rank	Roll Number	Name	CGP A
2010	1	108110061	PADMAPRIYA DURAI SAMY	10
	2	108110090	SNEHA BALAN	9.93
	3	108110048	MADHUVANTHI G	9.81
2011	1	108111052	PRASANNA R	9.95
	2	108111037	M GOWTHAMI JAYASHRI	9.89
	3	108111003	ADITHYARAGHAV THIRUMALAI ANANTHAMPILLAI	9.8
2012	1	108112102	VINAYAK SURESH	10
	2	108112060	PYDIMARRI V S SURYA PHANEENDRA	9.59
	3	108112107	Y CHAKRADHAR REDDY	9.48

B.Tech. INSTRUMENTATION AND CONTROL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	110110036	JADHAV SAROJ SUDAM	9.6
	2	110110096	ZAID MANZOOR KHAN	9.38
	3	110110008	ANEESH KULSHRESTHA	9.2
2011	1	110111050	P SRILAKSHMI	9.72

	2	110111064	RAHUL SRIVASTAVA	9.49
	3	110111004	AKSHAYA RANGARAJAN	9.28
2012	1	110112030	HARISH K	9.83
	2	110112071	S DEEPAK	9.67
	3	110112092	V RENUKA	9.48

B.Tech. MECHANICAL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	111110066	R BHARADWAJ	10
	2	111110063	PRASHANTHI R	9.78
	3	111110022	BANGAR SARIKA SHIVAJI	9.63
2011	1	111111006	ADYASHA DASH	9.76
	2	111111047	KARTHIK VIJAYAKUMAR	9.52
	3	111111036	DIVYAKANTH JAIN K	9.48
2012	1	111112090	SUBRAMANIAM B	9.54
	2	111112064	PADMEYA PRASHANT INDURKAR	9.5
	3	111112067	PRANAV SRIGANESH	9.4
	3	111112103	VIKASH KUMAR	9.4

B.Tech. METALLURGICAL AND MATERIALS ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	112110045	SANDEEP AWASTHI	9.63
	2	112110021	R TARUNIKA	9.34
	3	112110012	J R SHALINI	9.05
2011	1	112111009	APOORVA SARAF	9.6

	2	112111035	PREETHI S	9.57
	3	112111008	ANANYA RAJAGOPAL	9.53
2012	1	112112058	VRINDAA SOMJIT	9.94
	2	112112050	SRINIVASA RAKESH CHEETHIRALA	9.53
	3	112112032	MUKKA ANUDEEP	9.51

B.Tech. PRODUCTION ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2010	1	114110098	CHANDRA VINOTH S	9.71
	2	114110089	VIJAY VENKATESH S	9.48
	3	114110001	A M ANIRUDH	9.45
2011	1	114111047	NACHIAPPAN V	9.87
	2	114111052	PONNARASI RANJANA S	9.62
	3	114111055	R ABHISHIEKH	9.56
2012	1	114112065	PRAVIN NATH J	9.87
	2	114112072	RANGARAJAN P	9.44
	3	114112089	SUMIT SHEKHAR	9.33

B.Tech. I YEAR Batch: 2013-14

Batch	Rank	Roll Number	Name	CGPA
2013	1	112113062	YASHVI SINGH	9.89
	2	102113012	B SOUNDARYA	9.8
	3	111113094	VAISHNAVI RAMASWAMY	9.78

B.Arch. ARCHITECTURE

Batch	Rank	Roll Number	Name	CGPA
2009-2010	1	101109053	MADHUBALA A	8.93
	2	101109029	S LAKSHMI	8.74
	3	101109025	SIDHARTH SARCAR	8.7
2010-2011	1	101110018	MONICA S	9.69
	2	101110011	VIVEKARASAN M	9.17
	3	101110041	PRASHANTHINI RAJAGOPAL	8.56
2011-2012	1	101111011	R SWARNA LAKSHMI	8.8
	2	101111017	SHUBANI CHANDRA J	8.64
	3	101111053	ATHIRA B	8.52
2012-2013	1	101112043	SWETHA BHARGAVI A	9.02
	2	101112030	R VIDHYA	8.91
	3	101112004	AKASH RAJ	8.86
2013-2014	1	101113006	ANAGHA D	9.3
	2	101113044	SNEHA MARIA VARGHESE	8.82
	3	101113032	OISHWARYA SARKAR	8.66

INSTITUTE DAY PRIZE WINNERS – APRIL 2015

TOP THREE RANK HOLDERS (PG)

M.Tech. CHEMICAL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	202112003	RONNIE KIRAN MATHEW	9.78
	2	202112018	ARUN S	8.8
	3	202112006	MADHURI LAKHOTIA	8.72
2013-2014	1	202113012	TUSHANT GHODE	9.48
	2	202113003	TONGE ASHISH BALAJI	8.98
	3	202113002	RAHUL KUMAR GUPTA	8.9

M.Tech. ENERGY ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	202312011	SNEHA E MAHESH	9.81
	2	202312001	PREM KUMAR T	9.55
	3	202312012	SACHIN S NAIR	9.17
	3	202312020	M VAISHNAVI	9.17
2013-2014	1	202313003	REMYA G	9.81
	2	202313009	ANUPAM KRISHNAN	9.29
	3	202313015	PISHARODY ASHWIN R	9.17

M.Tech. PROCESS CONTROL AND INSTRUMENTATION

Batch	Rank	Roll Number	Name	CGPA
	1	202212002	ABY THOMAS	9.05

2012-2013	2	202212016	BABISHA BABU V K	8.95
	3	202212011	VEENA MATHEW	8.87
2013-2014	1	202213018	VIVEK A	9.29
	2	202213010	RONISH SIMON	9.16
	3	202213019	VINOD SHARMA	8.97

M.Tech. ENVIRONMENTAL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	203412020	K BABY SHEENA	9.48
	2	203412003	GUNA SHEELA M	9.45
	3	203412004	SOWMIYA S	9.23
2013-2014	1	203413022	DHIVYA S	9.29
	2	203413017	ASWATHY P	9.24
	3	203413004	TUSI MANDAL	9.24
	3	203413001	JINISHA R	9.17

M.Tech. STRUCTURAL ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	203212021	NIVETHITHA A P	9.34
	2	203212020	ABINAYA V	9.06
	3	203212017	HONEY VERMA	8.95
2013-2014	1	203213023	POTHULA SATYANARAYANA	9.0
	2	203213019	MACCHA HEMANTH YADAV	8.71
	2	203213015	SABAREESAN M	8.71
	3	203213008	SABIN K V	8.67

M.Tech. TRANSPORTATION ENGINEERING AND MANAGEMENT

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	203112016	SONALI SNEHAJAN	9.55
	2	203112027	DIVYA S	9.3
	2	203112029	ISWARYA S	9.3
	3	203112021	VANDANA V	9.27
2013-2014	1	203113004	KARTHIK K R	9.43
	2	203113026	NOOJILLA SATYA LAKSHMI APARNA	9.21
	3	203113007	NAVYATHA METTA	9.19

M.Tech. COMPUTER SCIENCE

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	206112015	SHANKAR LAL AGARWAL	9.52
	1	206112028	VARADHAN V V	9.52
	2	206112001	DIVYA PATEL	9.16
	3	206112018	ANU JAMES	8.92

M.Tech. COMPUTER SCIENCE AND ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2013-2014	1	206113004	VIDYA T	9.93
	2	206113020	SANJIV KUMAR	9.29
	3	206113001	ANNAM RAJA SHEKHAR REDDY	9.1
	3	206113015	GUBBA NEERAJA	9.1

M.Tech. POWER ELECTRONICS

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	207212016	R NARENDRA SATHVIK	9.39
	2	207212017	T ASWINI	9.32
	3	207212024	THANNEERU GOWRI SANKAR	9.23
2013-2014	1	207213024	JADA VENU	9.32
	2	207213028	HASANAPURAM PRIYANKA	9.08
	3	207213007	CHINTHAKINDHI VINAY	9.03

M.Tech. POWER SYSTEMS

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	207112018	ASHA RADHAKRISHNAN	9.76
	1	207112011	ABHILASH R S	9.76
	2	207112002	PERIYASAMY A	9.37
	3	207112012	PADARTHI RAMESH	9.13
2013-2014	1	207113008	ARAVIND RAJ A	9.84
	2	207113004	GOLLAPALLI RAJESH	9.47
	3	207113009	MAMIDI TALUPULU BABU	9.39

M.Tech. COMMUNICATION SYSTEMS

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	208112015	SURUCHI KUMARI	9.67
	2	208112011	RENJITH H KUMAR	9.47
	3	208112008	BISHWAJEET SAH	9.26

2013-2014	1	208113003	SRIRAM P	9.55
	2	208113008	PATEL JAY KAUSHIKKUMAR	9.24
	3	208113024	B VINAY KUMAR	9.19

M.Tech. VLSI SYSTEM

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	208212011	GANTASALA SRINIVAS	9.86
	2	208212005	MUHAMMED ASWIM C	9.55
	3	208212015	SANDEEP K	9.41
2013-2014	1	208213010	SHAH VIRAG HARESHKUMAR	9.76
	2	208213008	RAHUL P R	9.14
	3	208213002	DEVAREDDY MOKSHA	9.05

M.Tech. INDUSTRIAL SAFETY ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	211212027	UNDRALA ANUSHA	9.52
	2	211212026	BINEESH P	9.24
	3	211212013	ANKUSH AGRAWAL	9.08
2013-2014	1	211213012	MINHAJ AHMED ANSARI	9.62
	2	211213025	SURAJ VERMA	9.46
	3	211213027	MANISH KUMAR	9.1

M.Tech. THERMAL POWER ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	211312030	JAGTAP AMOL SHIVAJI	9.75
	2	211312009	ANEESH CHANDRAN R	9.34
	3	211312012	SUMIT RAJ	9.2
2013-2014	1	211313020	AKASH SHRIVASTAVA	9.35
	2	211313029	VEEPURU BHARGAVI	9.27
	3	201313027	SATHISHKUMAR J	9.24

M.Tech. MATERIALS SCIENCE AND ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	212212024	ARJUN VARMA R	9.91
	2	212212002	MANU HARILAL	9.53
	3	212212004	DIVESH KUMAR C	9.16
2013-2014	1	212213004	JITHIN THOMAS K	9.3
	2	212213005	KOUSIK POLLEY	8.85
	3	212213018	B BALACHANDIRAN	8.8

M.Tech. WELDING ENGINEERING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	212112018	JAZEELRAHMAN CHUKKAN	9.52
	2	212112007	SIVA PRASAD M	9.49
	3	212112016	PASUPULETI CHANDRA BABU NAIDU	9.31
	1	212113010	MORE SACHIN ASHRUBA	9.9

2013-2014	2	212113009	MADIGA NEELAKANTA	9.41
	3	212113011	YANALA CHANDRASHEKHAR REDDY	9.15

M.Tech. INDUSTRIAL METALLURGY

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	212312009	HARISH CHANDRAN H	9.43
	2	212312005	AJAY JAYARAM	9.1
	3	212312015	MEKALA CHINABABU	9.04
2013-2014	1	212313002	SRIDHARAN G	9.51
	2	212313012	T NAGABHUSHANAM REDDY	9.14
	3	212313004	ABHIJITH S	9.09

M.Tech. INDUSTRIAL ENGINEERING AND MANAGEMENT

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	214212022	SINKER SAYALI PRADEEP	9.45
	2	214212015	ADARSH KUMAR SINGH	9.3
	3	214212001	HAJARE SHASHANK VIJAYKUMAR	9.2
2013-2014	1	214213006	SURA V PAVAN KUMAR	9.64
	2	214213027	RAMYA C	9.42
	3	214213022	N SREE PHANI POOJA	9.31

M.Tech. MANUFACTURING TECHNOLOGY

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	214112011	RAHUL V S	9.3

	2	214112004	NIKHIL M	9.05
	3	214112024	ASHISH MISHRA	8.95
2013-2014	1	214113030	SHELKE MAHESH ANNARAO	9.47
	2	214113023	RISHABH SHRIVASTAVA	9.2
	3	214113012	R JAYARAM	9.13

M.Tech. NON-DESTRUCTIVE TESTING

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	213112027	SARATH S	9.25
	1	213112007	ANIL KIRSHNAN A G	9.25
	2	213112018	SATWANT SINGH	9.18
	3	213112021	TADPATRIKAR TEJAS SHRIPRAKASH	9.05
2013-2014	1	213113003	AKHIL B.S.	9.46
	2	213113025	SABARISH J	9.3
	3	213113027	ANISH CHANDRAN	9.22

M.Sc. PHYSICS

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	213212010	SHALINI K	9.6
	2	213212009	LAKSHMI PRIYA K B	9.55
	3	213212001	ANIRUDH CHANDRA	9.54
2013-2014	1	213213006	V M M SAIPAVITRA	9.65
	2	213213004	VISHAL K JOSE	9.32
	3	213213007	R PRIYANKA	8.94

M.Sc. CHEMISTRY

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	204112003	VINOTHAVARTHINI R	9.03
	2	204112005	GURU PRASAD G	8.54
	3	204112008	RAM PRASAD R R	8.51
2013-2014	1	204113018	VINAY BHARADWAJ B S	9.11
	2	204113013	KALPANA P	8.97
	3	204113001	SWAMINATHAN SRIVIDYA	8.68

M.Sc. OPERATIONS RESEARCH AND COMPUTER APPLICATIONS

Batch	Rank	Roll Number	Name	CGPA
2012-2013	1	216112021	SARADHA V	9.23
	2	216112018	V AKSHAYAA	9.03
	3	216112002	YOGA PRIYA L	8.91
2013-2014	1	216113011	GAYATHRI N	9.45
	2	216113015	V INDHUMATHI	9
	3	216113017	SAHITHYA PRIYAMVADHA R	8.87

M.C.A. COMPUTER APPLICATIONS

Batch	Rank	Roll Number	Name	CGPA
2011-12	1	205111007	RITIKA GUPTA	9.93
	2	205111008	S SWAPNA	9.8
	3	205111013	SHANTHA KUMAR R	9.7
	1	205112037	UTSAV CHATTERJEE	9.53

2012-13	2	205112011	VIKAS MEGHWANI	9.33
	2	205112075	GAURAV SHARMA	9.33
	3	205112030	KHUSHBOO GUPTA	9.25
2013-14	1	205113003	SHOBHAN GARG	9.84
	2	205113019	DIVYA MEHTA	9.37
	3	205113005	PARAG SHARMA	8.95

M.B.A. BUSINESS ADMINISTRATION

Batch	Rank	Roll Number	Name	CGPA
2012-13	1	215112044	GOWTHAMI K M	9.89
	2	215112008	PRIYADARSINI R K	9.78
	3	215112017	APOORVA KHETAN	9.33
2013-14	1	215113009	BHATTARAM SAI DEEPIKA	9.54
	2	215113034	PARVEEN CHOUDHURY	9.49
	3	215113083	SREE DEVI S	9.13

ENDOWMENT AWARDS

S. No.	Name of the award	Roll No	Name
1.	Smt. G. S. Rajalakshmi memorial award presented to First three Rank holder upto VII Semester in Chemical Engineering.	102111008	ANIRUDH RAJARAM
		102111064	VIKRAM RAGHAVENDHAR R
		102111011	DEVESH PATIDAR
2.	Dr. M. Shanmugam award for the First Rank holder upto VII Semester in Civil Engineering.,	103111057	PIYUSH AGARWAL
3.	Sri. Karchae Endowment award for the best project in the Department of Architecture	101109019	B ASONI MAHEO
4.	Sri. M.S. Balakumaran award for the best outgoing student of M.Tech. NDT	213113027	ANISH CHANDRAN
5.	Prof. S. Muthukaruppan Endowment award for the second Rank holder in EEE Branch up to VII Semester.	107111076	SAI RAMA USHA A
6.	Sri. Janardhana Iyengar memorial Award for the best Academic Performance in just concluded academic year.	108110061	PADMAPRIYA DURAISAMY
7.	Smt. Seethamma memorial award for the First Rank holder upto VII Semester in the ECE Branch.	108111102	VIKAS SAKARAY
8.	Dr. Sargurudoss memorial award for the Best performance in Mathematics in I Year B.Tech.	111113035	K ADITHYAA
		106113091	SUBHAM ROY
9	Sri. Avinash memorial award for the best outgoing male student of ICE branch	110111064	RAHUL SRIVASTAVA
10	Sri. Avinash memorial award for the best outgoing female student of ICE branch	110111050	P SRILAKSHMI
11.	Prof. Ibrahim / Dr.Sittaraman Award for the best outgoing student of DoMS	215113009	BHATTARAM SAI DEEPIKA
12.	Prof.Thirumalaiarasan Award for the Topper in HR and OB Subjects in MBA	215113009	BHATTARAM SAI DEEPIKA
13.	Srimathi Neela Balasubramanian Memorial Award for best outgoing student in ECE branch	108111102	VIKAS SAKARAY

14.	Karthik S Memorial Award	114111047	NACHIAPPAN V
15.	Smt. Vijayalakshmi Kannan Memorial Award	108111102	VIKAS SAKARAY
16.	Late S.Doraiswamy Memorial Award	211213025	SURAJ VERMA
17.	Sri. Ramanujam and Smt. Sundari Ramanujam Memorial Award for the first rank holder in English in B.Tech.	112113051	SHREYA SURESH
18	Mr.Subash Chandrabose Endowment Award for the Best Outgoing in B.Tech. MME	112111009	APOORVA SARAF
19	Dr.T.Balasubramaniam Endowment Award for the First Rank Holder in M.Sc Physics in I and II Semester	213213006	V M M SAIPAVITRA
20	Dr.A.L.Abdus Sattar, Memorial Award	108112102	VINAYAK SURESH
21.	Mr.Oisik Adak Endowment Award for “Best Creative Designer” in the Department of Architecture	101110017	MANOJ KUMAR S
22.	Joseph Martin Fernando trophy for excellence in the study and documentation of vernacular architecture	101112001	AARTHI KEERTHANA R
		101112007	ANUJ SINGH
		101112008	ATHUL K
		101112014	GANGINENI SAI SHANKAR
		101112021	LAKSHMI K AJAYAN
		101112025	MRIGANKA SONOWAL
		101112033	SAMIENENI SRIVALLI
		101112037	SNEHA MENON
		101112039	SREEKANTH S
		101112042	SUSAN ANN ABRAHAM
		101112047	VARSHINI THONDAIMAN E
		101112049	VISWESH KISHORE WARRIER

Best NCC Cadet	103111054	P S CIBI PRANAV
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Dr.P.S.Manisundaram Endowment Award for the Best Non-Teaching Staff	Mrs. N. Kalavathi
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ALUMNI AWARDS: UG

Sl.No.	Department	Roll No.	Name	CGPA
1	Architecture	101110018	MONICA S	9.56
2	Chemical Engineering	102111008	ANIRUDH RAJARAM	9.65
3	Civil Engineering	103111057	PIYUSH AGARWAL	9.61
4	Computer Science and Engineering	106111007	AKSHAY UTTAMANI	9.61
5	Electrical and Electronics Engineering	107111029	D SUZITH	9.72
6	Electronics and Communication Engineering	108111102	VIKAS SAKARAY	9.69
7	Instrumentation and Control Engineering	110111064	RAHUL SRIVASTAVA	9.63
8	Mechanical Engineering	111111006	ADYASHA DASH	9.51
9	Metallurgical and Materials Engineering	112111009	APOORVA SARAF	9.73
10	Production Engineering	114111047	NACHIAPPAN V	9.7

ALUMNI AWARDS: PG

S.No.	Dept./Specialization	Roll.No.	Name	CGPA
1	Computer Applications			
	Master of Computer Applications	205112037	UTSAV CHATTERJEE	9.44
	Operations Research and Computer Applications (M.Sc.)	216113011	GAYATHRI N.	9.53
2	Chemical Engineering			
	Chemical Engineering	202113012	TUSHANT GHODE	9.6
	Process Control and Instrumentation	202213018	VIVEK A.	9.46
3	Energy and Environmental Engineering.			
	Energy Engineering	202313003	REMYA G	9.85
4	CSE			
	Computer Science and Engineering.	206113004	VIDYA T	9.94
5	Civil Engineering			
	Transportation Engineering and Management	203113004	KARTHIK K.R.	9.33
	Structural Engineering	203213023	POTHULA SATYANARAYANA	8.78
	Environmental Engineering.	203413022	DHIVYA S	9.22
6	Electronics and Communication Engineering			
	Communication Systems	208113003	SRIRAM P	9.65
	VLSI System	208213010	SHAH VIRAG HARESHKUMAR	9.59
7	Electrical and Electronics Engineering			
	Power Systems	207113008	ARAVIND RAJ A	9.64
	Power Electronics	207213028	HASANAPURAM PRIYANKA	9.3

8	Mechanical Engineering			
	Thermal Engineering.	211313029	VEEPURU BHARGAVI	9.45
	Industrial Safety Engineering.	211213025	SURAJ VERMA	9.59
9	Metallurgy and Materials Engineering			
	Welding Engineering	212113010	MORE SACHIN ASHRUBA	9.92
	Materials Science and Engineering.	212213004	JITHIN THOM AS K	9.46
	Industrial Metallurgy	212313002	SRIDHARAN G	9.4
10	Production Engineering			
	Manufacturing Technology	214113023	RISHABH SHRIVASTAVA	9.17
	Industrial Engineering and Management	214213027	RAMYA C	9.35
11	Physics			
	Non-Destructive Testing (M.Tech.)	213113027	ANISH CHANDRAN	9.41
	Physics (M.Sc.)	213213006	V M M SAIPAVITRA	9.71
12	Chemistry			
	Chemistry	204113001	SWAMINATHAN SRIVIDYA	8.96
13	Management Studies			
	Master of Business Administration	215113009	BHATTARAM SAI DEEPIKA	9.35

OTHER AWARDS INSTITUTED BY RECAL

Overall Outstanding Student of the year	:	103111054 P S CIBI PRANAV
Anand Chidambaram Memorial Award	:	102111060 ABDUR RAHMAN T A
Praveen Kumar memorial award for the best Performance in I year "E" section	:	108113015 ARNAB SAHA
Outstanding Sportsman	:	112111062 VIVEK S

Outstanding Sport Woman	:	106111066 PRACHI PRAKASH DESAI
Best Batsman of the year	:	110111059 R K ARAVIND
Best Bowler of the year	:	102112002 A PRABHU RAM

Department: ARCHITECTURE**1. Notable Achievements****1.1. Faculty Members: Nil****1.2.****1.2. Students**

S.No.	Name	Details of Prizes/Awards	Organization
1.	Akhila Challa	3 Gold, 2 Silver and 1 Bronze medals	Inter – NIT Swimming Meet
2.	Yokeshwar Elangovan	1 st Prize in Oratory Competition	NCC – CATC2
3.	Fahim Jalal, Shyam sundar,S., Sheik Thoufeeq Mohammed and Adarsh Simon	Special Mention in the University of Westminster Trophy	NASA 2015
4.	Mathew Jose, Manoj Kumar and Dineh,J,	Citation in the University of Westminster Trophy	NASA 2015

2. Conference**2.1. Organised****International: NIL****National: NIL****2.2. Papers presented by the Faculty / Students****International**

S.No	Author(s)	Details
1	Prof.D.Kannamma and Dr.A.Meenatchisundaram	Presented a research paper titled “Design Best Practice Methods to Minimize the Impact of Building Materials on Urban Microclimate” at the 30 th International PLEA Conference on “Sustainable Habitat for Developing Cities”, 16 – 18 December 2014, Ahmedabad, India.

National

S.No	Author(s)	Details
1	Prof. P.Manickavachagam	Presented a paper titled “Multidimensional Role of Art” at the Fine Arts Symposium “VARNAJAL”, organised by Government College of Fine arts, 13 March 2015, Chennai, India.

3.0. Workshops / Seminars**3.1. Organised**

S.No	Co-ordinator	Title	Period
1	Prof. P. Manickavachagam	One day workshop on ‘Arts and Crafts for Architecture’ at PMU, Vallam, Thanjavur	July 14, 2014
2		One day workshop on ‘Art around us’ at School of Architecture, MAM college of Engineering, Tiruchirappalli	Sep. 06, 2014
3		Two days workshop on ‘Process of Creativity in Painting and Colour Theory’ at Government College of Fine Arts, Chennai	December 18 &19, 2014
4		One day Painting workshop For Tiruchirappalli District Art Teachers on ‘Portrait Painting’ organized by CEO, Tiruchirappalli	January 23, 2015
5		Two days workshop on ‘Pen and Ink Rendering’ at Thiagarajar College of Engineering, Madurai	February 21 & 22, 2015

3.2. Attended : Nil**4. Invited / Guest Lectures Delivered by the Faculty: Nil****5. Sponsored Projects undertaken:Nil**

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S.No	Equipment	Amount (Rs. in Lakhs)
1	Portable Instrument for Measuring Environmental Data (with Data Logger)	6726 Euros

7. Research Papers Published in National / International Journals**7.1. Faculty****International Journal**

S.No.	Title	Author(s)	Journal	Year Vol. (No) Page
1	Influence of Street Geometry on Urban Micro Climate – A Comparison of Traditional and Modern Streets of Srirangam	Prof.D.Kannamma and Dr.A.Meenatchisundaram	International Journal of Innovation and Scientific Research	Vol.3, No.1, June 2014, pp.27 - 39
2	Socio-Economic Assessment and Planning in Corridor Conservation Initiative	Dr.K.Thirumaran and Ar.R.Renganathan	International Journal of Engineering Research & Technology	Vol.3 No.11, Nov. 2014

National Journal: Nil**7.2. Students:****International Journal: Nil****8. Ph.D Awarded: Nil****9. Details of Book any authored by faculty: Nil****10. Patent if any obtained by faculty: Nil**

11. Other Important Points

- Prof.P.Manickavachagam conducted 5 days painting exhibition in Kasturi Srinivasan Art Gallery, Coimbatore
- Prof.P.Manickavachagam: Article on ‘Monuments around Tiruchirappalli’ published in Hindu dated May 17, 2014
- Prof.P.Manickavachagam: Interview and Article on Paintings published in Hindu dated July 12, 2014
- Prof.P.Manickavachagam: Interview on ‘Journey in Art’, telecasted by Kalaignar TV on January 13, 2015

12. Summary

S.No.	Details	Total nos			
1.	International Journals	2			
2.	National Journals	NIL			
3.	International Conference Publications	1			
4.	National Conference Publications	1			
5.	Sponsored Project	Nos:	NIL	Amount:	NIL
6.	No of Ph. D produced	NIL			
7.	No of Patents obtained	NIL			
8.	No of Books published	NIL			

DEPARTMENT : CHEMICAL ENGINEERING**1. Notable Achievements****1.1. Faculty Members**

S.No.	Name	Prizes/Awards	Organization
1	Dr. KN Sheeba	Most Inspiring Women Engineer, Engineering Watch, International women' day 2014.	
2	Dr. P. Sivashanmugam	Golden Jubilee Distinguished Alumni award for outstanding contribution to teaching and research in NIT,Trichy	NIT,Trichy

1.2. Students: Nil**2. Conference / Seminars / Symposium / Special Lectures****2.1. Organised**

S.No	Coordinator	Programme	Date
1	Dr. Arthanareeswaran Dr. M. Matheswaran Dr. J. Sarat Chandra Babu	International Conference on Green Technologies for Environmental Pollution Control and Prevention	27-29, September, 2014

2.2. Papers presented by the Faculty / Students

S.No	Author(s)	Title	Place & Date
1	Saravanan, S., Sivasankar, T	Synthesis of Copper Oxide nanoparticles by Sonochemical method, International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering	(RACEEE-14), February 27-28, 2014, SSN College of Engineering, Chennai,
2	Saravanan, S., Randeep Singh, Sivasankar, T	Degradation Of Basic Blue 3 Dye by using novel Fenton's reagent in assistance with Ultrasound, International Conference on Recent Advancements in Chemical,	(RACEEE-14), February 27-28, 2014, SSN College of Engineering,

		Environmental and Energy Engineering	Chennai,
3	Trivendra Singh Gangwar, Dinesh, G.K., Sivasankar, T	Synthesis of nano-Bismuth Oxide ($n\text{Bi}_2\text{O}_3$) and Zero Valent Iron Doped nano-Bismuth Oxide ($n\text{Bi}_2\text{O}_3\text{-Fe}(0)$) for Sonophotocatalytic degradation of Textile Dyes, International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering	(RACEEE-14), February 27-28, 2014, SSN College of Engineering, Chennai,
4	Anjaneyulu, J.V.V.N., Dinesh, G.K., Sivasankar, T	Sonophotocatalytic Treatment of Acid Yellow 23 using Novel nano-Zinc Oxide Doped Iron ($n\text{ZnO-Fe}(0)$), International Conference on Recent Advancements in Chemical, Environmental and Energy Engineering	(RACEEE-14), February 27-28, 2014, SSN College of Engineering, Chennai
5	M.Sriram Prasanth, A.Mercy vasan, K.N.Sheeba, M.Pramila,	“Experimental studies on biogas generation by co-digestion of Ipomea Carnea with cow dung – A new renewable energy source”, National conference on Issues in power quality and renewable energy systems	Department of EEE, Bharathidasan Institute of Technology, Trichy, 29 th -30 th April 2014.
6	Abdur Rahman, T.A., Faisal Sahul Hameed, Viritha, K., Sivasankar, T	Enhanced Sonochemical Oxidation of Reactive Red 4 Using Fenton-like Reagent, International Conference on Green Technology for Environmental Pollution Prevention and Control.	September 27-29, 2014, Department of Chemical Engineering, National Institute of Technology Tiruchirappalli,
7	Gokul Siddarth, Prabisha M, Indulekha John and Arunagiri A	Removal of Methylene Blue dye using cloud point extraction and ultrasound assisted Cloud Point Extraction ”, for oral presentation at International Conference on Green Technology for Environmental Pollution Prevention and Control (ICGTEPPC)	National Institute of Technology, Tiruchirappalli during September 27-29, 2014
8	R.Govindarajan M.Perumalsamy,	Extraction of value-added therapeutic proteins from cheese whey using environmentally benign biphasic system International Conference on Emerging Trends in Biotechnology (ICETB 2014), New Delhi	(ICETB 2014), New Delhi
9	Savin,C.P, Sheeba,K.N.,	“Analysis and comparison of models for biomass pyrolysis” International conference on recent advances in mechanical engineering and interdisciplinary developments	Department of Mechanical Engineering, Ponjesly college of Engg., Nagercoil,

2.3. Attended by the Faculty / Students

S.No	Faculty / Students	Title / Programme	Place & Date
1	P.Kalaichelvi	International conference on “Energy System Modeling and Optimization” (ESMOC 2013)	NIT Durgapur, West Bengal, India, 9 th -11 th 2013.
2	P. Augusta	International conference on Emerging Trends in Engineering & Technology (IETET-2013)	Geeta Institute of Management & Technology, Kurukshetra, Haryana on 25 th - 27 th October 2013.
3	C. Chellamboli and M. Perumalsamy	“Optimizing the growth and lipid of chlorella pyrenoidosa using response surface methodology for biodiesel production, National Conference On progress in algology on the Indian context	19 th -21 st September 2014

3.0. Summer School / Winter School / Workshops

3.1. Organised

S.No	Co-ordinator	Title	Period
1	Dr. K.N. Sheeba	Participated in the training programme on “Research Methodology and IPR” conducted by EQUATE, New Delhi.	4 th - 7 th February 2014
2	Dr. N.Anantharaman	Two-day National level seminar on “Innovative Green Technologies for geologic sequestration of Carbon dioxide (CO ₂) and to protect atmosphere” Erode Sengunthar Engineering College, Thudupathi, Perundurai	7 th - 8 th January 2014
3	Dr. K.M. Meera S. Beguma	Workshop on “Energy Conservation : Scope and Options”	24 th January 2014.
4	Dr. N.Anantharaman	Conducted a one day workshop on Workshop on Energy Conservation: Scope And Options on under TEQIP-II	24 th January 2014

5	Dr. N.Anantharaman	Unit operations and Role of a Chemical Engineer/ Biotechnologist and challenges at Vel Tech High Tech, Chennai	10 th March 2014
6	Dr. K.N. Sheeba	Conducted training programme on “ISO 50001:2011” under TEQIP during by Bureau Veritas, Mumbai.	10-14 th March 2014
7	Dr. K.N. Sheeba	Conducted training programme on “ISO 50001:2011” under TEQIP during by Bureau Veritas, Mumbai.	10 th -14 th March 2014
8	Dr. N.Anantharaman	Scale up methods at Anna University, Trichy,	25 th March 2014.
9	Dr. M. Perumalsamy	Three Days Workshop on “Piping Technology”, NIT Trichy	27 th -29 th March 2014
10	Dr. P. Kalaichelvi	Certificate course on “Piping Technology” sponsored by TEQIP – II.	27 th – 28 th March, 2014 and 19 th April 2014
11	Dr. A. Arunagiri & Dr. M. Arivazhagan.	One day workshop on “Hybrid waste water treatment Technologies”	12 th April 2014
12	Dr. N.Anantharaman	Conducted a two day workshop on Pressure vessels and Piping under TEQIP –II from 3.7.2014 to 4.7.2014	July 3-7, 2014
13	Dr. P. Kalaichelvi	Awareness Conference on “ Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka” sponsored by “The Asia Foundation”	12 September 2014
14	Dr. N.Anantharaman	Making Indian Engineering Education World-class at NIT Tiruchirappalli	15 th September 2014
15	Dr. P. Sivashanmugam	Energy conservation: scope and options	Sponsored by TEQIP, NIT Trichy, 2014

3.2. Attended

S.No	Faculty / Students	Title	Period
1	Dr. K.N. Sheeba	Participated in the training programme on “Research Methodology and IPR” conducted by EQUATE, New Delhi.	4 th - 7 th February 2014

2	Dr. K.N. Sheeba	Participated in the symposium on “Teaching Learning in higher technical education” conducted by Teaching Learning Centre, CCE, IIT Madras	28 th - 29 th May 2014.
3	Dr. A. Arunagiri	Three Day Training Programme on “The right to Information act, 2005” conducted by Institute of Public Administration at New Delhi.	02 nd - 04 th June 2014
4	Dr. K.N. Sheeba	Participated in the training workshop on Functioning and Maintenance of Solar Radiation Resource Assessment Station by CWET-Chennai	19 th - 20 th June 2014.
5	Dr. P. Kalaichelvi	Knowledge Management & Innovation for Higher Educational Institutions, USIEF at NIT Trichy.	25 th -26 th July 2014
6	Dr. P. Kalaichelvi	Organizing a 6 days EDP for Women Entrepreneur at Trichy.	15 th - 20 th November 2014.
7	Dr. P. Kalaichelvi	Participated in the one day awareness conference on “Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka” at South Eastern University of Sri Lanka.	18 th November 2014.
8	Dr. P. Kalaichelvi	Participated in the one day awareness conference on “Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka” at University of Jaffna, Sri Lanka.	20 th November 2014.

4. Invited / Guest Lectures Delivered by the Faculty

S.No	Faculty	Topic	Programme	Place & Date
1	Sivasankar. T	Sonochemical Engineering: Green Technology for Better Environment		Department of Food Technology, Kongu Engineering College, Perundurai, Erode, Tamilnadu, 12 th February 2014
2	Dr. T. K. Radhakrishnan	Linear System Modeling and		Thiyagarajar College of Engineering, 14 th -15 th

		Control- Research Issues and Emerging Trends in Control Systems Engineering		February 2014
3	Dr. A. Arunagiri	Waste water treatment and Hybrid waste water treatment	workshop on “Hybrid waste water treatment Technologies”	NIT, Trichy - 15 12 th April 2014
4	Dr. P. Kalaichelvi	“Business Plan Preparation”	DST-NIMAT Sponsored Faculty Development Programme (FDP) on Entrepreneurship Development & Management	5 th – 17 th May 2014, organized by Centre for Entrepreneurship at Development and Incubation, NIT - Trichy.
5	Dr. P. Kalaichelvi	“Business Plan Preparation”	Entrepreneurship Development Programme (EDP), supported by EDI, Ahmedabad under Department of Science and Technology (DST)- NIMAT Project, Government of India	30 th June – 26 th July 2014, Centre for Entrepreneurship Development and Incubation, NIT - Trichy.
6	Dr.T. K. Radhakrishnan	1. Model Predictive Control 2. Adaptive Control Trends in Process Control		NIT, Warangal 3 rd – 4 th July 2014
7	Dr.P. Sivashanmugam	Acted NBA Team member for NBA accreditation in SaheetBhagat Singh state	Acted NBA Team member for NBA accreditation in SaheetBhagat Singh state technical campus	Punjab in August 2014

		technical campus		
8	Sivasankar. T	Biomass pretreatment by ultrasonic processing		Department of Agircultural Microbiology, Tamilnadu Agricultural University, Coimbatore, Tamilnadu, 20 th August 2014.
9	Sivasankar. T	Application of ultrasound for nanomaterial synthesis		Department of Chemical Engineering, Coimbatore Institute of Technology, Coimbatore, Tamilnadu, 25 th November 2014
10	Dr. N.Anantharaman	Charged ultrafiltration membranes for desalination applications	Indo-French Workshop on Sustainable Water Purification Technologies held at	CSIR-Central Electrochemical Research Institute, Karaikudi (India) 11 th - 13 th February 2015.

5. Research Projects undertaken and status

S.No	Co-ordinator	Name of the Project	Sponsor	Amount (Rs. in Lakhs)
1	Dr. K.M. Meera S. Begum	Development of New Polymeric Membranes for ethanol separation by Air gap Membrane distillation	SCSP/TSP (2014- 2017)	54.3
2	Dr. P. Kalaichelvi	Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka	The Asia Foundation	Rs. 34.39 (US\$ 55000)
			Total	88.69

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S.No	Equipment	Amount (Rs. in Lakhs)
1	Double beam UV Vis spectrophotometer – 2 Nos	13.99
2	Analysis of Cement & Fertilizer	12.73950
3	Potentiometric Titrator	7.55600
4	Instrument for Analysis of Water	9.98813
5	Instrument for Analysis of Oil & Soap	7.26663
6	COD Analyzer	6.55407
7	Ultra Centrifuge	8.30000
8	Freeze Drier	5.98500
9	ICP MS	40.25741
10	Workstation	23.56992
11	Hyphenated TGA – GC-MS	123.29034
Total		259.49700

7. Research Papers Published in National / International Journals**7.1. Faculty**

S.No	Title	Author(s)	Journal	Year Vol. (No) Page
1	Preparation and characterization of TiO ₂ -sulfonated polymer embedded polyetherimide membranes for effective desalination application	Y Lukka Thuyavan, N Anantharaman , G Arthanareeswaran, AF Ismail, RV Mangalaraja	Desalination	365 (2015) 355-364

2	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	Sneha E. Mahesha, Anand Ramanathanb, K.M. Meera S. Beguma, N. Anantharaman	Energy Conversion and Management	91 (2015) 442–450
3	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, S. Begum, K.M. Meera, N. Anantharaman	Environmental Progress & Sustainable Energy	34 (2015) 248–254
4	Modification of polyethersulfone using sericin and polyvinylpyrrolidone for cadmium ion removal by polyelectrolyte-enhanced ultrafiltration	Y Lukka Thuyavan, N Anantharaman , G Arthanareeswaran, AF Ismail	Desalination and Water Treatment,	(2014) 1-13
5	Adsorptive Removal of Humic Acid by Zirconia Embedded in a Poly (ether sulfone) Membrane	YL Thuyavan, N Anantharaman , G Arthanareeswaran, AF Ismail	Industrial & Engineering Chemistry Research	53 (2014) 11355-11364
6	Enhancement of biodiesel synthesis over highly active CaO derived from natural white bivalve clam shell	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Arabian Journal of Chemistry	In Press (2014)
7	Hydrodynamic studies on fluidized beds with internals: Experimental and ANN approach	Ronnie Kiran Mathew, K.M. Meera Sheriffa Begum, N. Anantharaman	Powder Technology	264 (2014) 423–429
8	Studies on Fluidized Beds Using Disc-type Internals and Modelling by ANN	Ronnie Kiran Mathewa, Deepa Aravinda, K.M. Meera S. Beguma,	Indian Chemical Engineer	DOI: 10.1080/00194506.2014.975759

		N. Anantharaman		(2014)
9	Continuous flow reactive distillation process for biodiesel production using waste egg shells as heterogeneous catalysts	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	RSC Adv.,	4 (2014) 54109-54114
10	KF-impregnated clam shells for biodiesel production and its effect on a diesel engine performance and emission characteristics	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Environmental Progress & Sustainable Energy	DOI: 10.1002/e p.12070 (2014)
11	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Environmental Progress & Sustainable Energy	34 (2015) 248– 254
12	Local linear model tree and Neuro-Fuzzy system for modelling and control of an experimental pH neutralization process	G. PetchinathanI, K. Valarmathi; D. DevarajI; T. K. Radhakrishnan	Brazilian Journal of Chemical Engineering	31 (2014) doi.org/10.1590 /0104- 6632.20140312 s00002287
13	Performance comparison of triple and dual chamber microbial fuel cell using distillery wastewater as a substrate	N. Samsudeen, T. K. Radhakrishnan M. Matheswaran	Environmental Progress & Sustainable Energy	34 (2015) 589– 594
14	Differential Evolution Algorithm for System Identification and Tuning of a Fuzzy Modified Model Reference Adaptive Controller for a Coupled	K. Asan Mohideen,, K. Valarmathi, T. K. Radhakrishnan	International Journal of Engineering and Technology	6 (2014) 1530- 1549

	Tank Level Process		(IJET)	
15	Distributed multi parametric model predictive control design for a quadruple tank process	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	Measurement	47 (2014) 841–854
16	Metaheuristic Patient Estimation Based Patient-Specific Fuzzy Aggregated Artificial Pancreas Design	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	Ind. Eng. Chem. Res.,	53 (2014) 15052–15070
17	Multi-parametric model predictive control-based regulation of blood glucose in type 1 diabetics under unmeasured meal disturbances: a simulation study	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	International Journal of Biomedical Engineering and Technology	14 (2014) 105-118
18	Effect of Variation of K_LA in Aeration Tanks	K. Jeyannathan, A. Seshagiri Rao, T.K. Radhakrishnan,	<i>Int. J. Env. Res. Dev.</i>	4(2014) 115-122
19	Extraction of Peroxidase from waste brassica oleraceused for the treatment of aqueous phenol in synthetic waste water	AshutoshNath Deva , C. Arun, G. Arthanareeswaran, P. Sivashanmugam	Journal of Environmental Chemical Engineering	Vol. 2, 1148–1154,2014
20	CFD Simulation of thermoacoustic heat engine	H.Muralidharan, N. M. Hariharan, V.T.Perarasu, P. Sivashanmugam and S. Kasthuriengan	Progress in Computational Fluid Dynamics	<u>Vol.14, No.2</u> (2014),131 – 137, DOI: 10.1504/PCFD. 2014.060143
21	Studies on Performance of Thermoacoustic	N. M. Hariharan P. Sivashanmugam and	Experimental Heat Transfer	Vol. 28:267–281, 2015.

	Prime Mover	S. Kasthuriengan		
22	CFD modeling study of heat transfer in a coiled agitated vessel	V.T.Perarasu, M. Arivazhagan., P.Sivashanmugam	Progress in Computational Fluid Dynamics	Vol. 14, No. 3 177—188 (2014)
23	Performance evaluation of photovoltaic cells using functionalized carbon nanotube and polyaniline film	S Kavita, B Mohan and J Sarat Chandra Babu	<i>Adv. Nat. Sci: Nanosci. Nanotechnol.</i>	6 025013 (2014) doi:10.1088/2043-6262/6/2/025013
24	Theoretical Assessment and Validation of Global Horizontal and Direct Normal Solar Irradiance for a Tropical Climate in India	S. Sivasankari and J. Sarat Chandra Babu	Iranica Journal of Energy & Environment	5 (4) 354-368, 2014
25	Exergy analysis of a 100KWp multi-crystalline solar photovoltaic array system in a tropical savanna climate in India	S. Sivasankari and J. Sarat Chandra Babu	International Journal of Exergy	2015, (in press)
26	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	Sneha E. Mahesha, Anand Ramanathanb, K.M. Meera Sheriffa Begum , N. Anantharaman	Energy Conversion and Management	91 (2015) 442–450
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31	Continuous flow reactive distillation process for biodiesel production using waste egg shells as heterogeneous catalysts	S. Niju, K.M. Meera Sheriffa Begum , N. Anantharaman	RSC Adv.,	4 (2014) 54109-54114
32	KF-impregnated clam shells for biodiesel production and its effect on a diesel engine performance and emission characteristics	S. Niju, K.M. Meera Sheriffa Begum , N. Anantharaman	Environmental Progress & Sustainable Energy	DOI: 10.1002/e p.12070 (2014)
33	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, K.M. Meera Sheriffa Begum , N. Anantharaman	Environmental Progress & Sustainable Energy	34 (2015) 248–254
34	Performance of Fe-loaded chitosan carbonized rice husk beads (Fe-CCRB) for continuous adsorption of metal ions from industrial effluents	S. Sugashini, K.M. Meera Sheriffa Begum	Environmental Progress & Sustainable Energy	33(2014) 1125–1138,
35	Modification of egg	S. Niju, K.M. Meera	Journal of Saudi	

	shell and its application in biodiesel production	S. Begum, N. Anantharaman	Chemical Society	18 (2014) 702–706
36	Modeling and Simulation of Spiral Plate Heat Exchanger	P. Kalaichelvi, T. V. Karthick, D. Karthikeyan, S. Ramachandran, S. Sundaram, R.Jaishree	Journal of Thermal Engineering and Applications	Vol 1, No 1, 22-29, 2014
37	Removal of crystal violet dye from aqueous solution using Triton X-114 surfactant via cloud point extraction	A.Arunagiri, Indulekha John, P.Kalaichelvi, and R.Anantharaj	An International Journal Engineering Science and Technology	Vol.17, 137-144, 2014.
38	Investigation and modelling of surface tension of power-law fluids	Muthamizhi K., Kalaichelvi P., Shubhangi Powar and Jaishree R.	Rsc Advances	Vol-4, 9771-9776, 2014
39	Extraction of Reactive Orange 107 dyes from Aqueous Stream Using Triton X-114 Surfactant: Quantum Chemical Calculations & Experiment	K.Priya, D.Saravanan, P.Kalaichelvi, A.Arunagiri, R.Anantharaj	Journal of Industrial and Engineering Chemistry	Vol-20, 2409-2420, 2014
40	Heat transfer augmentation and friction factor analysis in plate heat exchanger with carboxy methyl cellulose solution as working fluid	Muthamizhi K., Kalaichelvi P. and Shubhangi T.Powar	Heat Transfer Research	Accepted, 2014
41	The effect of temperature and	Naveen Kumar Gupta,	Energy Sources, Part A: Recovery,	Accepted, 2014

	hemicellulose-lignin, cellulose-lignin and cellulose-hemicellulose on char yield from the slow pyrolysis of rice husk	Sheeba K.N., and Kalaichelvi P	Utilization, and Environmental Effects	
42	Development of Nusselt number correlation using dimensional analysis for PHE with a carboxymethyl cellulose solution	Muthamizhi K. and Kalaichelvi P.	Heat and Mass Transfer	Accepted
43	CFD Modeling Study of Heat Transfer in a Coiled Agitated Vessel	Perarasu V.T., M. Arivazhagan, P. Sivashanmugam	Progress in Computational Fluid Dynamics, An International Journal (PCFD)	Vol-14, 177-188, 2014
44	Extraction of peroxidase from waste Brassica oleracea used for the treatment of aqueous phenol in synthetic waste water	P. Sivashanmugam, Ashutosh Nath Deva, C. Arun, G. Arthanareeswaran	Journal of Environmental Chemical Engineering	2014(2) 1148–1154
45	Effects of in situ and ex situ formations of silica nanoparticles on polyethersulfone membranes	Soung Sun Mok Antony Ananth, G. Arthanareeswaran	Polymer Bulletin	2014 (71- 11) 2851-2861
46	Development of Adsorbents-based Cellulose Acetate Mixed Matrix Membranes for Removal of Pollutants from Textile Industry Effluent	R. Saranya, Y. Lukka Thuyavan, G. Arthanareeswaran	Journal Teknologi	2014,70 (2)
47	Treatment of paper mill effluent using	R Saranya, G Arthanareeswaran,	Chemical Engineering	2014(236), 369-377

	Polyethersulfone/ functionalised multiwalled carbon nanotubes based nanocomposite membranes	D.D. Dionysiou	Journal	
48	Effect of bio-mediated route synthesized silver nanoparticles for modification of polyethersulfone membranes,	A Ananth, G Arthanareeswaran , A.F. Ismail, YS Mok, T Matsuura	Colloids and Surfaces A: Physicochemical and Engineering Aspects	2014 (451), 151-160
49	Enhanced oil–water separation using polysulfone membranes modified with polymeric additives	Aruna Pagidi, R. Saranya, G. Arthanareeswaran , A.F. Ismail	Desalination	2014 (344), 280-288
50	Adsorptive Removal of Humic Acid by Zirconia Embedded in a Poly (ether sulfone), Membrane	Y. Lukka Thuyavan, N. Anantharaman, G. Arthanareeswaran	Industrial & Engineering Chemistry Research	2014,53 (28), 11355-11364
51	Modification of polyethersulfone using sericin and polyvinylpyrrolidone for cadmium ion removal by polyelectrolyte- enhanced ultrafiltration	Y. Lukka Thuyavan, N. Anantharaman, G. Arthanareeswaran , A.F. Ismail	Desalination and Water Treatment,	2014, 1-13
52	Enhancement of heat transfer in double pipe heat exchanger using novel inserts	S.Sitaraman, K.M. Meera S. Begum, N. Anantharaman, G. Arthanareeswaran	Progress in Chemical Engineering	2014(Press)
53	Application of response surface methodology for optimization of growth and lipids in Scenedesmus abundans	C Chellamboli, M. Perumalsamy	RSC Advances	Vol. 4 (42), 22129-22140, 2014

	using batch culture system			
54	Liquid–liquid equilibrium of aqueous two-phase system (PEG 2000–Sodium Citrate–Water) using potential difference as a key tool	M. Perumalsamy, T Murugesan	Physics and Chemistry of Liquids	Vol. 52 (1), 26–36, 2014
55	Optimization of process parameters for efficient decolorization of Congo red by novel fungus <i>Curvularia</i> sp. using Box–Behnken design	S Senthilkumar, M. Perumalsamy, HJ Prabhu, N Thajudin	Desalination and Water Treatment	1-9, 2014
56	Enhanced IMC-PID controller design with lead-lag filter for unstable and integrating processes with time delay	B. Vanavil , A. V.N.L. Anusha , M. Perumalsamy & A. Seshagiri	Chemical Engineering Communications	Vol. 201:11 1468-1496, 2014
57	Performance Evaluation of a Flat Plate Collector Coupled Solar Still System	K. N. Sheeba, P. Prakash, S. Jaisankar	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	37 (2014) 291–298
58	Combined slow pyrolysis and steam gasification of biomass for hydrogen generation—a review	P. Parthasarathy and K. N. Sheeba	International Journal of Energy Research	39 (2015) 147–164
59	Experimental study on adsorption of malachite green in simulated and real effluent by bio-based adsorbents	Tapas Kumar Patraa, K.N. Sheeba, P. Augustaa & S. Jaisankarb	International Journal of Green Energy	DOI: 10.1080/15435075. 2014.893877 (2014)

60	Separation of Methylene Blue Dye from Aqueous Solution Using Triton X-114 Surfactant	A.Arunagiri, Prabisha Purushothaman P.Kalaichelvi, R.Anantharaj	Journal of Thermodynamics : an International Journal	V-24, , 16 pages
61	Removal of Crystal Violet Dye from Aqueous Solution Using Triton X-114 Surfactant via Cloud Point Extraction	A.Arunagiri, Indulekha John, P.Kalaichelvi, R.Anantharaj	Engineering Science and Technology: an International Journal	V-17, 137-144, 2014
62	Molecular Interaction in Binary Mixture of 1-Ethyl-3 Methylimidazolium Ethylsulphate + Aromatic Sulfur Species: Ab Initio Calculations and Experiment	Anantharaj Ramalingam, Ramanathan Raja Subramanian and Appusamy Arunagiri	Journal of Innovative Engineering	2(2): 6, 2014
63	Extraction of Reactive Orange 107 dyes from Aqueous Stream Using Triton X-114 Surfactant: Quantum Chemical Calculations & Experiment	K.Priya, D.Saravanan, P.Kalaichelvi, A.Arunagiri, R.Anantharaj	Journal of Industrial and Engineering Chemistry	V-20, 2409-2420, 2014
64	Performance Comparison of Triple and Dual Chamber Microbial Fuel Cell Using Distillery Wastewater as a Substrate	N.Samsudeen, T.K.Radhakrishnan, M.Matheswaran	Environmental progress and sustainable energy	June 2014

65	Kinetics Studies of Catalytic Ozonation of Distillery Effluent	Asaithambi, P., R. Saravanathamizhan, and M.Matheswaran.	Desalination and Water Treatment	2014:1-7
66	Comparison of treatment and energy efficiency of advanced oxidation processes for the distillery wastewater	Asaithambi, P., R. Saravanathamizhan, and M.Matheswaran.	International Journal of Environmental Science and Technology	2014: 1-8.
67	Synthesis of TiO ₂ /WO ₃ nanoparticles via sonochemical approach for the Photocatalytic Degradation of Methylene Blue under Visible Light Illumination	Anandan, S., Sivasankar, T. , Teresa Lana-Villarreal	Ultrasonics Sonochemistry,	2014(21) 1964-1968.
68	Iron loaded Mangosteen as a Heterogeneous Fenton catalyst for the Treatment of Landfill Leachate	Laiju, A.R., Sivasankar, T. , Nidheesh, P.V.	Environmental Science and Pollution Research	2014(21) 10900-10907
69	Ultrasound Assisted Fenton's treatment of Reactive Black 5 dye: Effect of system parameters, kinetics and mechanism	Saravanan, S., Sivasankar, T	Desalination and Water Treatment	2014: 1-10(In Press)
70	Intensification of Sonochemical Degradation of Rhodamine B using Oxidants, hydrogen peroxide/peroxydisulphate/peroxymonosulphate with Fe ²⁺ ion: Proposed Pathway and Kinetics	Kurukutla, A.B., Satishkumar, P., Anandan, S., Sivasankar, T	Environmental Engineering Science	2014(In Press)
71	Sonophotocatalytic treatment of Methyl	Hemapriyamvadha, R., Sivasankar, T	Coloration Technology	2015

	Orange Dye and Real Textile Effluent using synthesized nano-Zinc Oxide			(In Press)
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7.2. Students

S.No	Title	Author(s)	Journal	Year Vol. (No) Page
1	Separation of Methylene Blue Dye from Aqueous Solution Using Triton X-114 Surfactant	A.Arunagiri, Prabisha Purushothaman P.Kalaichelvi, R.Anantharaj	Journal of Thermodynamics: an International Journal	V-24, , 16 pages
2	Removal of Crystal Violet Dye from Aqueous Solution Using Triton X-114 Surfactant via Cloud Point Extraction	A.Arunagiri, Indulekha John, P.Kalaichelvi, R.Anantharaj	Engineering Science and Technology: an International Journal	V-17, 137-144, 2014
3	Molecular Interaction in Binary Mixture of 1-Ethyl-3-Methylimidazolium Ethylsulphate + Aromatic Sulfur Species: Ab Initio Calculations and Experiment	Anantharaj Ramalingam, Ramanathan Raja Subramanian and Appusamy Arunagiri	Journal of Innovative Engineering	2(2): 6, 2014
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5	CFD Modeling Study of Heat Transfer in a Coiled Agitated Vessel	Perarasu V.T., M. Arivazhagan, P. Sivashanmugam	Progress in Computational Fluid Dynamics, An International Journal (PCFD)	Vol-14, 177-188, 2014
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8	Development of Adsorbents-based Cellulose Acetate Mixed Matrix Membranes for Removal of Pollutants from Textile Industry Effluent	R. Saranya, Y. Lukka Thuyavan, G. Arthanareeswaran	Journal Teknologi	2014,70 (2)
9	Treatment of paper mill effluent using Polyethersulfone/functionalised multiwalled carbon nanotubes based nanocomposite membranes	R Saranya, G Arthanareeswaran, D.D. Dionysiou	Chemical Engineering Journal	2014(236), 369-377
10	Effect of bio-mediated route synthesized silver nanoparticles for modification of polyethersulfone membranes,	A Ananth, G Arthanareeswaran, A.F. Ismail, YS Mok, T Matsuura	Colloids and Surfaces A: Physicochemical and Engineering Aspects	2014 (451), 151-160
11	Enhanced oil–water	Aruna Pagidi, R.	Desalination	2014 (344),

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12	Adsorptive Removal of Humic Acid by Zirconia Embedded in a Poly (ether sulfone), Membrane	Y. Lukka Thuyavan, N. Anantharaman, G. Arthanareeswaran	Industrial & Engineering Chemistry Research	2014,53 (28), 11355-11364
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14	Enhancement of heat transfer in double pipe heat exchanger using novel inserts	S.Sitaraman, K.M. Meera S. Begum, N. Anantharaman, G.Arthanareeswaran	Progress in Chemical Engineering	2014(Press)
15	Performance evaluation of photovoltaic cells using functionalized carbon nanotube and polyaniline film	S Kavita, B Mohan and J Sarat Chandra Babu	<i>Adv. Nat. Sci: Nanosci. Nanotechnol.</i>	6 025013 (2014) doi:10.1088/2043-6262/6/2/025013
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21	Enhanced IMC-PID controller design with lead-lag filter for unstable and integrating processes with time delay	B. Vanavil , A.V.N.L. Anusha, M. Perumalsamy & A. Seshagiri Rao	Chemical Engineering Communications	Vol. 201:11 1468-1496, 2014
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24	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	Sneha E. Mahesha, Anand Ramanathan, K.M. Meera S. Begum, N. Anantharaman	Energy Conversion and Management	91 (2015) 442– 450
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31	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Environmental Progress & Sustainable Energy	34 (2015) 248–254
32	Performance of Fe-loaded chitosan carbonized rice husk beads (Fe-CCRB) for continuous adsorption of metal ions from industrial effluents	S. Sugashini, K.M. Meera Sheriffa Begum	Environmental Progress & Sustainable Energy	33(2014) 1125–1138,

33	Modification of egg shell and its application in biodiesel production	S. Niju, K.M. Meera S. Begum, N. Anantharaman	Journal of Saudi Chemical Society	18 (2014) 702–706
34	Preparation and characterization of TiO ₂ -sulfonated polymer embedded polyetherimide membranes for effective desalination application	Y Lukka Thuyavan, N Anantharaman, G Arthanareeswaran, AF Ismail, RV Mangalaraja	Desalination	365 (2015) 355-364
35	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	Sneha E. Mahesha, Anand Ramanathan, K.M. Meera S. Begum, N. Anantharaman	Energy Conversion and Management	91 (2015) 442–450
36	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, S. Begum, K.M. Meera, N. Anantharaman	Environmental Progress & Sustainable Energy	34 (2015) 248-254
37	Modification of polyethersulfone using sericin and polyvinylpyrrolidone for cadmium ion removal by polyelectrolyte-enhanced ultrafiltration	Y Lukka Thuyavan, N Anantharaman, G Arthanareeswaran, AF Ismail	Desalination and Water Treatment,	(2014) 1-13
38	Adsorptive Removal of Humic Acid by Zirconia Embedded in a Poly (ether sulfone) Membrane	YL Thuyavan, N Anantharaman, G Arthanareeswaran, AF Ismail	Industrial & Engineering Chemistry Research	53 (2014) 11355-11364
39	Enhancement of biodiesel synthesis over highly active CaO derived from natural white bivalve clam shell	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Arabian Journal of Chemistry	In Press (2014)
40	Hydrodynamic studies on fluidized beds with internals: Experimental and	Ronnie Kiran Mathew, K.M. Meera Sheriffa	Powder Technology	264 (2014) 423–429

	ANN approach	Begum, N. Anantharaman		
41	Studies on Fluidized Beds Using Disc-type Internals and Modelling by ANN	Ronnie Kiran Mathewa, Deepa Aravinda, K.M. Meera S. Begum, N.Anantharaman	Indian Chemical Engineer	DOI: 10.1080/00194 506. 2014.975759 (2014)
42	Continuous flow reactive distillation process for biodiesel production using waste egg shells as heterogeneous catalysts	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	RSC Adv.,	4 (2014) 54109-54114
43	KF-impregnated clam shells for biodiesel production and its effect on a diesel engine performance and emission characteristics	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Environmenta l Progress & Sustainable Energy	DOI: 10.1002/ ep.12070 (2014)
44	Preparation of biodiesel from waste frying oil using a green and renewable solid catalyst derived from egg shell	S. Niju, K.M. Meera Sheriffa Begum, N. Anantharaman	Environmenta l Progress & Sustainable Energy	34 (2015) 248– 254
45	Extraction of Peroxidase from waste brassica oleracea used for the treatment of aqueous phenol in synthetic waste water	Ashutosh Nath Deva, C. Arun, G.Arthanareeswaran, P.Sivashanmugam	Journal of Environmenta l Chemical Engineering	Vol. 2, 1148– 1154, 2014
46	CFD Simulation of thermoacoustic heat engine	H.Muralidharan, N. M. Hariharan, V.T.Perarasu, P. Sivashanmugam and S.Kasthuriengan	Progress in Computational Fluid Dynamics	<u>Vol.14, No.2</u> (2014), 131 – 137, DOI: 10.1504/PCFD .2014.060143
47	Local linear model tree and Neuro-Fuzzy system for modelling and control of an experimental pH neutralization process	G. Petchinathan I, K.Valarmathi; D. Devaraj I; T. K. Radhakrishnan	Brazilian Journal of Chemical Engineering	31 (2014) doi.org/10.159 0/0104- 6632.2014031 2s00002287

48	Performance comparison of triple and dual chamber microbial fuel cell using distillery wastewater as a substrate	N. Samsudeen, T. K. Radhakrishnan M. Matheswaran	Environmental Progress & Sustainable Energy	34 (2015) 589–594
49	Differential Evolution Algorithm for System Identification and Tuning of a Fuzzy Modified Model Reference Adaptive Controller for a Coupled Tank Level Process	K. Asan Mohideen,, K. Valarmathi, T. K. Radhakrishnan	International Journal of Engineering and Technology (IJET)	6 (2014) 1530–1549
50	Distributed multi parametric model predictive control design for a quadruple tank process	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	Measurement	47 (2014) 841–854
51	Metaheuristic Patient Estimation Based Patient-Specific Fuzzy Aggregated Artificial Pancreas Design	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	Ind. Eng. Chem. Res.,	53 (2014) 15052–15070
52	Multi-parametric model predictive control-based regulation of blood glucose in type 1 diabetics under unmeasured meal disturbances: a simulation study	V. Kirubakarana, T.K. Radhakrishnana, N. Sivakumaran	International Journal of Biomedical Engineering and Technology	14 (2014) 105-118
53	‘Effect of Variation of K_{LA} in Aeration Tanks’,	K. Jeyannathan, A. Seshagiri Rao, T.K. Radhakrishnan	Int. J. Env. Res. Dev.	4(2014) 115-122
54	Modeling and Simulation of Spiral Plate Heat Exchanger	P. Kalaichelvi, T. V. Karthick, D. Karthikeyan,	Journal of Thermal Engineering and Applications	Vol 1, No 1, 22-29, 2014

		S. Ramachandran, S. Sundaram, R.Jaishree		
55	Removal of crystal violet dye from aqueous solution using Triton X-114 surfactant via cloud point extraction	A.Arunagiri, Indulekha John, P.Kalaichelvi , and R.Anantharaj	An International Journal Engineering Science and Technology	Vol.17, 137-144, 2014.
56	Investigation and modelling of surface tension of power-law fluids	Muthamizhi K., Kalaichelvi P. , Shubhangi Powar and Jaishree R.	Rsc Advances	Vol-4, 9771-9776, 2014
57	Extraction of Reactive Orange 107 dyes from Aqueous Stream Using Triton X-114 Surfactant: Quantum Chemical Calculations & Experiment	K.Priya, D.Saravanan, P.Kalaichelvi , A.Arunagiri, R.Anantharaj	Journal of Industrial and Engineering Chemistry	Vol-20, 2409-2420, 2014
58	Heat transfer augmentation and friction factor analysis in plate heat exchanger with carboxy methyl cellulose solution as working fluid	Muthamizhi K., Kalaichelvi P. and Shubhangi T.Powar	Heat Transfer Research	Accepted, 2014
59	The effect of temperature and hemicellulose-lignin, cellulose-lignin and cellulose-hemicellulose on char yield from the slow pyrolysis of rice husk	Naveen Kumar Gupta, Sheeba K.N., and Kalaichelvi P	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Accepted, 2014
60	Development of Nusselt number correlation using dimensional analysis for PHE with a carboxymethyl cellulose solution	Muthamizhi K. and Kalaichelvi P.	Heat and Mass Transfer	Accepted

61	Synthesis of TiO ₂ /WO ₃ nanoparticles via sonochemical approach for the Photocatalytic Degradation of Methylene Blue under Visible Light Illumination	Anandan, S., Sivasankar, T., Teresa Lana-Villarreal	Ultrasonics Sonochemistry,	2014(21) 1964-1968.
62	Iron loaded Mangosteen as a Heterogeneous Fenton catalyst for the Treatment of Landfill Leachate	Laiju, A.R., Sivasankar, T., Nidheesh, P.V.	Environmental Science and Pollution Research	2014(21) 10900-10907
63	Ultrasound Assisted Fenton's treatment of Reactive Black 5 dye: Effect of system parameters, kinetics and mechanism	Saravanan, S., Sivasankar, T	Desalination and Water Treatment	2014: 1-10(In Press)
64	Intensification of Sonochemical Degradation of Rhodamine B using Oxidants, hydrogen peroxide/peroxydisulphate/peroxymonosulphate with Fe ²⁺ ion: Proposed Pathway and Kinetics	Kurukutla, A.B., Satishkumar, P., Anandan, S., Sivasankar, T	Environmental Engineering Science	2014(In Press)
65	Sonophotocatalytic treatment of Methyl Orange Dye and Real Textile Effluent using synthesized nano-Zinc Oxide	Hemapriyamvada, R., Sivasankar, T	Coloration Technology	2015 (In Press)

8. Ph.D Awarded

S.No.	Name of the Research Scholar	Guide(s) / Supervisor(s)	University / Institute
1	R. Dhanushkodi	Dr. N. Anantharaman & Dr. A. Arunagiri	NIT, Trichy

2	Asaithambi .P	Dr. M.Matheswaran	NIT, Trichy
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9. Details of Book authored by faculty

Development of course material under National Mission Project on Education through ICT (PEDAGOGY) – EOI submitted, 2014

10. Patent if any obtained by faculty: Nil

11. Other Important Points: Nil

DEPARTMENT OF CHEMISTRY**1. NOTABLE ACHIEVEMENTS****1.1. Faculty**

S. No.	Name	Details of Prizes/Awards	Organization
1.	Dr. R. Karvembu	Top cited author for 2012-2013, Journal of Organometallic Chemistry	Elsevier

1.2. Students

S. No.	Name	Details of Prizes/Awards	Organisation/Programme
1.	M. Mary Sheeba	Best poster presentation	13 th Eurasia Conference on Chemical Sciences, Indian Institute of Science, Bangalore, December 14-18, 2014
2	Ms. D. Udhayakumari	International Travel grant from DST	Paper presentation at the 15th Tetrahedron symposium, Singapore, October 28-31, 2014

2. CONFERENCE / SEMINARS / SYMPOSIUM / SPECIAL LECTURES**2.1. Organised**

S. No.	Coordinator	Programme	Period
1.	Dr. L. Cindrella	Workshop on Electroanalytical Methods in Practical Chemistry and industrial applications	March 10-12,

		of Electrochemistry	2014
2.	Dr. L. Cindrella	Student symposium, HORIZON-2014	September 12- 13, 2014
3.	Dr. L. Cindrella	Electrochemical Methods for evaluation of nano materials	November 20-21, 2014
4.	Dr. R. Karvembu	Special Lecture by Dr. David Semeril, Inorganic Chemistry and Molecular Catalysis Lab, University of Strasbourg, France	November 21, 2014
5.	Dr. R. Karvembu	Special Lecture by Dr. K. C. Kumara Swamy, Professor & J. C. Bose National Fellow, School of Chemistry, University of Hyderabad	December 12, 2014
6.	Dr. R. Karvembu	Special Lecture by Dr. A. Murugadoss, Research Officer, University of Birmingham, UK	January 22, 2015
7.	Dr. R. Karvembu	Special Lecture by Dr. Maheswaran Shanmugam, Assistant Professor, Department of Chemistry, Indian Institute of Technology Bombay	February 24, 2015
8.	Dr. S. Velmathi	Special lecture by Prof. V. Ramamurthy, University of Miami, USA	February 04, 2014
9.	Dr. S. Velmathi	Short term course on Recent Trends in Catalysis	November 7-8, 2014
10.	Dr. S. Velmathi	Three Day Workshop on Characterization Techniques in Chemical Sciences	July 9-11, 2014
11.	Dr. V.M. Biju	“Short term course on Innovative Methods in Chemical Sciences,” NIT Trichy	May 5-9, 2014

2.2. Papers presented by the Faculty/Students

S. No.	Author(s)	Details
1.	L. Cindrella	“Charge flow dynamics and binding characteristics of dye sensitizers for solar cell applications,” presented at Gaussian Workshop, New Delhi, January 6-10, 2014

2.	L. Cindrella and Jayasree	"Novel Interphase of supported bimetallic composite to boost the performance of proton exchange membrane fuel cell", presented at Euro-Mediterranean Hydrogen Technologies Conference, Taormina, Italy, December 9-12, 2014
3.	L. Cindrella and Jayasree	"New strategy for enhanced performance and reduced requirement of platinum in PEM fuel cell", Emerging Trends in Electrochemical Engineering, Science and Technology, Madurai Kamaraj University, July 23-24, 2014.
4.	L. Cindrella and K.M.Mini	"Polymer electrodes for solar cell applications", presented at Emerging Trends in Electrochemical Engineering, Science and Technology, Madurai Kamaraj University, July 23-24, 2014.
	K. Jeyalakshmi, P. Jerome and R. Karvembu	"Synthesis, DNA/protein binding and cytotoxicity studies of Ru-arene complexes containing guanidine ligands" presented at the 13 th Eurasia Conference on Chemical Sciences, Indian Institute of Science, Bangalore, December 14-18, 2014
5.	M. Mary Sheeba, S. Preethi and R. Karvembu	"Half-sandwich chiral ruthenium(II) arene complexes for asymmetric transfer hydrogenation of ketones" presented in 13 th Eurasia Conference on Chemical Sciences, Indian Institute of Science, Bangalore, December 14 to 18, 2014
6.	J. Haribabu, R. Gangadharan, K. Sethusankar and R. Karvembu	"Crystal structure of (<i>E</i>)-2-[(4-chloro-2 <i>H</i> -chromen-3-yl)methylidene]- <i>N</i> -cyclohexylhydrazinecarbothioamide" presented in National Seminar on Recent Trends in X-ray Crystallography, Seethalakshmi Ramaswami College, Trichy, October 8-9, 2014
7.	P. Jerome and R. Karvembu	"Pd(II)-NNN pincer complexes as catalysts for the Suzuki-Miyaura cross coupling reaction under aqueous medium" presented in National Symposium on Transcending Frontiers in Organic Chemistry at CSIR-NIIST, Thiruvananthapuram, October 9-11, 2014
8.	E. Balakumar, S. Ganesh Babu and	"Pd/AIO(OH): An efficient reusable heterogeneous catalyst for Buchwald-Hartwig coupling under ligand free aerobic condition" presented in National Symposium on Transcending Frontiers in Organic Chemistry at CSIR-NIIST,

	R. Karvembu	Thiruvananthapuram, October 9-11, 2014
9.	J. Haribabu, N.S.P. Bhuvanesh and R. Karvembu	"Novel water soluble organobimetallic Ru(II) complexes containing indole based thiosemicarbazone ligands: Synthesis, structure and <i>in vitro</i> biological evaluation" presented in 17 th CRSI National Symposium in Chemistry at NCL, Pune, February 6-8, 2015
10.	G.Balamurugan and Sivan Velmathi	Novel exceptional chromogenic probes tuned for the recognition of aqueous cyanide ion and relay recognition of dihydrogenphosphate ion and H ₂ O ₂ . Poster presented in the National Conference RACS-2015 March 6-7, 2015 Organised by the Department of Chemistry, Gandhigram Rural University, Dindigul, Tamil Nadu.
11.	S. Vikneshwaran and S. Velmathi.	<i>L</i> -Tryptophan based Novel Chiral Schiff Bases as Inhibitors for Corrosion of Steel. Oral presentation in the National Conference RACS-2015 March 6-7, 2015 Organised by the Department of Chemistry, Gandhigram Rural University, Dindigul, Tamil Nadu.
12.	S. Suganya and S. Velmathi	Synthesis and Toxic Metal Ions Detection of Simple Dithiosemicarbazones and its Application in Bio Imaging of Living Cell, Paper presented in the 13th Eurasia Conference on Chemical Sciences, held at IISc Bangalore, Dec 2014
13.	G.Balamurugan and Sivan Velmathi	Novel benzimidazole based highly selective chromogenic fluoride sensors, Paper presented in the Indian International Symposium on Fluorine Chemistry (IISFC-2014) Nov 3-7, 2014 Organized by Fluorine Organics Division, Indian Institute of Chemical Technology, Tarnaka, Hyderabad.
14.	Duraisamy Udhayakumari and Sivan Velmathi	An azo linked Schiff base for highly selective sensing of cyanide in aqueous solution, Poster presented in the 15th Tetrahedron Symposium- Asia Edition. held in Singapore, 28-31 October 2014.
15.	Duraisamy Udhayakumari and Sivan	Salophen Based Highly Sensitive Fluorescent Sensor for Detecting Mn (II) ion at Nanomolar Level, Paper presented in the International Conference for Advanced materials (ICAN-

	Velmathi	2014) held in the department of Inorganic Chemistry, University of Madras, Chennai, 2014
16.	Aswini K. K., Vinu Mohan A. M. and V.M. Biju	“Conducting polymer based electrochemical sensors for drugs via molecular recognition”, presented in Polymer Conference for Young Researchers (PCYR-14), October 18, 2014, CSIR-National Institute for inter-disciplinary Science and Technology (CSIR- NIIST), Pappanamcode, Thiruvananthapuram.
17.	Aswathi. M and V.M. Biju	“Room temperature ionic liquid supported cloud point extraction of copper from natural samples” presented in CSIMC 2015 at Jamal Mohamed College, Tiruchirappalli
18.	Aswathi. M and V.M. Biju	“Synergistic enhancement effect of room temperature ionic liquids for cloud point extraction I combination with FAAS quantitation of copper in natural samples” presented in IGCBIC 2014, Indian Institute of Science, Bangalore.

2.3. Attended by the Faculty / Students

S. No.	Faculty / Students	Details
1.	Dr. L. Cindrella	Gaussian Workshop, New Delhi, January 6-10, 2014
2.	Dr. L. Cindrella	Conference on Emerging Trends in Electrochemical Engineering, Science and Technology, Madurai Kamaraj University, July 23-24, 2014.
3.	P. Jerome	International Conference and Workshop on Advances in Biomolecular Sciences & Analytical NMR, Srimad Andavan Arts and Science College, Tiruchirappalli, August 25-27, 2014

4. INVITED / GUEST LECTURES DELIVERED BY THE FACULTY

S. No.	Faculty	Topic	Programme	Place & Date
1.	Dr. L. Cindrella	1. Fuel cells 2. Quantum dot solar cells	Refresher course in chemistry for university and college teachers	UGC Academic Staff College, Bharathidasan University, Trichy, February 5, 2015
2.	Dr. L. Cindrella	Fuel cell components and their challenges	Recent Trends in Materials Science	Kumarasamy College of Engineering, Karur, February 12-13, 2015
3.	Dr. L. Cindrella	Group theory and its applications	UGC sponsored seminar on Captivating challenges in Chemistry	Periyar EVR College, Trichy, February 19, 2015
4.	Dr. L. Cindrella	Analytical tools for surface coating	TEQIP sponsored workshop on Functional Coating- Current Trends	Thiagarajar College of Engineering, Madurai, March 6, 2015
5.	Dr. R. Karvembu	Transition metal complexes with simple ligands: Interesting structures and efficient catalysis	Short term course on innovative methods in chemical sciences	NIT, Trichy, May 7, 2014.
6.	Dr. R. Karvembu	Characterization of inorganic compounds	Workshop on characterization techniques in chemical sciences	NIT, Trichy, July 10, 2014
7.	Dr. R. Karvembu	Nanomaterials in catalysis	National conference on current trends in advanced chemistry	Saranathan College of Engineering, Trichy on August 9, 2014

8.	Dr. R. Karvembu	Transition metal complexes with simple ligands: Interesting structures and efficient catalysis	Invited lecture under star college scheme	PSGR Krishnammal College for Women, Coimbatore, August 13, 2014
9.	Dr. R. Karvembu	Nanomaterials in catalysis	TEQIP sponsored national conference on advancement in materials science	Coimbatore Institute of Technology, Coimbatore, October 27, 2014.
10.	Dr. R. Karvembu	Versatile coordination behaviour of acylthiourea ligands - Structures, catalysis and biological applications of transition metal complexes	MoES sponsored national conference on nanotechnology, chemistry and environmental research	Kongu Engineering College, Perundurai on December 11, 2014
11.	Dr. R. Karvembu	Chromatographic techniques	Dr. V. Meenakshi and Dr. T.S. Jani Bai endowment lectures	Seethalakshmi Ramaswamy College, Trichy, December 12, 2014
12.	Dr. R. Karvembu	1. Nanomaterials in catalysis 2. Versatile coordination behaviour of acylthiourea ligands - Structures, catalysis and biological applications of transition metal complexes	Refresher course in chemistry for university and college teachers	UGC Academic Staff College, Bharathidasan University, Trichy on January 29, 2015
13.	Dr. S. Velmathi	Invited Lecture on Alternative energy resources	Faculty Development Programme	Mohd. Sathak college, Kilakarai, February 28, 2015
14.	Dr. S. Velmathi	Lectures on Chemosensors and Chromatographic techniques	Refresher course for College teachers organized by UGC	Academic Staff College, Department of Chemistry, Bharathidasan University, Trichy, February 13, 2014
15.	Dr. S. Velmathi	Lecture on Chemosensors	Short term course on Innovative	NIT Trichy, May 05-09, 2014

			methods in chemical research	
16.	Dr. S. Velmathi	Lecture on NMR Spectroscopy	Workshop on Characterization techniques in Chemical Sciences	NIT Trichy, July 9-11, 2014
17.	Dr. S. Velmathi	Lecture on Green Chemistry and Alternative energy resources	Short term course on Recent Trends in Catalysis	NIT Trichy, November 7-8, 2014
18.	Dr. S. Velmathi	Lectures on Mesoporous materials and Fluorescent chemosensors	Refresher course for College teachers organized by UGC	Academic Staff College department of Chemistry, Bharathidasan University, Trichy, January 29, 2015
19.	Dr. S. Velmathi	Invited lecture on C2 symmetric chemosensors for Cyanide ions	UGC Sponsored National Conference in Frontier Areas in Chemistry	Thyagarajar college of Arts and Science Madurai on Feb 27, 2015
20.	Dr. S. Anandan	Effects put forth to enhance the efficiency in dye-sensitized nanostructured solar cells		Department of Chemical Engineering, Feng Chia University, Taiwan, January 14, 2014
21.	Dr. S. Anandan	Metal-Semiconductor Nanoparticles for Solar Energy Conversion Applications		Department of Environmental Engineering, Feng Chia University, Taiwan, on January 16, 2014
22.	Dr. S. Anandan	Sonochemistry-An Emergent Technology		Seethalakshmi Ramaswami College, Trichy, January 28, 2014
23.	Dr. S. Anandan	Preparation of Novel Components for Dye-sensitized Solar Cells		Department of Chemistry, Seethalakshmi Ramaswami College,

				Trichy, January 28, 2014
24.	Dr. S. Anandan	Effects put forth to enhance the efficiency in dye-sensitized nanostructured solar cells		Department of Chemistry, National Engineering College, Kovilpatti, February 7, 2014
25.	Dr. S. Anandan	Nanostructured solar cells		Department of Electrical Engineering, Vivekanandha College of Engineering for Women, Tiruchengode, March 7, 2014
26.	Dr. S. Anandan	Hybrid Nanomaterials for Energy Storage Applications		Department of Production Engineering, NIT Trichy March 7, 2014
27.	Dr. S. Anandan	Conjugated polymer based on Oligobenzo(c)thiophene and its derivatives as potential donor for Bulk Heterojunction Solar Cells		Department of Electrical Engineering, Indian Institute of Technology Kanpur during March 20-21, 2014
28.	Dr. S. Anandan	Nanostructured Solar cells-An overview		Department of Chemistry, Madurai Kamaraj University, July 24, 2014
29.	Dr. S. Anandan	Nanosized Semiconductor Particles and their Applications		Institute of Physical Chemistry, University of Alicante, Spain, September 16, 2014
30.	Dr. S. Anandan	Nanobiotechnology - Excitement & Opportunities	Short term Course in Bio-inspired Nanomaterials & Applications	Department of Chemical Engineering, Coimbatore Institute of Technology, Coimbatore, November 25, 2014

31.	Dr. S. Anandan	Invited lecture on Nanostructured Solar cells-An overview		The Institution of Engineers (INDIA), Trichy local center towards Energy Conservation Day on December 16, 2014
32.	Dr. V.M. Biju	Design and Development of Electrochemical sensors using Gold nanoparticles and Graphene modified glassy carbon electrodes	National Seminar on New Materials in Chemistry	Govt. College, Kattappana, Kerala, November, 2014
33.	Dr. V.M. Biju	Corrosion Engineering	Visiting Faculty Scheme (VFS) constituted by AICTE	Govt. Engineering College, Wayanad, February 18-20, 2015
34.	Dr. V.M. Biju	Atomic Absorption Spectroscopy and its Applications	National Seminar on New Frontiers in Chemistry sponsored by Directorate of Collegiate Education Government of Kerala.	Department of Chemistry, University College, Thiruvananthapuram, Kerala, March 2-3, 2015

5. SPONSORED PROJECTS UNDERTAKEN

S. No.	Co-ordinator	Name of the Project	Sponsor	Amount (Rs. in Lakhs)
1.	Dr. L. Cindrella	Radiation capped, stagnation temperature improved, wide spectrum responsive solar selective coatings for solar thermal systems	CSIR	10.75
2.	Dr. R. Karvembu	Nano silica immobilized acylthiourea complexes for catalytic applications	DAE-BRNS	21.2

3.	Dr. S. Anandan	Medium Band Gap Donor-Acceptor Conjugated Polymers towards fabrication of Bulk Heterojunction Solar Cells	DST-SERC Major Research Project	47
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6. MAJOR EQUIPMENT / SOFTWARE PURCHASED (more than Rs. 5 lakhs)

S.No	Equipment	Amount (Rs. in Lakhs)
1	Solar Simulator	7
2	Glove box	30
2	Gas Chromatograph-Mass Spectrometer	50
3	500 MHz NMR Spectrometer	2.8 Crores

7. RESEARCH PAPERS PUBLISHED IN NATIONAL / INTERNATIONAL JOURNALS

7.1. Faculty

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Global thrust on fuel cells and their sustainability – an assessment of research trends by bibliometric analysis	L. Cindrella, Hui-Zhen Fu and Yuh-Shan Ho	International Journal of Sustainable Energy	2014, Vol. 33(1), 125-140
2.	Impact of alloying and lattice strain on ORR activity of Pt and Pd based ternary alloys with Fe and Co for proton exchange membrane fuel cell applications	K. Mohanraju and L. Cindrella	RSC Advances	2014, Vol. 4, 11939– 11947

3.	Semiconducting composite of chalcone-bridged polythiophene and titania, its ammonia vapor sensing property	R. Venkatesan and L. Cindrella	Materials Science in Semiconductor Processing	2015, Vol. 34, 126-137
4.	Enhanced electrocatalytic activity of PANI and CoFe ₂ O ₄ /PANI composite supported on graphene for fuel cell applications	K. Mohanraju, V. Sreejith, R. Ananth and L. Cindrella	J. Power Sources	2015, Vol. 284, 383-391
5.	Nickel oxide doped hydroxyapatite for catalytic oxidation of alcohols to carbonyl compounds at room temperature	P. Emayavaramban, S. Ganesh Babu, R. Karvembu and N. Dharmaraj	Adv. Sci. Eng. Med.	2014, Vol. 6(6), 659-666
6.	Synthesis, structure, DNA and protein binding studies and cytotoxic activity of nickel(II) complexes containing 3,3-dialkyl/aryl-1-(2,4-dichlorobenzoyl)thiourea ligands	N. Selvakumaran, N.S.P. Bhuvanesh, A. Endo and R. Karvembu	Polyhedron	2014, Vol. 75, 95-109
7.	DNA/protein binding and cytotoxicity studies of copper(II) complexes containing N, N', N''-trisubstituted guanidine ligands	K. Jeyalakshmi, N. Selvakumaran, N.S.P. Bhuvanesh, A. Sreekanth and R. Karvembu	RSC Advances	2014, Vol. 4(33), 17179- 17195
8.	Catalytic N-oxidation of tertiary amines on RuO ₂ NPs anchored graphene nanoplatelets	M. Gopiraman, H. Bang, S. Ganesh Babu, K. Wei, R. Karvembu and I.S. Kim	Catal. Sci. Technol.	2014, Vol. 4(7), 2099- 2106

9.	Highly active, selective and reusable RuO ₂ /SWCNT catalyst for Heck olefination of aryl halides	M. Gopiraman, R. Karvembu and I.S. Kim	ACS Catal.	2014, Vol. 4(7), 2118- 2129
10.	Highly efficient homogeneous and heterogenized ruthenium catalysts for transfer hydrogenation of carbonyl compounds	S. Ganesamoorthy, P. Jerome, K. Shanmugasundaram and R. Karvembu	RSC Advances	2014, Vol. 4(53), 27955- 27962
11.	V ₂ O ₅ anchored RuO ₂ – An efficient, reusable and heterogeneous nanocatalyst for aerial oxidation of alcohols	S. Ganesh Babu, S. Krishnamoorthi, R. Thiruneelakandan and R. Karvembu	Catal. Lett.	2014, Vol. 144(7), 1245- 1252
12.	Nanostructured RuO ₂ on MWCNTs: Efficient catalyst for transfer hydrogenation of carbonyl compounds and aerial oxidation of alcohols	M. Gopiraman, S. Ganesh Babu, R. Karvembu and I.S. Kim	Appl. Catal. A: Gen.	2014, Vol. 484, 84-96
13.	Self-assembled Cu(II) and Ni(II) metallamacrocycles formed from 3,3,3',3'-tetrabenzyl-1,1'-aroylbis(thiourea) ligands: DNA and protein binding studies, and cytotoxicity of trinuclear complexes	N. Selvakumaran, N.S.P. Bhuvanesh and R. Karvembu	Dalton Trans.	2014, Vol. 43(43), 16395- 16410
14.	α -Arylation of β -diketones with aryl halides catalyzed by CuO on aluminosilicate	S. Ganesh Babu, R. Sakthivel, N. Dharmaraj and R. Karvembu	Tetrahedron Lett.	2014, Vol. 55(50), 6873- 6877
15.	Copper supported on lepidocrocite: A highly active magnetically separable nanocatalyst for N-arylation of imidazole	R. Sivakami, S. Dhanuskodi, S. Ganesh Babu and R. Karvembu	RSC Advances	2015, Vol. 5(12), 8571-

				8578
16.	Crystal structure of (E)-2-[(4-chloro-2H-chromen-3-yl)methylidene]-N-cyclohexylhydrazinecarbothioamide	R. Gangadharan, J. Haribabu, R. Karvembu and K. Sethusankar	Acta Cryst.	2014, Vol. E70(9), o1039-o1040
17.	Crystal structure of (2E)-N-methyl-2-[(4-oxo-4H-chromen-3-yl)methylidene]hydrazinecarbothioamide	G. Vimala, J. Govindaraj, J. Haribabu, R. Karvembu and A. SubbiahPandi	Acta Cryst.	2014, E70(11), o1151
18.	Crystal structure of (2E)-N-methyl-2-(2-oxo-1,2-dihydroacenaphthylen-1-ylidene)hydrazinecarbothioamide	G. Vimala, J. Govindaraj, J. Haribabu, R. Karvembu and A. SubbiahPandi	Acta Cryst.	2014, Vol. E70(11), 415-417
19.	Crystal structure of (Z)-2-(1-benzyl-2-oxoindolin-3-ylidene)-N-phenylhydrazine-1-carbothioamide	G. Vimala, J. Haribabu, R. Karvembu, B.V.N.P. Kumar and A. SubbiahPandi	Acta Cryst.	2015, Vol. E71(3), o160-o161
20.	Crystal structures of two hydrazinecarbothioamide derivatives: (E)-N-ethyl-2-((4-oxo-4H-chromen-3-yl)methylene)hydrazinecarbothioamide hemihydrate and (E)-2-((4-chloro-2H-chromen-3-yl)methylidene)-N-phenylhydrazinecarbothioamide	R. Gangadharan, J. Haribabu, R. Karvembu and K. Sethusankar	Acta Cryst.	2015, Vol. E71(3), 305-308
21.	A Dual-mode Chemosensor: Highly Selective Colorimetric Fluorescent Probe for Cu ²⁺ and F ⁻ ions	Duraisamy Udhayakumari ^a and Sivan Velmathi ^{a*} Wei-Chieh Chen ^b and Shu-Pao Wu ^b	Sensors and Actuators B	2014, Vol. 204, p. 375–381
22.	Simultaneous sensing of aqueous anions and toxic metal ions by simple	Sivalingam Suganya, Hye Jin Zo, Jong S. Park,	Industrial and engineering Chemistry Research	2014, Vol. 53 (23),

	dithiosemicarbazones and their real time application.	Sivan Velmathi *		9561–9569
23.	Colorimetric Detection of In-situ Metal Acetates by a Bipyridyl-Linked Schiff Base	Sivalingam Suganya, Hye Jin Zo, Jong S. Park, Sivan Velmathi *	Journal of Molecular Recognition	2014, Vol. 27 (12), 689-695
24.	Highly fluorescent Probe for Copper (II) Ion based on Commercially Available compounds and Live Cell Imaging	Duraisamy Udhayakumari and Sivan Velmathi *	Sensors and actuators B	2014, Vol. 198, 285-293
25.	Iron Impregnated SBA-15, Mild and Efficient Catalyst for Catalytic Hydride Transfer Reduction of Aromatic Nitro Compounds	N.S. Sanjini, S. Velmathi	RSc Advances	2014, Vol. 4, 15381-15388.
26.	Chiral amide from (1S,2R)-(+)-norephedrine and furoic acid: an efficient catalyst for asymmetric Reformatsky reaction	Nallamuthu Ananthi, Sivan Velmathi*	Journal of Chemical sciences	2014, Vol. 126 (1), 151-158,
27.	Colorimetric chemosensor for Multi-signaling detection of metal ions using pyrrole based Schiff bases	Duraisamy Udhayakumari and Sivan Velmathi *	Spectrochimica Acta Part A	2014, Vol. 122, 428-435
28.	Naked Eye Sensing of Toxic Metal Ions in Aqueous Medium Using Thiophene Based Ligands and its application in Living Cells	Udhayakumari, S. Suganya and S. Velmathi *	J. of Molecular Recognition	2014, Vol. 27, 151-159.
29.	Dihydrazone Based Colorimetric Chemosensor for Detecting Biologically Important Anions in Complete Aqueous Medium.	Sivalingam Suganya, Jong.S.Park and Sivan Velmathi *	Sensors and Actuators B	2014, Vol. 190, 679– 684

30.	Structural, Optical and Photocatalytic Properties of Wide Band Gap CuO Nanoparticles Synthesized By Microwave- Assisted Quick Precipitation Method	N.S.Sanjini, K. Dhanalakshmi and S. Velmathi*,	Science of Advanced Materials	2014, Vol. 6, 1399-1405
31.	Highly Selective nano molar detection of Cu ²⁺ ion by Fluorescent Turn-on response and their application in Living Cells.,	Sivalingam Suganya, Sivan Velmathi* , D. Mubarak Ali,	Dyes and Pigments	2014, Vol. 104, 116-122
32.	Azo Linked Thiourea based Effective Dual Sensors and its Real samples Application in aqueous medium	Duraisamy Udhayakumari and Sivan Velmathi*	Sensors and Actuators B	2015, Vol. 209, 462-469
33.	Ultrasound assisted synthesis of Mn ₃ O ₄ nanoparticles anchored graphene nanosheets for supercapacitor applications	Gnana Sundara Raj B, Ramprasad RR, Asiri AM, Wu JJ, Anandan S	Electrochimica acta	2015, Vol. 156, 127-137
34.	Preparation of CuO Mesocrystals via Antlerite Intermediate for photocatalytic applications	Selvamani T, Manjula CA, Anandan S , Asiri AM, Ashokkumar M	Crystal Research Technology	2015, Vol. 50, 143-149
35.	Simultaneous Detection of Dopamine and Ascorbic Acid Using Silicate Network Interlinked Gold Nanoparticles and Multi-Walled Carbon Nanotubes	Vinoth V, Wu JJ, Asiri AM, Anandan S	Sensors & Acutators B	2015, Vol. 210, 731-741
36.	New D- π -A type indole based chromogens for DSSC: Design, synthesis and performance studies	Babu DD, Saritha Reddy G, Anandan S , Adhikari AV	Dyes and Pigments	2015, Vol. 112, 183-191

37.	Green grasses as light harvesters in dye sensitized solar cells	Vinoth S, Manoharan S, Sharafali A, Anandan S , Murugan R	Spectrochimica Acta Part A-Molecular And Biomolecular Spectroscopy	2015, Vol. 135, 947-952
38.	C and N doped nano sized TiO ₂ for visible light photocatalytic degradation of aqueous pollutants	Dayamani A, Muthusamy S, Anandan S , Subrahmanyam Ch	Of Experimental Nanoscience	2015, Vol. 10, 115-125
39.	Sonophotocatalytic treatment of Bismarck Brown G dye and real textile effluent using synthesized novel Fe(0) doped TiO ₂ catalyst	Dinesh GK, Anandan S , Sivasankar T	RSC Advances	2015, Vol. 5, 10440- 10451
40.	Synthesis of 1, 3-dihexyl-2-(phenylthio)-1H-benzo[d]imidazol-3-ium iodide-A new ionic liquid for dye sensitized solar cell applications	Ramkumar S, Upul Wijayantha KG, Velayutham D, Anandan S	Journal of Molecular Liquids	2014, Vol. 193, 185-188
41.	Ultrasound Assisted Synthesis of Sn Nanoparticles-Stabilized Reduced Graphene Oxide	Anandan S, Asiri AM, Ashokkumar M	Ultrasonics Sonochemistry	2014, Vol. 21, 920-923
42.	Exploration of (S)-4,5,6,7-Tetrahydrobenzo[d]thiazole-2,6-diamine as Feasible Corrosion Inhibitor for Mild Steel in Acidic Media	Manivel A, Ramkumar S, Wu JJ, Asiri AM , Anandan S,	Journal of Environmental Chemical Engineering	2014, Vol. 2, 463-470
43.	Enhanced Visible Light Photodegradation of Water Pollutants over N-, S-doped Titanium dioxide and n-Titanium dioxide in the presence of Inorganic Anions	Asiri AM, Al- Amoudi MS, Bazaid SA, Adam AA, Alamry KA, Anandan S	Journal of Saudi Chemical Society	2014, Vol. 18, 155-163

44.	Photocatalytic degradation of ceftiofur sodium in the presence of gold nanoparticles loaded TiO ₂ under UV-visible light	Pugazhenthiran N, Murugesan S , Sathishkumar P, Anandan S	Chemical Engineering Journal	2014, Vol. 241 401-409
45.	Cyanovinyl substituted benzimidazole -A) organic dyes for fabrication of Dye Sensitized Solar Cells□based (D-	Manohar S, Anandan S	Dyes and Pigments	Volume: 105 Pages: 223-231 2014
46.	Ultrasound Assisted Synthesis of TiO ₂ -WO ₃ Heterostructures for the Catalytic Degradation of Tergitol (NP-9) in Water	Anandan S, Wu JJ	Ultrasonics sonochemistry	Volume: 21 Pages: 1284- 1288 2014
47.	Low frequency ultrasound (42 kHz) assisted degradation of Acid Blue 113 in the presence of visible light driven rare earth nanoclusters loaded TiO ₂ nanophotocatalysts	Sathishkumar P, Mangalaraja R V, Rozaz O, Mansilla H D, Gracia-Pinilla M A, Anandan S	Ultrasonics sonochemistry	2014, Vol. 21, 1675- 1681
48.	Sonochemical Synthesis of Hollow Copper Doped Zinc Sulfide Nanostructures - Optical and Catalytic Properties for Visible Light Assisted Photosplitting of Water	Lee GJ, Anandan S, Masten, SJ, Wu JJ	Industrial & engineering chemistry research	2014, Vol. 53, 8766- 8772
49.	Natural Sensitizers for Dye Sensitized Solar Cell Applications	Mary Rosana NT, JoshuaAmarnath D, Vincent Joseph KL, Suresh A, Anandan S, Saritha G	International journal of scientific & engineering research	2014, Vol. 5, 340-344

50.	Mixed Dye from Nerium Oleander and Hibiscus Flowers as a photosensitizer in Dye Sensitized Solar Cells	Mary Rosana NT, Joshua Amarnath D, Vincent Joseph KL, Anandan S,	International journal of chemtech research	2014, Vol. 6, 5022-5026
51.	Sonochemically synthesized MnO ₂ nanoparticles as electrode material for supercapacitors	Author(s): Gnana Sundara Raj B, Asiri AM, Qusti AH, Wu JJ, Anandan S	Ultrasonics sonochemistry	2014, Vol. 21, 1933-1938
52.	Sonochemical synthesis of carbon supported Sn nanoparticles and its electrochemical application	Anandan S, Wu JJ	Ultrasonics sonochemistry	2014, Vol. 21, 1954-1957
53.	Synthesis of TiO ₂ /WO ₃ nanoparticles via sonochemical approach for the Photocatalytic Degradation of Methylene Blue under Visible Light Illumination	Anandan S, Sivasankar T, Villarreal TL	Ultrasonics sonochemistry	2014, Vol. 21, 1964-1968
54.	Sonophotocatalytic (42 kHz) degradation of Simazine in the presence of Au-TiO ₂ nanocatalysts	Sathishkumar P, Mangalaraja R V, Mansilla H D, Gracia-Pinilla M A, Anandan S	Applied catalysis b-environmental	2014, Vol. 160-161, 692-700
55.	Interfacially synthesized PANi-PMo ₁₂ hybrid material for supercapacitor applications	Manivel A, Asiri AM, Alamry KA, Villarreal TL, Anandan S	Bulletin of materials science	2014, Vol. 37, 861-869
56.	Sonophotocatalytic degradation of Acid Blue 113 in the presence of Rare Earth nanoclusters loaded TiO ₂ nanophotocatalysts	Sathishkumar P, Mangalaraja R V, Rozaz O, Mansilla H D, Gracia-Pinilla M A, Melendrez MF, Anandan S	Separation and purification technology	2014, Vol. 133, 407-414

57.	Sonochemical Synthesis and Characterization of Turbostratic MnNi(OH) ₂ Layered Double Hydroxide Nanoparticles for Supercapacitor Applications	Anandan S, Chen CY, Wu JJ	Rsc Advances	2014, Vol. 4, 55519-55523
58.	Intensification of Sonochemical Degradation of Rhodamine B using oxidants, hydrogen peroxide/peroxydisulphate/peroxy monosulphate with Fe ²⁺ ion: proposed pathway and Kinetic	Kurukutla AB, Sathishkumar P, Anandan S, Sivasankar T	Environmental engineering science	2014, Vol. 32, 1-12
59.	Molecularly imprinted polymer based electrochemical detection of L-cysteine at carbon paste electrode,	Aswini KK, Vinu Mohan AM and VM Biju	Materials Science & Engineering C	2014, Vol. 37, 321-326
60.	Electrochemical co-deposition of gold particle-poly(2-(2-pyridyl) benzimidazole) hybrid film on glassy carbon electrode for the electrocatalytic oxidation of nitric oxide	Vinu Mohan AM, Aswini KK. and VM Biju	Sensor and Actuators B: chemical,	2014, Vol. 196, 406-412.
61.	Quantitative determination of melatonin in milk by LC-MS/MS	D.Karunanithi, A.Radhakrishna, K.P. Sivaraman & V.M.Biju,	Journal of Food Science and Technology	51 (2014) 805-812.
62.	Electrocatalytic behaviour of hybrid cobalt manganese hexacyanoferrate film on glassy carbon electrode	Vinu Mohan A. M., Rambabu Gutru, Aswini K.K., and V. M. Biju,	Thin solid films	565 (2014) 207-214.
63.	Synthesis and chelation properties of a new polymeric ligand derived from 1-amino-2-naphthol-4-sulfonic acid	D. Manivannan and VM Biju,	Journal of AOAC international	2015, Vol. 98, 188-191.

8. PhD AWARDED

S.No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1	S. Ganesamoorthy	Dr. R. Karvembu	NITT
2	N. Selvakumaran	Dr. R. Karvembu	NITT
3	S. Ramkumar	Dr. S. Anandan	NITT
4	Vinu Mohan A. M.	V.M. Biju	NITT
5	D. Karunanithi	V.M. Biju	NITT

9. Details of Book any authored by faculty.

1. **S. Anandan** and M. Ashokkumar, "Sonochemical synthesis of noble mono- and bimetallic nanoparticles for catalytic applications", **Cavitation: A Novel Energy Efficient Technique for the Generation of Nanomaterials**, (2014) 55-88. **Publisher: Pan Stanford Publishing, Singapore.**
2. S. Naveenraj and **S. Anandan**, "Binding of serum albumins with nanoparticles: A short review", **Industrial Biotechnology in Non-aligned and other developing countries-Current status and future prospects**, (2014) 25-40. **Publisher: Daya Publishing House (A division of Astral International Pvt. Ltd, New Delhi, India.**
3. **S. Anandan** and M. Ashokkumar, "Graphene Oxide Nanodisks and Nanodots -An overview", **Carbon Nanomaterials Source book**, xxx (2015) xx-xx. **Publisher: Taylor & Francis books.**

10. Patent if any obtained by faculty: Nil.**11. Other Important Points****Dr.S.Anandan**

1. **Hiyoshi Environmental Award - 2014** of Hiyoshi Corporation Japan for outstanding contribution to applied study for Environmental Conservation and Protection.
2. Editorial board Member for the International Journal of Nanomaterials, Nanotechnology and Nanomedicine- Publisher: Peertechz Journal- 2015
3. As Visiting Professor at Department of Environmental Engineering & Science, Feng Chia University, Taiwan from 3rd January 2015- 17th January 2015.
4. As Visiting Professor at Institute of Physical Chemistry, University of Alicante, Spain from 8th September 2014- 20th September 2014.
5. As Visiting Professor at Department of Environmental Engineering & Science, Feng Chia University, Taiwan from 16th June 2014- 7th July 2014. As Visiting Professor Department of Environmental Engineering & Science, Feng Chia University, Taiwan from 6th January 2014- 24th January 2014

Department: **CIVIL ENGINEERING**

1. Notable Achievements

Nil

1.1 Faculty Members

S.No	Name	Details of Prizes / Awards	Organization
1	Dr.C.Natarajan	<p>Mayan Awards 2014 conferred on Mr. C. Natarajan for Zealous Contribution in Structural Designs by the Excellency of the Governor of Tamil Nadu on January 4, 2015.</p> <p>Award of appreciation of being the structural consultant of Public Building at Tiruchirappali Region by ICI- UltraTech Endowment Award - 2014</p>	<p>Vista India, Chennai</p> <p>ICI- UltraTech</p>
2.	Dr. S.Jayalekshmi	<p>Best Paper Award(Co-Author), International Journal of Civil Engineering</p> <p>Paper Details: Sudeep Sapkota, Madhukar Dhingra and S.Jayalekshmi(2014) Review on Soil Stabilisation Techniques, International Journal of Civil Engineering(IJCE),ISSN(P) 2278-9987;ISSN(E): 2278-9995, Volume 3, Issue 3, May 2014, pp.63-78.</p>	<p>Awarded by International Academy of Science, Engineering and Technology</p>

1.2 Students

S.No	Name	Details of Prizes / Awards	Organization
1.	Sudeep Sapkota (Passed out B.Tech. student) – First Author	<p>Best Paper Award, International Journal of Civil Engineering</p> <p>Paper Details: Sudeep Sapkota, Madhukar Dhingra and S.Jayalekshmi(2014) Review on Soil Stabilisation Techniques, International Journal of Civil Engineering(IJCE),ISSN(P) 2278-9987;ISSN(E): 2278-9995, Volume 3, Issue 3, May 2014, pp.63-78.</p>	<p>Awarded by International Academy of Science, Engineering and Technology</p>

2.	Madhukar Dhingra (Passed out B.Tech. student) – Co-Author	Best Paper Award, International Journal of Civil Engineering Paper Details: Sudeep Sapkota, Madhukar Dhingra and S.Jayalekshmi(2014) Review on Soil Stabilisation Techniques, International Journal of Civil Engineering(IJCE),ISSN(P) 2278-9987;ISSN(E): 2278-9995, Volume 3, Issue 3, May 2014, pp.63- 78.	Awarded by International Academy of Science, Engineering and Technology
3.	J.S.Sankar Jegadesh Ph.D. Scholar, Dept. of Civil Engg., N.I.T., Tiruchirappalli (First Author)	Paper Details Sankar Jegadesh J.S. and S.Jayalekshmi (2015)State of the Art on Design Standards of Concrete Filled Steel Tubular Columns, International Journal of Applied Engineering Research (IAER), Volume 10, Number 9 (2015) Special Issues ,6537-6542	Awarded best Paper at International Conference, Muthayammal College of Engineering, Rasipuram, Namakkal District 5 th to 6 th March 2015.
4.	Tusi Mandal Dr. S. T. Ramesh	Best Poster Award	International conference on new frontiers in chemical, energy and environmental engineering (INCEEE) Department of Chemical Engineering, National Institute of Technology, Warangal, March 20- 21, 2015.

2. Conference

2.1 Organised

International

S.No	Coordinator	Programme	Period
1.	Programme Committee – Dr.S.Jayalekshmi	International Conference on Architectural and Civil Engineering ACE 2015,Singapore presented by Global Science and Technology Forum	Conference Date : 13 th April 2015 to

	Venue: Hotel Fort Canning, Singapore	14 th April 2014
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National: Nil

2.2 Papers presented by the Faculty / Students

International

S. No	Author (s)	Details
1	Srinivasan Chandrasekaran, N. Madhavi and C. Natarajan	33rd International Conference on Ocean, Offshore and Arctic Engineering (OMA E14), ASME, San Francisco, CA, USA, June 8 th -13 th , 2014
2	R. Bharathi Murugan and Dr. C. Natarajan, M K Haridharan and C Natarajan (2014)	R. Bharathi Murugan and Dr. C. Natarajan, “Experimental Study on Waste Tire Crumb Rubber as Construction Material” Innovations and Advances in Civil Engineering Towards Green and Sustainable Systems (INACES- 2014) on 28 th to 30 th April, 2014 at CIT, Coimbatore. R. Bharathi Murugan, B. Selvakumar and Dr. C. Natarajan, “Properties of concrete containing waste tire crumb rubber”

		<p>2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p> <p>“Effect of Cooling Methods on Mechanical Properties of OPC and PPC Concrete Subjected to Elevated Temperature.” International Conference on Innovations and Advances in Civil Engineering towards Green and Sustainable Systems (INACES-2014), 28 to 30th April 2014, Coimbatore.</p>
3	<p>Padmavathi N.S. and Krishnan P.A.</p> <p>Sabareesan. M and P. A. Krishnan</p>	<p>“ Buckling Analysis of Circular Cylindrical Shells with Circular Cutouts”, International Conference on Advances in Civil Engineering Materials and Processes, Coimbatore Institute of Technology 7th -9th January 2015.</p> <p>“ Free Vibration Analysis of Edge Cracked plate with Different Crack Configurations”, International Conference on Advances in Civil Engineering Materials and Processes, Coimbatore Institute of Technology 7th -9th January 2015.</p>
4	<p>Honey Verma and Baskar, K.,</p> <p>Harikrishna, T. and Baskar, K.,</p>	<ol style="list-style-type: none"> 1. Numerical simulation of welding and its influence on ultimate strength of thin-walled welded plate girder (ID – SEC14AQD),” Proceedings of the Structural Engineering Convention 2014, SEC2014, organized by IIT Delhi, 22nd – 24th December 2014. 2. Comparative study on response of boiler supporting structure designed using structural steel I-columns and concrete filled square steel tubular columns (ID - SEC14AOL),” Proceedings of the Structural Engineering Convention 2014, SEC2014, organized by IIT Delhi, 22nd – 24th December 2014.
5	Muthukkumaran, K. and Jose Joseph	<p>GeoShanghai International Conference -2014, May 26-28, 2014. Shanghai, China.</p> <p>Utilization of Industrial waste in the stabilization of Montmorillonite rich expansive soils</p>
6	Muthukkumaran, K. and Aravind Kumar, B	<p>GeoShanghai International Conference -2014, May 26-28, 2014. Shanghai, China.</p> <p>Effect of raker piles in lateral load capacity of laterally load pile group”</p>

7	Muthukkumaran, K., B. Madhusudan Reddy	Sixth International Geotechnical Symposium on Disaster Mitigation in Special Geoenvironmental Condition, 21-23 January 2015, IIT Madras. Analysis of Earthen Embankment Constructed on Soft Ground under Static and Seismic Loading
8	SankarJegadesh J.S. and S. Jayalekshmi	Sankar Jegadesh J.S. and S. Jayalekshmi, "Theoretical Investigations on Design Approaches of Concrete Filled Steel Tubular Columns" Presented in / Proceedings - International Conference on Inter Disciplinary Research in Engineering and Technology held at Professional College of Engineering, Palladam, Tirupur. (21.8.2014 to 22.8.2014)
9	S. Jayalekshmi and Sankar Jegadesh J.S.	S. Jayalekshmi and Sankar Jegadesh J.S. "Finite Element Analysis and Theoretical Investigations on Concrete Filled Steel Tubular Columns" Presented in / Proceedings - International Conference on Inter Disciplinary Research in Engineering and Technology held at Professional College of Engineering, Palladam, Tirupur. (21.8.2014 to 22.8.2014)
10	Sankar Jegadesh J.S. and S. Jayalekshmi	SankarJegadesh J.S. and S. Jayalekshmi "A Comparative Study on Design Principles of Circular Concrete Filled Steel Tubular Columns " Presented in International Conference on Inter Disciplinary Research in Engineering and Technology held at Professional College of Engineering, Palladam, Tirupur. (21.8.2014 to 22.8.2014)
11	Sugali Sreenivasulu and S.Jayalekshmi	SugaliSreenivasulu and S.Jayalekshmi (2014) Geotechnical Characterisation of TRI-1 Lunar Simulant, Proceedings of the first Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC 2014, May 19-20,2014, Organised by Department of Civil Engineering, National Institute of Technology, Karnataka, Surathkal pp.351-358
12	Sankar Jegadesh J.S. and S.Jayalekshmi	SankarJegadesh J.S. and S.Jayalekshmi(2014) Study on Behaviour of Concrete Filled Steel Tubular Columns, Proceedings of the first Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC 2014, May 19-20,2014, Organised by Department of Civil Engineering, National Institute of Technology, Karnataka, Surathkal pp.592-599.
13	Sankar Jegadesh J.S. , P. Chandrasekaran and S.Jayalekshmi	Sankar Jegadesh J.S, P.Chandrasekaran and S.Jayalekshmi (2014). Novel Technology To Treat Textile Effluent Using Fly Ash As An Adsorbent And Use Of Waste Materials In Concrete To Reduce Global Warming Gases. International Conference on Green technology for Pollution Prevention and Pollution Control, 27-29 September, 2014.
14	Sankar Jegadesh J.S. and S.Jayalekshmi	Sankar Jegadesh J.S. and S.Jayalekshmi(2015) A Study on Design Principles of Concentrically Loaded Circular Concrete Filled Steel Tubular Columns, Proceedings of International Conference on Advances in Civil Engineering, Materials and Processes, ICACEMAP 2015, Jan. 07-09,2015, Organised by Department of Civil Engineering, Coimbatore Institute of

		Technology, Coimbatore-641014 (Paper ID S026)
15	Santhosh M.B., P.Raam Pandian and S.Jayalekshmi	Santhosh M.B., P.Raam Pandian and S.Jayalekshmi(2015), Study on Phytoextraction and Phytoremediation of Soil Contaminated by Zinc, Proceedings of International Conference on Advances in Civil Engineering, Materials and Processes, ICACEMAP 2015, Jan. 07-09,2015, Organised by Department of Civil Engineering, Coimbatore Institute of Technology, Coimbatore-641014 Paper ID G-006
16	P.Raam Pandian, Santhosh M.B. and S.Jayalekshmi	P.Raam Pandian, Santhosh M.B. and S.Jayalekshmi (2015) Experimental Investigation on effect of Sugarcane Bagasse Ash(SCBA) on weak soil, Proceedings of International Conference on Advances in Civil Engineering, Materials and Processes, ICACEMAP 2015, Jan. 07-09,2015, Organised by Department of Civil Engineering, Coimbatore Institute of Technology, Coimbatore-641014 Paper ID G-005
17	Sankar Jegadesh J.S. and S.Jayalekshmi	Sankar Jegadesh J.S. and S.Jayalekshmi (2015)State of the Art on Design Standards of Concrete Filled Steel Tubular Columns, Second International Conference on Engineering, Technology and Science , Muthayammal College of Engineering, Rasipuram, Namakkal District, Tamil Nadu, 5 th and 6 th March 2015.
18	Sankar Jegadesh J.S. and S.Jayalekshmi	Sankar Jegadesh J.S. and S.Jayalekshmi (2015)State of the Art on Design Standards of Concrete Filled Steel Tubular Columns, International Journal of Applied Engineering Research (IJAER), Volume 10, Number 9 (2015) Special Issues ,6537-6542
19	Karthikeyan J and Ananthi A	Material Properties of Bottom Ash and Welding Slag as Fine Aggregates in Concrete, International Conference on Construction Materials and Structures held on 26 th to 28 th of November 2014 at Johannesburg, South Africa.
20	Gopi Teja Sri, S. T. Ramesh, M. Gunasheela, R. Venkat Saravanan	Active Treatment Technology for precipitating metals from Acid Mine Drainage using Calcium Hydroxide, Sodium Hydroxide and Calcium Silicate,
21	Dhivya S, S. T. Ramesh, R, Gandhimathi	Effectiveness of a plant based natural coagulant extracted from plantago ovata seeds: Potential for water application
22	Tusi Mandal, S. T. Ramesh	Synthesis, Characterization and evaluation of sorptive property of Zerovalent iron for the removal of Megenta MB dye from aqueous solution,
23	Shara siby S. T. Ramesh	Evaluation of the photocatalytic activity of TiO ₂ catalyst for the degradation of organic pollutants under UV-A irradiation
24	Archana P Abraham S. T. Ramesh	Performance analysis of electrolysis integrated tidal flow constructed wetland system for nutrient removal
25	P. Aswathy and R. Gandhimathi	Removal of organics from bilge water using batch electrocoagulation and its optimization
26	T. T. Asha and R. Gandhimathi	Treatment of stabilized leachate by sulfate radical based advanced oxidation process

27	P. S. Roshini and R. Gandhimathi	Treatment of textile wastewater by combined advanced oxidation and biological process
28	R. Jinisha and R. Gandhimathi	Fe-SBA-15 as a heterogeneous catalyst for the removal of Rhodamine B using electro Fenton process
29	Manjula R, Sannasiraj S.A and Saravanan S	Experimental Investigation of response of vertical slender cylinder under breaking wave impact” presented on 13-03-2015 at NIT Surathkal in international conference on water resources, coastal and ocean Engineering 2015
30	S. Iswarya and S. Moses Santhakumar	Simulation of Traffic Flow Around an Urban Roundabout , First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014, NITK, Surathkal, 19-20 May 2014.
31	S. Divya and S. Moses Santhakumar	Simulation of Pedestrian Crossing Behaviour along an Urban Corridor , First Annual Conference on Innovations and Developments in Civil Engineering, ACIDIC-2014, NITK, Surathkal, 19-20 May 2014.

National

Author (s)	Details
1. BharathiMurugan R. and C. Natarajan (2014)	Investigation of the behavior of concrete containing waste tire crumb rubber”, Structural Engineering Convention (SEC-2014) ,IIT Delhi, 1795-1802
“ 2. M. Sudhakar, George M. Varghese and C. Natarajan(2014)	” Performance Studies on Geopolymer Based Solid Interlocking Masonry Blocks” Structural Engineering Convention (SEC-2014) , IIT Delhi , 1“Study on the Properties of cement Concrete using Manufactured Sand , Structural Engineering Convention (SEC-2014) , IIT Delhi , 1803-1809 687-1701
3. M.R. Lokeswaran and C. Natarajan (2014),	Performance assessment of RC beams with CFRP and GFRP sheets” Structural Engineering Convention (SEC-2014) , IIT Delhi ,1987-2000
4. Ch. Venkateswarlu and C. Natarajan (2014)	Interaction Study on Interlocking Masonry Wall Under Simultaneous In-Plane and Out-of-Plane Loading” Structural Engineering Convention (SEC-2014) , IIT Delhi ,2471-2480 ”Behaviour of Two way reinforced concrete slab at elevated temperatures”, Structural Engineering Convention (SEC-2014) , IIT Delhi ,2285-2298
5. M. Sudhakar, M.P. Raj and C. Natarajan(2014)	

<p>6. " N. RaveendraBabuNukala,M. K. Haridharan and C. Natarajan (2014)</p>	<p>Properties of concrete containing waste tire crumb rubber" 2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p>
<p>7.R. BharathiMurugan, B. Selvakumar and Dr. C. Natarajan,</p>	<p>"Non-Destructive investigation on the effect of locally available manufactured sands in concrete" 2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p>
<p>7. M.R. Lokeswaran and C. Natarajan,</p>	<p>"Experimental investigation of functionally graded concrete with fly ash" 2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p>
<p>8. SatyanarayanaPothula and C. Natarajan,</p>	<p>"Analytical studies of the behaviour of reinforced concrete beam with openings" International conference on advances in civil engineering materials and processes, on 7th January, 2015 at CIT, Coimbatore.</p> <p>"Effect of Cooling Methods on Mechanical Properties of OPC and PPC Concrete Subjected to Elevated Temperature." International Conference on Innovations and Advances in Civil Engineering Towards Green and Sustainable Systems (INACES-2014), 28 to30th April 2014, Coimbatore.</p> <p>"Numerical Simulation of Damage in Reinforced Concrete Slab subjected to Elevated Temperature" "Proceedings of the National Conference on Advancements in Materials, Construction & Sustainable</p>

<p>10.HemanthYadhav M and C. Natarajan,</p> <p>11.M K Haridharan and C Natarajan (2014)</p> <p>12.M K Haridharan and C Natarajan (2014) “</p>	<p>Environment (AMCSE 2014), 29th March 2014, Krishnankovil, Tamilnadu, India.</p>
<p>13. AniruddhMaddi and P. A. Krishnan</p> <p>14. R. R. Sawant and P. A. Krishnan</p> <p>15. Saleem S.K and P. A. Krishnan</p>	<p>”Interfacial Stress Analysis of Externally Plated RC Beams” Futuristic Innovations and Emerging Trends in Civil Engineering FIETCE ’14 Department of Civil Engineering, B.S.Abdurahman University, Chennai 5th and 6th May 2014.</p> <p>“Curvature Effect on Buckling Characteristics of Curved Plates under Uniform Shear”, National Conference on Technological Innovations for Sustainable Infrastructure (TISI 2015) , 13th and 14th March 2015, NIT, Calicut.</p> <p>“Static Response of Functionally Graded (FG) Composite Shell using Finite Element Method”, National Conference on Technological Innovations for Sustainable Infrastructure (TISI 2015) , 1^{3th} and 1^{4th} March 2015, NIT, Calicut.</p> <p>“Buckling Analysis of Cylindrical Shells with Stiffened Circular Cutout. ”, National Conference on Technological Innovations for Sustainable Infrastructure (TISI 2015) , 13th and 14th March 2015, NIT, Calicut</p>

16.Pavithra S and P. A. Krishnan	
17.B. S. Shashank and K. Muthukkumaran	Properties of microorganisms treated cohesionless soils”, Proceedings of Indian Geotechnical Conference IGC-2014, December 18-20, 2014, Kakinada, India. pp 663-669.
18.Amy Susan George and K. Muthukkumaran	Immobilization of lead in soils by bacillus cereus bioaugmentation and sludge amendment”, Proceedings of Indian Geotechnical Conference IGC-2014, December 18-20, 2014, Kakinada, India. pp 1175-1184.
19.Deendayal, K. Muthukkumaran, and T.G. Sitharam	Experimental investigation of single model pile in clay slope under lateral load”, Proceedings of Indian Geotechnical Conference IGC-2014, December 18-20, 2014, Kakinada, India. pp 1595-1599.
20.Prapulla Kumar Uppu and K. Muthukkumaran	Detection of seawater intrusion using resistivity survey and hydrochemical analysis- a case study”, Proceedings of Indian Geotechnical Conference IGC-2014, December 18-20, 2014, Kakinada, India. pp 1873-1877.
21.A. R. Prakash and K. Muthukkumaran	Behaviour of monopile under axial load in soft marine clay”, Proceedings of Indian Geotechnical Conference IGC-2014, December 18-20, 2014, Kakinada, India. pp 1937-1940.
22.Sri Raam Pandian P and S. Jayalekshmi	Sri Raam Pandian P and S. Jayalekshmi, “Review on Technical And Legal Aspects Involved in Forensic Geotechnical Engineering” National conference on Advances in Soil, Water and Environmental Engineering, SASTRA University, Thanjavur, 10 – 11th Oct , 2014
23.Archana Abraham, S. T. Ramesh	Preliminary study on nutrient removal using a novel electrolyte integrated tidal flow constructed wetland,
24.Ramya M, Saravanan S and Manjula R	Investigating Ground water Contamination using vertical electrical sounding around Ariyamangalam Municipal Solid waste Dumpsite, Trichy, Tamilnadu, National conference held at VIT.
25.Sakthivel G, Lakshmanan R , Arthur James, Manjula R and Saravanan S	Assessment of microbial pollution and land use land cover changes in Cuddalore coastal Region, Tamilnadu, NCAACE'15 , National Conference held on 4 th April 2015 at Saveetha University

26.Rajesh R, Saravanan S and Manjula R	Assessment of artificial recharge on ground water quality and table- A case study at NIT Trichy, , National Conference held on 4 th April 2015 at Saveetha University
27.Rajesh.R, Antony Raj. A, Ramya.M, Saravanan.S,Manjula.R,	Evaluation of groundwater quality in and around Ariyamangalam landfill site, Tiruchirapalli,India: an integrated geochemical and GIS approach” Presented at International Conference on Green Technology for Environmental Pollution Prevention and Control September 27-29,2014, National Institute of Technology, Tiruchirappalli.
28.Ramya.M, Saravanan.S, Manjula.R,	Municipal Solid Waste Characteristics and Management- A Case Study on Ariyamangalam landfill site, Tiruchirapalli,India” International Conference on Green Technology for Environmental Pollution Prevention and Control September 27-29,2014, National Institute of Technology, Tiruchirappalli.
29.Antony Raj. A, Rajesh. R, Ramya. M, Saravanan.S and Manjula. R	Effects of Treated Wastewater Irrigation on Soil Properties – A Case Study at NIT Trichy, ICACEMAP 2015, Proceedings of International Conference on Advances in Civil Engineering Materials And Processes, Jan 7-9, 2015 at CIT, Coimbatore.
30.R. Bharathi Murugan and Dr. C. Natarajan,	<p>“Durability study on concrete incorporating waste tire crumb rubber as fine aggregate” National Level Conference On Advancement In Materials, Construction and Sustainable Environment on 29th March, 2014 at kalasalingam university, krishnakoil.</p> <p>Bharathi Murugan, R and C. Natarajan C (2015), “Investigation of the behaviour of concrete congaing waste tire crumb rubber”. Advances in Structural Engineering: Springer India, ISBN: 978-81-322-2186-9 (Print) 978-81-322-2187-6 (Online), Volume 03, pp- 1795 - 1802.</p>
31.M K Haridharan and C Natarajan (2014)	<p>“Numerical Simulation of Damage in Reinforced Concrete Slab subjected to Elevated Temperature”</p> <p>Proceedings of the National Conference on Advancements in Materials, Construction & Sustainable Environment</p>

<p>32. N. Raveendra Babu, M.K. Haridharan and C. Natarajan (2014)</p>	<p>(AMCSE 2014), 29th March 2014, Krishnankovil, Tamilnadu, India.</p> <p>“Behaviour of Two Way Reinforced Concrete Slab at Elevated Temperature“, Advances in Structural Engineering, ISBN: 978-81-322-2186-9 (Print) 978-81-322-2187-6 (Online), Volume 03, 13th December 2014 pp 2285-2298.</p>
<p>33.M.R. Lokeswaran and C. Natarajan (2015)</p>	<p>“Study on the Properties of Cement Concrete Using Manufactured Sand” Advances in Structural Engineering: Springer India, ISBN: 978-81-322-2186-9 (Print) 978-81-322-2187-6 (Online), Volume 03, pp-1803 - 1809.</p> <p>“Non-Destructive investigation on the effect of locally available manufactured sands in concrete” 2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p>
<p>34.Satyanarayana Pothula and C. Natarajan,</p> <p>35.Hemanth Yadhav M and C. Natarajan,</p>	<p>“Experimental investigation of functionally graded concrete with fly ash” 2nd International Conference on Earth Sciences and Engineering [ICEE 2015], 20th – 21st March, 2015.</p> <p>“Analytical studies of the behaviour of reinforced concrete beam with openings” International conference on advances in civil engineering materials and processes, on 7th January, 2015 at CIT, Coimbatore.</p>

3. Workshops / Seminars

3.1 Organized

	Coordinator	Title	Period
1	Dr.C.Natarajan Dr.K.Muthukkumaran	Health Monitoring of Civil Engineering Structures	4-5, November, 2014
	Dr.C.Natarajan Dr.J.Kartheyan	Forensic Engineering practices for Kerala PWD Engineers at Kerala State Highway Research Institute, Trivandrum,	17-19 December 2014
2	K. Baskar and J. Karthikeyan	1. Two Days Short Course on Introduction to Finite Element Method and its Applications ” , , at NIT Trichy. Self Supported Course in Association with Indian Association for Computational Mechanics (IndACM).	23 rd & 24 th January 2015
	J.Karthikeyan and K. Baskar	2. Two Days Short Course on Advancement in Concrete Technology ” , , at NIT Trichy, Self supported course	27 th & 28 th March 2015
3	Dr.S.Jayalekshmi	Conducted AIGEE – 2014 Advances in Geotechnical Earthquake Engineering under TEQIP II organized by Department of Civil Engineering, N.I.T., Tiruchirappalli	January 8 th to 9 th 2014
4	C.Natarajan and J.Karthikeyan	Forensic Engineering practices for Kerala PWD Engineers at Kerala State Highway Research Institute, Trivandrum	19-21 December 2014
5	K.Baskar and J.Karthikeyan	Introduction to Finite Element Methods and its applications	23-24 January 2015
6	J.Karthikeyan and K.Baskar	Advancement in Concrete Technology	27-28 March 2015
7	Dr. S. Moses Santhakumar, Dr. Samson Mathew and	One-day Workshop on R&D Technology Initiatives for the	18 th September

	Prof. R. Jayasankar	EEs and AEEs of the Rural Development Department	2014
8	Dr. S. Moses Santhakumar, Dr. Samson Mathew and Prof. R. Jayasankar	One-day Workshop on Alternate Technologies and Materials for PMGSY Roads for the EEs and AEEs of the Rural Development Department	17 th November 2014

3.2 Attended

S.No	Faculty	Details
1	Dr.C.Natarajan	<p>The International Conference on advances in Civil Engineering Materials and Process at Coimbatore Institute of Technology, Coimbatore, January 7th - 9th, 2015,</p> <p>Three day short course on “Finite Element Method” organized by the department of civil engineering, NIT, Trichy, during March 21st to 23rd, 2013.</p> <p>Two days workshop on “Role of Geotechnical Engineering on Infrastructure Development” organized by the department of civil engineering, NIT, Trichy during, April 29th to 29th, 2013.</p> <p>National workshop on “Sustainable Concrete Pavements – Practice, Challenges & Directions” held at hotel at hotel dream, kochi, kerala on June 1, 2013. (Organized by ICI Kochi centre and CSIR- CRRI).</p> <p>Workshop on “R&D Proposal to National and International Funding for Researchers – Approach & Preparation” organized by the department of chemical engineering, NIT, Trichy during, August 16th to 17th, 2013.</p> <p>One day workshop on “Implementation of RFID Technology in Library and Information Centers” organized in collaboration with NIT – Trichy by M/S. @CQR India, Chennai held at NIT, Trichy on August 23, 2013.</p> <p>Seminar on “Health Monitoring of Concrete Structures” on September 13th, 2013 at IIT madras.</p> <p>One day workshop on “Construction of Concrete Roads and Overlays – Do’s and Don’ts” held on 23rd September, 2013 at IIT madras, Chennai.</p>

		<p>Two day short course on “Reliability Analysis and Design of Sub Structures” Organized By the Department of Civil Engineering, NIT, Trichy during, 3rd and 4th October, 2013.</p> <p>Two day workshop on “Transportation Infrastructure Planning – Latest Technologies” organized by the department of civil engineering, NIT, Trichy during, 21st and 22nd November, 2013.</p> <p>International workshop on “Structural Life Assessment and Failure Diagnosis” organized by the department of civil engineering, NIT, Trichy during, December 06- 07, 2013.</p> <p>Workshop on “Advances in Geotechnical Earthquake Engineering AIGEE -2014” organized by the department of civil engineering, NIT, Trichy during, January 08 - 09, 2014.</p> <p>Two day national workshop on “Challenges in Geotechnical Investigation and Foundation Design” organized by the department of civil engineering, NIT, Trichy during, 14th – 15th February, 2014.</p> <p>Two day national seminar on “Innovative Concrete Materials and Technologies” held on 25th & 26th February 2014 at BMS College of engineering, Bangalore.</p> <p>International Workshop on Health Monitoring of Civil Engineering Structures at NIT Tiruchirappalli on 04.11.2014 and 05.11.2014</p> <p>Five days short course on “Recent Advances in Highway Design and Construction” at IIT Delhi on December 15 - 19, 2014.</p> <p>International Workshop on Emerging Trends in Earthquake Engineering and Structural Dynamics at IIT Delhi on 20.12.2014 and 21.12.2014.</p> <p>Course on Introduction to Finite Element Method and its Applications at NIT Tiruchirappalli on 23.01.2015 and 24.01.2015</p> <p>Workshop on Micro structural Characterization of Structural Concrete at PSG College of Technology Coimbatore on 28.02.2015</p> <p>Course on Advancement in Concrete Technology at</p>
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		NIT Tiruchirappalli on 27.03.2015 and 28.03.2015.
2	Dr. K. Baskar	<p>1. Advance Developments in Beams & Plate Theories and Structural Dynamics, 4th – 6th January 2014, MNIT Jaipur</p> <p>2. Advanced Course on Seismic Response Control and Damage Mitigation Methodologies for Buildings and Structures, from 19th – 21st February 2014 at SERC Taramani, Chennai - 600113</p> <p>3. A One Day Workshop on “Project Management Education at National Institutes of Technology (NITs)” is organized by L&T Institute of Project Management, Chennai, along with the support of NIT Warangal on 21st March, 2014 at Chennai.</p> <p>4. International Workshop on “Emerging Trends in Earthquake Engineering and Structural Dynamics”, Organized by IIT Delhi, 20th & 21st December 2014.</p>
3	Dr.S.Jayalekshmi	Attended and Participated in the One Day Course on Microscopic Techniques in Material Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 10 th October, 2014.
4	Dr.S.Jayalekshmi	Attended and Participated in the One Day Course on Structural Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 14 th October, 2014
5	Dr.S.Jayalekshmi	Attended and Participated in the One Day Workshop on Prediction, Prevention and Post Analysis of Engineering Failures, Organised by Society for Failure Analysis, Tiruchirappalli Chapter in association with National Institute of Technology, Tiruchirappalli on 17 th October 2014
6	J.Karthikeyan	International workshop on Construction Chemicals on 6-7 February 2015 at Kolkata.
7	Dr. S. T. Ramesh	“Introduction of incineration & waste-to-energy technologies in Tamilnadu”, Hotel GRT Chennai, 10 th February, 2015.
8	Manjula R	Attended Bentley workshop on Learning Day for water distribution and waste water networks in association with IIT Madras on 11-12-2014
9	Manjula R	Presented research paper in the Falling walls lab held at IIT Madras on 29-09-2014
10	Dr. S. Moses Santhakumar and Dr. Samson Mathew	Workshop on “Non-conventional Materials and Technologies” under PMGSY, IIT Bhubaneswar on 22-24 August 2014

S.No	Students	Details
1	Sankar Jegadesh J.S.	Attended and Participated in the One Day Course on Microscopic Techniques in Material Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 10 th October, 2014.
2	Sankar Jegadesh J.S.	Attended and Participated in the One Day Course on Structural Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 14 th October, 2014
3	Pala Gireesh Kumar	Attended and Participated in the One Day Course on Microscopic Techniques in Material Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 10 th October, 2014.
4	Pala Gireesh Kumar	Attended and Participated in the One Day Course on Structural Characterisation, organized by Department of Materials and Materials Engineering, National Institute of Technology, Tiruchirappalli on 14 th October, 2014

4. Invited / Guest Lectures Delivered by the Faculty

S.No	Faculty	Topic	Programme	Place & Date
1	Dr.C.Natarajan	Inagural address	National seminar	JJ college of Engineering and Technology, Tiruchy, 28 march 2015
		Condition assessment of buildings	QIP STTP -UGC sponsored programme	Tiruchi Rotary Club,24 march 2015
		Prefabrication	QIP STTP -UGC sponsored programme	Anna University Campus, Dindugal on 6 March, 2015.
		Condition Assessment of Buildings	UGC sponsored International Seminar Green Management	Pondicherry Engineering College, Pondicherry on 18 February, 2015.
		Green Initiatives in Constrution Industry		

		<p>Condition assessment of Buildings</p> <p>Case studies on Failure Investigations</p> <p>Precautions in Building Construction</p> <p>Engineers day</p> <p>Importance of Structural Engineer in Construction</p>	<p>One day workshop</p> <p>Two day International Workshop on Forensic Engineering</p> <p>State Level seminar on Precautionary Measures in Construction</p>	<p>St. Joseph's College, Tiruchirappalli, 13 February, 2015</p> <p>Mohamed Sathak Engineering College, Kilakarai</p> <p>Builders association of India, Tirunelveli, 5th October, 2014</p> <p>Civil Engineers and Architects Association, Thanjavur, 24 September, 2014.</p> <p>Indira Ganesan College of engineering 15, September 2014</p> <p>CREDAI, Tiruchirappalli, 9 September, 2014</p>
2	<p>Dr. K. Baskar</p> <p>Dr. K. Baskar</p>	<p>1. IS code provisions on Precast Construction</p> <p>2. Comparative Study on Response of Boiler Supporting Structure Designed Using</p>	<p>One day workshop on Pre-stressed Concrete Structures</p> <p>Structural Engineering Convention 2014(SEC2014)</p>	<p>CARE School of Engineering, Trichy-9, 4th February 2015.</p> <p>Indian Institute of Technology Delhi, 22nd December 2014.</p>

	Dr. K. Baskar	Structural Steel I-Columns and Concrete Filled Square Steel Tubular Columns”,		
	Dr. K. Baskar	3. Design of Pre-stressed Concrete Cylindrical Tanks and Pipes” organized by	One day workshop on Pre-stressed Concrete Structures	CARE School of Engineering, Trichy-9, 20 th august 2014.
	Dr. K. Baskar	4. Opportunities in Civil Engineering	Inaugural function of Civil Engineering Association	Shanmuganathan Engineering College, Arasampatti, Pudokottai District, 9 th August, 2014.
		5. Durability, assessment and repairing of RCC structures	ISTE-SRM sponsored Faculty Development Program	Paavai Engineering College, Namakkal, 14 th July 2014.
3	Dr.K.Muthukkumaran	Fibre Reinforced Polymer (FRP) Strengthened Reinforced Concrete Piles Under Lateral Loads	Symposium on Geotechnical Applications-2014	JNTU, IIT Hyderabad and IGS Hyderabad (4 th April 2014)
4	Dr.K.Muthukkumaran	Finite Element theory and application in geotechnical Engineering (Material modeling of soil behaviour)	Faculty & Student Development Programme	Division of Soil Mechanics and Foundation Engineering, Department of Civil Engineering, College of Engineering Guindy, Anna University, Chennai (21 st April 2014)
5	Dr.K.Muthukkumaran	Soil and Foundation	Faculty Development	KALASALINGAM UNIVERSITY

		Engineering	Programme	(8 th August 2014)
6	Dr.K.Muthukkumaran	Pile Foundation	Faculty & Student Development Programme	Karunya University, Coimbatore (26 th August 2014)
7	Dr.K.Muthukkumaran	Innovation in Civil Engineering	National Level Technical Symposium and Workshop (AMONEC-14)	University College of Engineering, Nagercoil. (A Constituent college of Anna University Chennai) (19 th September 2014)
8	Dr.K.Muthukkumaran	Performance monitoring of a berthing structure under service condition & Forensic investigation of a berthing structure under seismic condition – a field study	Two day International workshop on Forensic Engineering	Builders Association of India, Tirunelveli Centre (4 th & 5 th October 2014)
9	Dr.K.Muthukkumaran	Advance in Geotechnical Engineering – Performance monitoring of geotechnical constructions - Key note lecture	Two day National Conference on Advances in Soil, Water and Environmental Engineering (ASWEE 2014)	SASTRA University, Thanjavur (10 th October 2014)
10	Dr.K.Muthukkumaran	Challenges in Geotechnical Investigations – Key note lecture	Pre-conference workshop on Geotechnical Investigation - Indian Geotechnical Conference -2014	JNTU Kakinada (IGC-2014) (17 th December 2014)
11	Dr.K.Muthukkumaran	Later Load Capacity Enhancement of RC Piles using FRP under Static and Cyclic Loads - Key note	International Conference on Advances in Civil Engineering Materials and Processes (ICACEMAP-	Coimbatore Institute of Technology (CIT) (7 th January 2015)

		lecture	2015)	
12	Dr.K.Muthukkumaran	Soil Strength at Construction Site	Faculty & Student Development Programme – Geology Association	National College Trichy (3 rd February 2015)
13	Dr.K.Muthukkumaran	Performance of Ground and Buildings during Earthquakes. and Recent advancement in ground improvement techniques	One Day Seminar on Disaster Risk Mitigation & Sustainable Construction	Kongunadu College of Engineering & Technology, THOTTIAM (14 th February 2015)
14	Dr.K.Muthukkumaran	Long and short term mitigations of earthquake	DST-SERB Sponsored National level workshop on Seismic Hazard Assessment and Mitigation Techniques	Sri Shakthi Institute of Engineering and Technology Coimbatore (17 th February 2015)
15	Dr.K.Muthukkumaran	Disaster mitigation - foundation perspective	Building Material & Technology Promotion Council, Government of India Sponsored Training Program in “Cost Effective and Disaster management Techniques”	Bharathidasan Institute of Technology Anna University, Trichy (26 th February 2015)
16	Dr.S.Jayalekshmi	Keynote Address on Creep of Geosynthetics and Infrastructure Development	Indian Geotechnical Society (Tiruchirappalli Chapter)	N.I.T., Tiruchirappalli on 14 th February 2014
17	Dr.S.Jayalekshmi	Keynote Address, Resource Person/ Basics of Geotechnical Earthquake Engineering	One Day Seminar Programme on Basics of Geotechnical Earthquake Engineering	Kongunadu College of Engineering and Technology at Thottiam, Namakkal on 26 th September

				2014.
18	Dr.S.Jayalekshmi	One forenoon session on Soil Mechanics	Anna University approved FDTP on Soil Mechanics (CE6405)	Vellalar College of Engineering and Technology, Erode 18 th December 2014
19	Dr.S.Jayalekshmi	Resource Person/ An outline of the Latest trends in Admixtures in India.	Two days Short Course on Advancement in Concrete Technology	Dept. of Civil Engineering, N.I.T., Tiruchirappalli 27 th and 28 th March 2015
20	J. Karthikeyan	Thermal Stresses	5 days FDP on Mechanics of Solids	Agni College of Technology, Chennai. 16 th June 2014
21	J. Karthikeyan	Thin Cylinders and Shells	5days FDP on Mechanics of Solids	Agni College of Technology, Chennai. 16 th June 2014
22	J. Karthikeyan	Importance of Ductility- Methods of Introducing Ductility into R.C. Structures	2 days seminar on RCC structures	Anna University of Technology, Dindigul. 22 nd June 2014.
23	J. Karthikeyan	Application of Plane truss, Beam and Frame problems using FEM	2 days short course on Introduction to FEM and Its Applications	NIT-Tiruchirappalli. 24 th January 2015.
24	J.Karthikeyan	Testing of Cement, Concrete, Aggregates, timber & Steel	3 days course on Forensic Engineering practices for Kerala PWD Engineers	Kerala State Highway Research Institute, Trivandrum 19 th to 21 st December 2014.
25	J.Karthikeyan	Sustainability in Concrete Construction for the present Era.	Invited Lecture, CEA valedictory talk	Care Group of Institutions, Tiruchirappalli. 13 th March 2015.
26	J.Karthikeyan	Modern Concreting Techniques	Pre-workshop on Constructions Techniques and its Materials	The Gandhigram Rural Institute, Gandhigram, Dindigul. 26 th March 2015.
27	J.Karthikeyan	Concreting under Special Circumstances	3 days Short course on Advancement in	NIT-Tiruchirappalli. 27 th March 2015

			Concrete Technology	
28	J.Karthikeyan	Testing of Fresh and Hardened Properties of Concrete	3 days Short course on Advancement in Concrete Technology	NIT-Tiruchirappalli. 27 th March 2015
29	J.Karthikeyan	Special Concrete	3 days Short course on Advancement in Concrete Technology	NIT-Tiruchirappalli. 28 th March 2015
30	Dr. S. T. Ramesh	Authorities of NBA and Accreditation and its Benefits	Workshop on “Outcome based accreditation process and parameters for undergraduate engineering programme”	K.P.R. Institute of Engineering and Technology, Coimbatore, 12 th June 2014.
31	Dr. S. T. Ramesh	Steps Involved In Accreditation Procedure	Workshop on “Outcome based accreditation process and parameters for undergraduate engineering programme”	K.P.R. Institute of Engineering and Technology, Coimbatore, 12 th June 2014.
32	Dr. S. T. Ramesh	Pre-visit Activities, Activities during the visit and Schedule of On-Site Visit	Workshop on “Outcome based accreditation process and parameters for undergraduate engineering programme”	K.P.R. Institute of Engineering and Technology, Coimbatore, 12 th June 2014.
33	Dr. S. T. Ramesh	Vision, Mission and Programme Educational Objectives (PEOs)	Workshop on “Outcome based accreditation process and parameters for undergraduate engineering programme”	K.P.R. Institute of Engineering and Technology, Coimbatore, 12 th June 2014.
34	Dr. S. T. Ramesh	Assessment Methods and Tools	Workshop on “Outcome based accreditation process and parameters for undergraduate	K.P.R. Institute of Engineering and Technology, Coimbatore, 13 th June 2014.

			engineering programme”	
35	Dr. S. T. Ramesh	Administrative system for implementation of OBE	Workshop on “Outcome based accreditation process and parameters for undergraduate engineering programme”	K.P.R. Institute of Engineering and Technology, Coimbatore, 13 th June 2014.
36	Dr. S. T. Ramesh	Options with your subject: Environmental engineering	Two Days National Seminar on Environmental Technology for Greening	Department of Civil Engineering, SCAD College of Engineering & Technology, Cheranmahadevi, Tirunelveli – 627414, 25 th July 2014.
37	Dr. S. T. Ramesh	Emerging contaminants and the implications for Drinking Water	Inauguration of Civil Engineering Association	Department of Civil Engineering, ACCET, Karaikudi-4, 13 th August 2014
38	Dr. S. T. Ramesh	NBA-Promoting international quality standards for Technical education in India	Invited Lecture	Department of Civil Engineering, CARE (Center for applied Research and Education). 26 th August 2014.
39	Dr. S. T. Ramesh	Issues with Emerging Contaminants in Water	National Level workshop on “innovations in Civil Engineering”	Department of Civil Engineering, University College of Engineering, Nagercoil, 19 th September 2014.
40	Dr. S. T. Ramesh	Need of biomedical waste management system in hospitals - An emerging issue	Two days training programme on Waste Management - Trash to treasure	Department Chemistry, Bharathidasan Institute of Technology, Anna University, Trichy, 11 th November 2014.
41	Dr. S. T. Ramesh	Strategies for improving the Sustainability of Waste Management Systems	International Seminar on Smart Cities and Sustainable Development	Department Civil Engineering, Periyar Maniammai University, Vallam, Tanjore,

				8 th January 2015.
42	Dr. S. T. Ramesh	Introduction to Environmental Impact Assessment	Invited lecture	DoMS, National Institute of Technology, Tiruchirappalli, 30 th January 2015.
43	Dr. S. T. Ramesh	Key elements in the outcome based education	Invited Lecture	Department of Civil Engineering, CARE (Center for applied Research and Education). 30 th January 2015.
44	Dr. S. T. Ramesh	Insitu treatment technologies for contaminated sites	National Conference on Role of biotechnology tools and techniques in wastewater Management	K.S.Rangasamy College of Technology, Tiruchengode. 4 th February, 2015.
45	Dr. S. T. Ramesh	Analysis of solid waste and leachate management, Tiruchirappalli	India & Japan Joint Workshop 2015, "Introduction of incineration & waste-to-energy technologies in Tamilnadu"	Hotel GRT, 10 th February, 2015, Chennai
46	Dr. S. T. Ramesh	Challenges and Opportunities in Civil Engineering	Inaugural Lecture	Arasu Engineering college, Kumbakonam, 12 th February, 2015.
47	Dr. R. Gandhimathi	Stabilized leachate treatment by electro chemical process	Indo-French Workshop on Sustainable Water Purification Technologies	CSIR-Central Electrochemical Research Institute, Karaikudi, February 11-13, 2015
48	Dr. S. Moses Santhakumar	Advances in Civil Engineering		Francis Xavier Engineering College, Tirunelveli, 14.07.2014
49	Dr. S. Moses Santhakumar	Intelligent Transportation Systems	Inauguration of Civil Engineering Association	Roevers College Engineering and Technology, Perambalur, 27.08.2014
50	Dr. S. Moses Santhakumar	Recent Advances in	Inauguration of Civil Engineering	Mt. Zion College Engineering and

		Civil Engineering	Association	Technology, Pudukkottai, 28.08.2014
51	Dr. S. Moses Santhakumar	Intelligent Transportation Systems	Inauguration of National Conference	Ramakrishna College Engineering and Technology, Trichy, 10.03.2015
52	Dr. S. Moses Santhakumar	Recent Advances in Civil Engineering	Department Day Function of Civil Engineering	Shivani Engineering College, Trichy, 31.03.2015

5. Sponsored Projects undertaken.

S.No	Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
1	Dr.K.Muthukkumaran	Investigation of industrial and domestic waste treated weak soils under dynamic loading	MHRD	78.54
2	Dr. Moses Santhakumar Dr. Samson Mathew Dr. V. Sunitha Dr. Nisha Radhakrishnan	Centre of Excellence in Transportation Engineering	MHRD	Rs. 1 Crore

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S. No.	Equipment	Amount (Rs. In Lakhs)
1	Actuator for SSI Study	27.85
2	Cyclic triaxial test apparatus	39.39
3.	ICPMS	63,94,044.72 (96000 Euros)
4.	Ion chromatography	16,81,468.00
5.	UV –Visible spectrophotometer	8,68,623.00
6.	Atomic Absorption Spectrophotometer (graphite furnace)	39,02,248.00
7.	Gas Chromatography	13,18,243.00
8	TN Analysis module for TOC Analyzer	6,41,433.00
9.	Solid analysis module for TOC Analyzer	8,75,816.00

10.	Dynamic Shear Rheometer	22.57
11.	New Technology Oven (NTO) for Asphalt Content	8.81
12	MxROAD	3.72
13	Integrated Equipment System for Dynamic Characterization of Structural Elements	Rs.37, 99,950/-
1	Dynamic Shear Rheometer	18.9
2	NCAT Asphalt Content Ignition Oven	8.0

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	“Flexural Behavior Of Concrete Prisms Confined With FRP Composites”,	Murugan, M.,Natarajan, C .and Muthukkumaran K	Int. Journal of Construction Materials and Structures	2014, 2 (1), 9-18
2.	“ Experimental Investigation on GFRP strengthened RC Piles under lateral loads ”	Murugan, M., Natarajan, C .and Muthukkumaran K	Int.Journal of Forensic Engineering	(2014) , 2 (1), 15-28
3.	”Free Vibration Analysis of Composite Annular Plates” .	RachmaleOmkar, PriyaNatesh and P. A. Krishnan	International Journal of Technology and Management,	CyberTimes Vol. 7, Issue 2 April 2014 pp 140-146
4.	“Experimental Investigation on Circular CFT	Chithira, K. and Baskar, K.,	<i>International Journal of Steel and Composite Structures,</i>	Vol. 16, No. 1, 99-116, SCI Journal, Thompson and

5.	columns with and without shear connectors”, “Recycling of E-Plastic Waste as a Construction Material in Developing Countries”,	Kaliyavaradhan Senthil Kumar and Kaliyamoorthy Baskar,	Techno-press Publications, Journal of Material Cycles and Waste Management, Springer Publications,	Reuters Impact Factor 0.933, 2014. DOI 10.1007/s10163-014-0303-5, SCI Journal, Thompson and Reuters Impact Factor 0.831, 2014
6.	“Preliminary study on concrete with mixed electronic plastic waste”,	Senthil Kumar, K. and Baskar, K.,	The International Reviewer,	June 2014.
7.	“Behaviour of Composite Deck Slab made using steel sheets with perforated stiffeners”,	Suresh Kannan, G., Premalatha, P.V. and Baskar, K.,	Journal of Bridge and Structural Engineers, An Ing-IABSE,	Vol.44., No.3., pp137-147, Sep.2014
8.	“Static and Dynamic Analysis of Boiler Supporting Structures Designed using Concrete Filled Square Tubular Column and Comparison with Structural Steel Column”,	Harikrishna, T., Penchal Reddy, M. and Baskar, K.,	Journal of Science and Research, ISSN (Online):	2319-7064, Vol.3., Issue 8, pp1254-1259, August 2014
9.	“Shear Strength of Concrete with E-plastic (HIPS),	Senthil Kumar, K and Baskar, K.,	Proceedings of Institution of Civil Engineers – Construction	Accepted. (SJR – 0.36), 2014

10	Response Surfaces for Fresh and Hardened Properties of Concrete with E-Plastic Waste (HIPS)",	Senthil Kumar, K. and Baskar, K., "	Materials, UK, International Journal of Waste management.	Accepted,
11.	Experimental investigation on GFRP strengthened RC piles under lateral loads	Murugan, M., Natarajan, C. and Muthukkumaran, K.	International Journal of Forensic Engineering	2014, Vol. 2, No. 1, pp.15–28.
12	Effect of slope and loading direction on laterally loaded piles in cohesionless soil	Muthukkumaran, K.	International Journal of Geomechanics, ASCE	2014, Vol. 14, No. 1, pp 1-7.
13	Utilization of Industrial waste in the stabilization of Montmorillonite rich expansive soils	Muthukkumaran, K. and Jose Joseph	Soil Behaviour and Geomechanics, Geotechnical Special Publication, ASCE	2014, No. 236, ASCE, pp 224-233.
14	Effect of raker piles in lateral load capacity of laterally load pile group"	Muthukkumaran, K. and Aravind Kumar, B.	Soil Behaviour and Geomechanics, Geotechnical Special Publication, ASCE	2014, No. 236, ASCE, pp 776-785.
15	Bioclogging in porous media: influence in reduction of hydraulic conductivity and organic contaminants during synthetic leachate permeation	Kanmani, S. Gandhimathi, R. and Muthukkumaran, K.	<i>Journal of Environmental Health Science and Engineering,</i>	2014, 12:126 DOI:10.1186/s40201-014-0126-2.

16	Effect of seabed slope on pile behaviour of fixed offshore platform under lateral forces	Muthukkumaran, K and Arun, K.S.	Journal of Ocean Engineering and Marine Energy	2015, DOI:10.1007/s40722-015-0013-7.
17	Experimental investigation of single model pile subjected lateral load in sloping ground	Muthukkumaran, K and Almas Begum, N.	International Journal of Geotechnical and Geological Engineering.	2015, DOI:10.1007/s10706-015-9875-7
18	Electrokinetic Remediation of Heavy Metal Contaminated soil International Journal of Structural and Civil	Sruthy O.A. and Dr.S.Jayalekshmi	Engineering Research,	Volume 3, Issue 1, May 2014, pp.103-111 ISSN 2319-6009.
19.	Review on Soil Stabilisation Techniques	, Sudeep Sapkota, Madhukar Dhingra and S.Jayalekshmi	International Journal of Civil Engineering(IJCE), IS SN(P)	2278-9987;ISSN(E): 2278-9995, Volume 3, Issue 3, May 2014, pp.63-78. (Best paper Award)
20	A Review On Effect Of Mineral Admixture On Self Compacting Concrete	Saurabh Kumar Singh, Vijay Pal Sagar, Ranjeet Kumar, Sena	Anvesh Kumar and S.Jayalekshmi (2014), , International Journal of Civil Engineering (IJCE), Vol. 3, Issue 3,	May 2014, 79-90 ISSN(P): 2278-9987; ISSN(E): 2278-9995
21	Study On Properties Of Concrete With Colour Adsorbed Fly Ash, Rice Husk Ash, Steel Slag And Polypropylene Fibres	SankarJegadesh J S and S Jayalekshmi(2014),	International Journal of Civil Engineering(IJCE), V ol. 3, Issue 3,	May 2014, pp.9-18 ISSN(P): 2278-9987; ISSN(E): 2278-
22	Terramechanics on Lunar Soil	SugaliSreenivasulu and S Jayalekshmi (2014) ISimulants: A Review,	International Journal of Structural and Civil Engineering Research, Volume 3, Issue 2	May 2014 pp.92-103 ISSN 2319-6009.
23	Soil - An Adsorbent for Purification of Phosphate Contaminated Water	Vyshak R S and S Jayalekshmi(2014)	International Journal of Structural and Civil Engineering	Research, Volume 3, Issue 2, May 2014 pp.65-77 ISSN 2319-6009.

24	Advancements in Concrete Filled Steel Tubular (CFST) Columns	Sankar Jegadesh J S and S jayalekshmi(2014)	A Review, International Journal of Structural and Civil Engineering Research,	Volume 3, Issue 2, May 2014pp.57-64 ISSN 2319-6009.
25	A Review On Investigations Of Concrete Filled Steel Tubular Columns	S.Jayalekshmi, and SankarJegadesh J.S., ,	International Journal of Earth Science Engineering. (Accepted)	(Accepted)
26	A Simple Review on Various Soil Stabilization Techniques and Materials	S. Jayalekshmi and Sri RaamPandian.P ,	International Journal of Earth Science Engineering	(Accepted)
27.	Behaviour Of Colour Adsorbed Fly Ash With Polypropylne Fibers,.	P.Chandrasekaran, S.Jayalekshmi and SankarJegadesh J.S.,	International Journal of Earth Science Engineering. (Accepted)	
28	Prediction of Compressive Strength for HPC mixes containing different blends using ANN	Allam Lingam and J.Karthikeyan	Computers and Concrete (Technopress)	Vol. 13, No. 5, May 2014. (pg.581-592)
29	A Review on the Performance of Fibre and Industrial Slag in Concrete	A.Ananthi and J.Karthikeyan	International Journal of Advanced Concrete Technology	Vol. 1, No. 1, March 2015 (pg 16-31)
30	Alkali- treated fly ash for the removal of fluoride from aqueous solutions.	C. K. Geethamani, S. T. Ramesh, R. Gandhimathi, P.V. Nidheesh	Desalination and Water Treatment	129, 64–70.
31	Electro Fenton oxidation of salicylic acid from aqueous solution: Batch studies and degradation pathway	Stephy Jacqueline George, R. Gandhimathi, P. V. Nidheesh, S.T. Ramesh	Clean- Soil, Air, Water	42, 1–11.
32	Removal characteristics of basic dyes from aqueous solution by fly ash in single and tertiary system	R. Gandhimathi, S. T. Ramesh, V. Sindhu, P. V. Nidheesh	Journal of Scientific and Industrial Research	73 4), 267-272.
33	Comparison of homogeneous and	Shilpa Xavier, R. Gandhimathi, P.	Desalination and water treatment	DOI: 10.1080/19443994.2013.

	heterogeneous Fenton processes for the removal of reactive dye magenta MB from aqueous solution	V. Nidheesh, S.T. Ramesh		844083.
34	Pineapple leaf (ananas comosus) powder as a biosorbent for the removal of crystal violet from aqueous solution	Shuvee Neupane, S. T. Ramesh, R. Gandhimathi, P. V. Nidheesh	Desalination and water treatment	(DOI: 10.1080/19443994.2014.903867)
35	Treatment of stabilized landfill leachate using peroxicoagulation process	Devika Venu, R. Gandhimathi, P. V. Nidheesh, S. T. Ramesh	Separation and Purification Technology	129, 64–70.
36	Studies on the removal of phosphate from water by electrocoagulation with aluminium plate electrodes,	Sarasan Seena Mithra, S.T.Ramesh, R. Gandhimathi, P.V. Nidheesh,	Env Eng Management Journal Science,	2014
37	Electro Fenton oxidation of salicylic acid from aqueous solution: Batch studies and degradation pathway	Stephy Jacqueline George, R. Gandhimathi, P. V. Nidheesh, S.T. Ramesh	Clean- Soil, Air, Water	2014, 42, 1–11.
38	Treatment of stabilized landfill leachate using peroxicoagulation process	Devika Venu, R. Gandhimathi, P. V. Nidheesh, S. T. Ramesh	Separation and Purification Technology	2014, 129, 64–70.
39	Electrolytic removal of Rhodamine B from aqueous solution by peroxicoagulation process.	P. V. Nidheesh and R. Gandhimathi	Environmental Science and Pollution Research	2014, 21, 8585–8594
40	Effect of solution pH on the performance of three electrolytic advanced oxidation	P. V. Nidheesh and R. Gandhimathi	RSC Advances	2014, 4, 27946–27954

	processes for the treatment of textile wastewater and sludge characteristics			
41	NaHCO ₃ enhanced Rhodamine B removal from aqueous solution by graphite-graphite electro Fenton system	P. V. Nidheesh, R. Gandhimathi and N. S. Sanjini	Separation and Purification Technology	2014, 132, 568–576
42	Laboratory Study on Leachate Treatment by Electrocoagulation Using Fly Ash and Bottom Ash as Supporting Electrolytes	R. Gandhimathi, Albin Babu, P. V. Nidheesh, S. T. Ramesh and T. S. Anantha Singh	Journal of Hazardous, Toxic, and Radioactive Waste, ASCE	2014, DOI: 10.1061/(ASCE)HZ.2153-5515.0000240
43	Comparative removal of Rhodamine B from aqueous solution by electro Fenton and electro Fenton like processes	P. V. Nidheesh and R. Gandhimathi	Clean- Soil, Air, Water	2014, 42, 779–784
44	Electro Fenton oxidation for the Removal of Rhodamine B from Aqueous Solution in a Bubble Column Reactor under Continuous Mode.	P. V. Nidheesh and R. Gandhimathi	Desalination Water Treatment	2014, DOI: 10.1080/19443994.2014.913266
45	Textile Wastewater Treatment by Electro-Fenton Process in Batch and Continuous Modes	P. V. Nidheesh and R. Gandhimathi	Journal of Hazardous, Toxic, and Radioactive Waste, ASCE	2014, DOI: 10.1061/(ASCE)HZ.2153-5515.0000254
46	Bioclogging in porous media: influence in reduction of hydraulic conductivity and organic contaminants	S. Kanmani, R. Gandhimathi and K. Muthukkumaran	Journal of Environmental Health Science & Engineering	2014, 12:126.

	during synthetic leachate permeation			
47	Application of Geospatial Techniques on Land Suitability Analysis	Mr. Sathees P Nisha Radhakrishnan Samson Mathew	Journal of Sustainable Building Technology & Urban Development	Accepted for Publications
48	Experimental Investigations of acceleration on slender cylindrical member under breaking waves	Manjula R., Sannasiraj, S.A., and Palanichamy, K(2014)	International Journal of Ocean and Climate Systems	Vol.5, No.3, pp. 117-125
49.	Experimental Investigation of Response of Vertical Slender Cylinder under Breaking Wave Impact	Manjula R, Sannasiraj S.A and Saravanan S(2015)	Aquatic Proceedia	2015, Vol.4, 227-233
50	Geomorphology Based Semi-distributed Approach for Modeling Rainfall-runoff Modeling Using GIS	Saravanan S andManjula R(2015)	Aquatic Proceedia	2015, Vol.4, 908-916

National Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Comparative Studies on Mechanical Properties in High Performance Concrete	Karthikeyan. J and Shaheer Ali.K	The Indian Concrete Journal	Vol. 88, No.9, September 2014
2.	Removal characteristics of basic dyes from aqueous solution by fly ash in single and tertiary system	R. Gandhimathi, S. T. Ramesh, V. Sindhu, P. V. Nidheesh	Journal of Scientific and Industrial Research	2014, 73 (4), 267-272.

7.2 Students

International Journal

S. No	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Remediation of Heavy Metal Contaminated soil International	Sruthy O.A. and Dr.S.Jayalekshmi Electrokinetic	Journal of Structural and Civil Engineering Research,	Volume 3, Issue 1, May 2014,pp.103-111 ISSN 2319-6009
2.	Review on Soil Stabilisation Techniques	Sudeep Sapkota, Madhukar Dhingra and S.Jayalekshmi (Passed out U.G. Students, (International Journal of Civil Engineering	IJCE),ISSN(P) 2278-9987;ISSN(E) : 2278-9995, Volume 3, Issue 3, May 2014, pp.63-78. (Best paper Award)
3.	Review On Effect Of Mineral Admixture On Self Compacting Concrete,	Saurabh Kumar Singh, Vijay Pal Sagar, Ranjeet Kumar, Sena Anvesh Kumar and S.Jayalekshmi (2014),	A International Journal of Civil Engineering	(IJCE),Vol. 3, Issue 3, May 2014, 79-90 ISSN(P): 2278-9987; ISSN(E): 2278-9995
4.	Study On Properties Of Concrete With Colour Adsorbed Fly Ash, Rice Husk Ash, Steel Slag And Polypropylene Fibres,	SankarJegadesh J S and S Jayalekshmi(2014)	International Journal of Civil Engineering(IJCE),	Vol. 3, Issue 3, May 2014,pp.9-18 ISSN(P): 2278-9987; ISSN(E): 2278-
5.	Terramechanics on Lunar Soil Simulants: A Review,	SugaliSreenivasulu and S Jayalekshmi (2014)	International Journal of Structural and Civil Engineering	Volume 3, Issue 2, May 2014pp.92-103 ISSN 2319-6009.
6.	Soil - An Adsorbent for Purification of Phosphate	Vyshak R S and S Jayalekshmi(2014) , Research,	International Journal of Structural and Civil Engineering	Volume 3, Issue 2, May 2014pp.65-77 ISSN 2319-

	Contaminated Water			6009.
7.	Advancements in Concrete Filled Steel Tubular (CFST) Columns - A Review,	Sankar Jegadesh J S and S Jayalekshmi(2014),	International Journal of Structural and Civil Engineering Research	Volume 3, Issue 2, May 2014pp.57-64 ISSN 2319-6009.
8.	A Review On Investigations Of Concrete Filled Steel Tubular Columns	S.Jayalekshmi, and SankarJegadesh J.S., ,	International Journal of Earth Science Engineering. (Accepted)	
9.	A Simple Review on Various Soil Stabilization Techniques and Materials	S. Jayalekshmi and Sri RaamPandian.P ,	International Journal of Earth Science Engineering. (Accepted)	
10.	Behaviour Of Colour Adsorbed Fly Ash With Polypropylne Fibers,	P.Chandrasekaran, S.Jayalekshmi and SankarJegadesh J.S.,	International Journal of Earth Science Engineering. (Accepted)	

National Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
	NIL			

8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1.	Mr. Sudhakar	Dr.C.Natarajan	NIT, Tiruchi, March 2015
2.	Sugali Sreenivasulu	Dr.S.Jayalekshmi	Ph.D.(Q.I.P.) / N.I.T., Tiruchirappalli (Viva-voce completed on 10.12.2014)

3.	Allam Lingam	J.Karthikeyan	NIT-Tiruchirappalli.
4.	T. S. Ananthasingh	Dr. S. T. Ramesh	National Institute of Technology, Tiruchirappalli
5.	S. Kanmani	Dr. R. Gandhimathi	National Institute of Technology, Tiruchirappalli
6.	P.V. Nidheesh	Dr. R. Gandhimathi	National Institute of Technology, Tiruchirappalli
7	R. Vidya	Dr. S. Moses Santhakumar	NITT

9. Details of Book any authored by faculty.

Dr.C.Natarajan' -Matrix methods of analysis Structures- Theory and problems-

10. Patent if any obtained by faculty: Nil

11. Other Important Points

Dr.S.T. Ramesh

Reviewer

1. Clean Technologies and Environmental Policy
2. Institution of Engineers
3. International Journal of Green Energy
4. International Journal of Environment and Waste Management (IJEWM).
- 5.
6. Journal of Water Sustainability.
7. Basic Research Journal of Soil and Environmental Science (BRJSES)
8. Int. J. of Environment and Waste Management
9. Sky Journal of Journal of Soil Sciences and Environmental Management (SJSSEM)
10. British Journal of Applied Science & Technology
11. Desalination and Water Treatment
12. Physical Review & Research International
13. Int. J. of Environmental Technology and Management
14. Chemical Engineering Research and Design
15. Cellulose Chemistry and Technology
16. Separation Science and Technology
17. Physical Review & Research International
18. Applied Water Science

Dr. R. Gandhimathi

Reviewer

1. Journal of Environmental Engineering (ASCE)

2. Journal of Hazardous Toxic and Radioactive Waste (ASCE)
3. Environmental Progress
4. Environmental Science and Technology (ACS)
5. The Korean Journal of Chemical Engineering
6. Separation and Purification Technology (Elsevier)
7. Separation Science and Technology (Taylor and Francis)

Dr.S.Jayalekshmi

- Reviewer / Institution of Engineers(Series A)
- Reviewer, Programme Committee Member, ACE 2015,
- Singapore Doctoral Committee Member/SASTRA University

12. Summary

S.No	Details	Total nos			
1.	International Journals	60			
2.	National journals	2			
3.	International conference publications	32			
4.	National conference publications	35			
5.	Sponsored Project	No's:	2	Amount:	1.79 crores
6.	No of Ph.D produced	6			
7.	No of Patents obtained				
8.	No of books published	1			

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1. Notable Achievements like prizes, awards won by the Students & Staff.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	Distinguished Alumni Award at NIT Trichy
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	Distinguished Alumni Award at NIT Trichy on Golden Jubilee celebration
7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

Achievements of 2nd Year

Name	Roll No	Achievements
Shurya Kumar N S	106113088	1.Diploma in cyber forensics 2.Certified ethical hacker
Pranav Kumar S	106113069	Intern at Samadhan, a startup company, for developing a website based on eHR(Electronic Health Report)

Achievements of 3rdYear

Name	Roll No	Achievements
P Sai Prem Patro	106112066	Got selected for IAS summer fellowship programme 2014. Did the project at IIT-Guwahati.
Vijay Meena	106112102	SILVER MEDAL IN KABADDI DURING ALL INDIA INTER-NIT SPORTS MEET 2014
Mohit Goyal	106112059	Asia KGP ACM Regionals - Rank 21 Summer Intern at Citruspay, 2014 Facebook Hacker Cup - Global rank 321
ANUJ KUMAR MEENA	106112009	Project on SEO(Search Engine Optimization) From HemsInfotech in Summer vacation, 2014(May-June).
R SARAVANAN	106112074	<ul style="list-style-type: none"> • Active member of RMI (Robotics and Machine Intelligence) group. • Passed the A certificate Examination held on 2009 under the authority of Ministry of Defense, Government of India. (NCC). RANK: CPL (corporal). • Attended the CATC – cum – RDC Probables Selection / TSC (B) Camp of 1 Tamil Nadu Battalion NCC, Chennai at AM Jain College. (2008).RANK: LCPL. • Conducted hands-on workshop Genesis'13 for freshman students with RMI-NITT Wall followers (2013), Content taught: Embedded C, Arduino coding, basic Mechanics and electronics, Line Sensor Circuits, peripherals of (Micro controller) Atmega 16, bot fabrication. • Awarded by the IAPT (Indian association of Physics Teachers) in NSEC (National Standard Examination in Chemistry) for having placed among the top 10 % among the students enrolled at the centre. (2011). • Awarded Special merit certificate for being among the top 0.1 percent of successful students of AISSCE 2012. • Selected to attend the 125th Anniversary of Genius Ramanujan presided over by the former Prime Minister of India Dr. Manmohan Singh and the Governor of Tamil Nadu Shri.K. Rosaiah.
SHANU KUMAR SUMAN	106112086	1) Winner of Infotrek(quiz conducted under ACM, NIT Trichy)

		2) Training at BSNL, 2014
Gaurang Khanwalkar	106112107	Project on machine translation and machine learning at IIT- Hyderabad (May-June 2014).
Kumar Rishav	106112049	1. Summer Internship at Google: Google Summer of Code-2014 (May - August 2014) 2. Mozilla Representative for Mozilla Organisation (From November 2014) 3. Speaker (Invited for talks/taking session) at Gravitas, VIT Vellore (Sep 2014) and Developer Boot Camp, Indore (Sep - 2014)

Achievements of 4th Year

Name	Roll No	Achievements
Akshay Uttamani	106111007	-Selected for international scholarships- DAAD-WISE, MITACS and MPI-SWS -Did a project on compiler security at University of Saarland, Germany under prof Michael Backes during summer break 2014. -was selected for the prestigious CMU IPTSE Winter school held at NIT Surathkal and conducted research work which was well acknowledged. http://www.deccanherald.com/content/449978/44-students-prepare-10-projects.html/
RISHI KUMAR	106111074	Diploma in Web Programming-> Worked on Flash, HTML, CSS, Javascript, PHP, MySQL, Ajax and Joomla.
Ashish Kumar	106111019	Created An Non Government Organization to provide free education to underprivileged children called Sampanna Jeevan Foundation.

Internship

Fidelity-7
Qualcomm-2
Goldman Sachs-2
Samsung-9
JPMorgan-10
Credit Suisse-2
Flipkart-2
Microsoft-6
Morgan Stanley-3
Amazon-12

2. Details of Conference / Seminars / Symposium / Special Lectures conducted.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	1. "IBM Security Awareness Campaign" at NIT Tiruchirappalli on 16, Sept.'14
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	1. Workshop on Big Data Analytics, December 12-13, 2014 2. National Conference on Big Data and Cloud Computing ,March 20-21, 2015
6.	Dr. R. LEELA VELUSAMY	1. A one day awareness conference on "Business and Management Capacity Development of Rural Women Entrepreneurs of India and Srilanka" on 12 th September 2014 sponsored by the Asia Foundation. 2. A two weeks FDP on "Entrepreneurship Development and Management" from 5 th May 2014 to 17 th May 2014 in NIT Trichy, Sponsored by DST, NIMAT project. 3. A one day awareness conference on "Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka" on 18 th November 2014 sponsored by the Asia Foundation in Sri Lanka South Eastern University. 4. A one day awareness conference on "Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka" on 20 th November 2014 sponsored by the Asia Foundation in Sri Lanka University of Jaffna. 5. A six days EDP on "Business and Management Capacity Development of Rural Women Entrepreneurs of India and Sri Lanka" from 15 th November 2014 to 20 th November 2014 in Trichy, sponsored

		by the Asia Foundation.
7.	Dr. R. MOHAN	Information not given
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

3. Details of papers presented/ attended by the Faculties /Students in Conferences/ Seminars/ Symposium/Workshops.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	<ol style="list-style-type: none"> 1. "National Cyber Safety and Security Standards Summit-2014" at PSG Auditorium, Coimbatore during 19-20, Sept.'14 2. SAP, Bangalore at 20, June.'14 3. IBM Cyber Security Challenges at Bangalore during 4-6, June.'14
2.	Dr. K. VISWANATHAN IYER	<ol style="list-style-type: none"> 1. K.V.Iyer, A case for Intranet-based online portal for undergraduate Computer Science teaching, V Annual Int'l. Conf. Comp. Sci. Education: Innov. And Tech. 22-23 Sept. 2014, Singapore.

<p>3.</p>	<p>Dr. N. RAMASUBRAMANIAN</p>	<ol style="list-style-type: none"> 1. Vollala, S., Varadhan, V. V., Geetha, K., & Ramasubramanian, Efficient modular multiplication algorithms for public key cryptography, Advance Computing Conference (IACC), 2014 IEEE International, 21 Feb - 22 Feb 2014, Gurgaon, India. 2. Yadav, P. K., & Ramasubramanian, N, Power consumption of Android device using different video codecs: An analysis , Advance Computing Conference (IACC), 2014 IEEE International, 21 Feb - 22 Feb 2014, Gurgaon, India. 3. Satyanarayana Vollala, Praveen Kumar Yadav, K.Geetha, N.Ramasubramanian,A Comparative Study on Enhancements Made for RSA Implementation from Hardware Perspective,International Conference on Advances in Computer Science, AET ACS 2013 Dec 13-14, 2014, in NCR-Delhi 4. Tamizharasan, P. S., Praveen Kumar Yadav, N. Ramasubramanian, and K. eetha,Performance enhancing factors for many core architectures: State-of-the-art In Networks & Soft computing (ICNSC), 2014 First International Conference 19-20 Aug. 2014 ,Guntur, India 5. B. C. Manjith , Praveen Kumar Yadav, R. Sangeetha and N. Ramasubramanian,A Survey of Hardware – Software Security Architectures to Cloud Server International Conference on Computer Communication Networks (ICCN 2014) 25-July-2014 to 27 July 2014 Bangalore, India 6. Praveen Kumar Yadav, and N. Ramasubramanian, Efficient Resource Utilization in Mobile Devices Using Bayesian Framework Based Saliency Mapping Bilingual International Conference,Information Technology : Yesterday, Today, and Tomorrow February 19-21, 2015, Delhi, India 7. Anand Prem Kumar, Vidya Thiyagarajan and N. Ramasubramanian, A Survey of Packet Classification Tools and Techniques First International Conference on Computing, Communication, Control And Automation 26-27 February 2015
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4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	<ol style="list-style-type: none"> 1. T.Veni and S. Mary Saira Bhanu, Enhancing memory deduplication using temporal page sharing behaviors in virtual environments”, International Conference on Advanced Computing, Networking and Informatics (ICACNI 2014) Kolkatta, 24-26, June 2014, Springer, PP. 481-488 2. Kamlesh Kumar Hingwe and S.Mary Saira Bhanu Two layered protection for sensitive data in cloud”, Advances in Computing, Communications and Informatics (ICACCI, 2014), 24-27 Sept. 2014, Delhi, India 3. Kamlesh Kumar Hingwe and S. Mary Bhanu, Saira Sensitive Data Protection of DBaaS using OPE and FPE”, 2014 Fourth International Conference of Emerging Applications of Information Technology (EAIT 2014) December 19-21, 2014, Kolkata, India 4. Mahesh Babu B. and S. Mary Saira Bhanu “Analyzing User Behavior Using KeyStroke Dynamics to Protect Cloud from Malicious Insiders”, 2014 IEEE International Conference Cloud Computing in Emerging Markets (CCEM), 15-17 October 2014
6.	Dr. R. LEELA VELUSAMY	<ol style="list-style-type: none"> 1. U. Venkanna, and R. Leela Velusamy, “Reward based cooperative routing in Mobile Ad hoc Network by using Markov Decision Process” in the proceedings of IEEE international conference on Recent Advances in Engineering and Computational Sciences (RAECS’ 14) 2. Pravin Ranjan and R. Leela Velusamy, “Route discovery in Mobile Adhoc Networking using an optimum angle selection based approach”, in the proceedings of International Conference on Computer and Communication Technology (ICCCT’ 14), 26-28 September 2014 3. Koppala Guravaiah and R. Leela Velusamy “ Design issues and techniques on data collection in WSNs: A Survey” in the proceedings of Bilingual International

		<p>Conference on Information Technology: Yesterday, Today, and Tomorrow, 19-21 February 2015, pp. 201-209, DESIDOC, 2015</p> <p>4. Pravin Ranjan and R. Leela Velusamy, “Optimized Local Route Repair and Congestion Control in Mobile Adhoc Network”, in the proceedings of International Conference on Computer and Communication Technology (ICCT’ 15), 26-27 February 2015</p>
7.	Dr. R. MOHAN	1. Attend the coordinators’ workshop on Computer Networking during 5 th May to 9 th May, 2014 organized by IIT Bombay
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	<p>1. Kunwar Singh, C. Pandu Rangan, A. K. Banerjee: “Lattice based Identity based Unidirectional Proxy Re-Encryption Scheme”. SPACE 2014, DIAT Pune, LNCS, Springer-Verlag, 2014.</p> <p>2. Kunwar Singh, C. Pandu Rangan, A. K. Banerjee: “Efficient Lattice HIBE in the Standard Model with Shorter Public Parameters”. AsiaARES 2014, Bali, Indonesia, April 2014, LNCS, Springer-Verlag, 2014.</p> <p>3. Kunwar Singh, C. Pandu Rangan, A. K. Banerjee: “Cryptanalysis of Unidirectional Proxy Re-Encryption Scheme”. AsiaARES 2014, Bali, Indonesia, April 2014, LNCS, Springer-Verlag, 2014</p>
10.	Dr. E. SIVASANKAR	<p>1. Ramya A.V and Sivasankar E, "Distributed pattern matching and document analysis in big data using Hadoop Map Reduce model", IEEE Proceedings of the International Conference on Parallel and Distributed and Grid Computing (PDGC), 2014.</p> <p>2. Srikrishnan V and Sivasankar E, "A log data analytics based scheduling in open source cloud software", IEEE Proceedings of the International Conference on Parallel and Distributed and Grid Computing (PDGC), 2014.</p> <p>3. Srikrishnan V and Sivasankar E, "A performance comparison of scheduling distributed mining in cloud", IEEE Proceedings of the First International</p>

		Conference on Networks & Soft Computing (ICNSC), 2014. 4. Srikrishnan V and Sivasankar E, "Collating Performance of Repository built with HDFS and GridFS", Second International Conference on Business Analytics and Intelligence (ICBAI), December 2014
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	1. C.Mala, M.Sridevi, Parallel Algorithms for Edge Detection in an Image 2. M.Sridevi, C.Mala, E.Sivasankar, Optimized Multilevel Threshold Selection using Evolutionary Computing
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

2.2 Papers presented by the MS Students

S.No	Author(s)	Details
1	B. C. Manjith, Praveen Kumar Yadav, R. Sangeetha and N. Ramasubramanian,	"A Survey of Hardware – Software Security Architectures to Cloud Server", International Conference on Computer Communication Networks (ICCN 2014), 25-July-2014 to 27 July 2014 Bangalore, India.
2	Tamizharasan, S., Praveen Kumar Yadav, N. Ramasubramanian, and K. Geetha	P. "Performance enhancing factors for many core architectures: State-of-the-art", In Networks & Soft Computing (ICNSC), IEEE 2014 First International Conference, 19-20 Aug. 2014 ,Guntur, India.
3	Pravin Ranjan and R. Leela Velusamy,	"Route Discovery in Mobile Ad

		Hoc Network Using an Optimum Angle Selection based Approach”, 5 th International Conference on Computer and Communication Technology (ICCCT-2014) MNNIT Allahabad 26-28 September 2014
4	Kamlesh Kumar Hingwe and S.Mary Saira Bhanu	“Two layered protection for sensitive data in cloud”, Advances in Computing, Communications and Informatics (ICACCI, 2014), 24-27 Sept. 2014, Delhi, India
5	Mahesh Babu B. and S. Mary Saira Bhanu	“Analyzing User Behavior Using KeyStroke Dynamics to Protect Cloud from Malicious Insiders”, 2014 IEEE International Conference Cloud Computing in Emerging Markets (CCEM), 15-17 October 2014.
6	Kamlesh Kumar Hingwe and S. Mary Bhanu, Saira	“Sensitive Data Protection of DBaaS using OPE and FPE”, 2014 Fourth International Conference of Emerging Applications of Information Technology (EAIT 2014) December 19-21, 2014, Kolkata, India
7	Praveen Kumar Yadav and N. Ramasubramanian,	“Efficient resource utilization in mobile devices using Bayesian framework based saliency mapping”, International Conference on Information Technology: yesterday, today, and tomorrow, DRDO, 19-21 Feb 2015, pp. 133- 136, New Delhi, India.
8	Suriender Singh and S. Selvakumar	“Detection of Distributed Denial of service attacks using Panel of experts”, Bilingual International conference on Information Technology: Yesterday, Today, and Tomorrow. 19-21 Feb., 2015 PP. 248-254.
9	Anand Prem Kumar, Vidya Thiyagarajan and N. Ramasubramanian	“A Survey of Packet Classification Tools and Techniques”, First International Conference on Computing, Communication, Control And Automation, 26-27 February 2015

2.2 Papers presented by the Ph.D. Students

S.No	Author(s)	Details
1	Sangeeta Bhattacharya and S. Selvakumar	“SSENet-2014 Dataset: A Dataset for Detection of Multiconnection Attacks”, Proceedings of the 3rd International Conference on Eco-friendly Computing and Communication Systems, ICECCS 2014, NITK Surathkal, Mangalore, December 18th - 21st, 2014, IEEE.
2	Selvi C, Chakshu Ahuja, Sivasankar E	“A Comparative Study of Feature Selection and Machine Learning methods for Sentiment Classification on Movie Data set”, First International Conference on Intelligent Computing & Application, Dec. 22 – 24, 2014.
3	Renugadevi, N., and C. Mala.	“Tree Based Group Key Agreement–A Survey for Cognitive Radio Mobile Ad Hoc Networks”, Advanced Computing, networking and Informatics, 24-26, June 2014, pp. 85-94.
4	T.Veni and S. Mary Saira Bhanu	“Enhancing memory deduplication using temporal page sharing behaviours in virtual Environments”, International conference on advanced computing, networking and informatics, Kolkatta, 24-26, June 2014, Springer, pp. 481-488.
5	Koppala Guraviah and R. Leela Velusamy	“Design issues and techniques on Design issues in WSNs: A Survey”, International Conference on Information Technology: yesterday, today, and tomorrow, DRDO, 19-21 Feb 2015, pp. 201-209, New Delhi, India
6	Selvi C, Sivasankar E	“Explainable Recommendation System Based on Aspect – Level Sentiment Analysis”, National Conference on Distributed Machine Learning ,SSN Chennai on 20-21 FEB 2015.

3 Workshops attended by the MS students

S.No	Author(s)	Details
1	Mahesh Babu B	ASK 2014 The Fourth Asian Workshop on Symmetric Key Cryptography - Cryptology School 19-22, December 2014, SETS Chennai.
2	Sachin Kumar	ASK 2014 The Fourth Asian Workshop on Symmetric Key Cryptography - Cryptology School 19-22, December 2014, SETS chennai
3	Suriender Singh	6 weeks Workshop on Application Development in Android Organised by: CSE Dept., NITT Trichy-15.

3 Workshops attended by the Ph.D. students

S.No	Students	Details
1	Vijaya J.	One week National level Workshop on “Data Mining in Bio- Informatics Engineer’s contribution for Health care and Drug Design” at Anna University, Coimbatore from 15th to 21th Dec, 2014.
2		Two days Workshop on “Big Data Analytics” to be held on 12 th & 13 th of December, 2014 at National Institute of Technology, Tiruchirappalli.
3	Chitra D Gracia	FDP on Wireless Sensor Network and its applications - 12th to 16th May, 2014 at NITT.
4	N. Renugadevi	On Simulation of Wired and Wireless Networks at NIT, Surathkal from 3rd to 5th July, 2014.
5	Koppala Guraviah	On Simulation of Wired and Wireless Networks at NIT, Surathkal from 3rd to 5th July, 2014.
6	A Kavitha	On Simulation of Wired and Wireless Networks at NIT, Surathkal from 3rd to 5th July, 2014.
7	Thillaikarasi	On Simulation of Wired and Wireless Networks at NIT, Surathkal from 3rd to 5th July, 2014.
8	Chitra D Gracia	One day workshop on Wireless Sensor Network-hardware and software-12th August 2014 at NITT
9	C. Selvi	Big Data Analytics using Hadoop Eco System Tools, CDAC Chennai on 12 – 14 Aug. 2014.
10		Systematic Approach towards Research on Machine Learning and Distributed Computing, SSN

		Chennai on 20-21 FEB 2015
11	Chitra D Gracia	One day workshop on Simulation and Analysis of MANET using Network Simulator (NS-2) on 6th March 2015.

4. Details of invited/Guest Lectures delivered by the Faculty.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	<ol style="list-style-type: none"> "Futuristic Challenges in Network Security", AICTE Sponsored Seminar on Cryptography & Network Security, Saranathan College of Engineering, Tiruchirappalli – 12, 24-25, Jan.'14 "Research Challenges in Cyber Space Security", TEQIP Sponsored – Three days Workshop on “Mathematical Essentials for Cryptology Research”, Thiagarajar College of Engineering, Madurai – 15, (16-18, Oct.'14)
2.	Dr. K. VISWANATHAN IYER	1. In October, 2014 gave lectures on Vertex cover, Independent sets, Dominating sets and their complexity and on Conditional Coloring at a TEQIP sponsored workshop on Some Trends in Graph Theory, organized by the Computer Science department of NIT, Warangal,
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	NIL
7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	1. January 2015. Provable secure public key encryption scheme and Provable secure signature scheme. Workshop on “Formal methods in Cryptography”, National

		Engineering College, Kovilpatti - Tamilnadu, India. 2.October 2014. Cryptography. Workshop on ‘Essentials for Cryptology Research’, Department of Information Technology, Thiagarajar College of Engineering, Madurai, Tamilnadu.
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	NIL

5. Details of sponsored projects undertaken.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	NIL
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	Business and Management Capacity Development of Rural Women Entrepreneurs of India and Srilanka, sponsored by The Asia Foundation, July 2014 -July 2015, for Rs. 32,56,000/-

7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

6. Details of equipment purchased if the value is more than Rs.5.00 lakh.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	NIL
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	1. ZYBO Zynq-7000 Development Board (20 No's) <ul style="list-style-type: none"> • Features the Xilinx Zynq™ Z-7010 AP SoC • 512MB DDR3/128Mb Serial FLASH • 10/100/1000 Ethernet PHY • OTG USB 2.0 PHY • Dual mode HDMI & 16-bit VGA • Audio codec with headphone, mic & line in jacks

		<ul style="list-style-type: none"> • MicroSD slot • On-board JTAG programming • 6 Pmod connectors for unlimited expansion <ol style="list-style-type: none"> 2. Raspberry Pi processor (20 No's) <ul style="list-style-type: none"> • Raspberry Pi model B+ featuring • 700MHz Broadcom BCM2835 CPU with 512MB RAM • 40pin extended GPIO • Full size HDMI • 4USB ports • Micro SD slot 3. Mbed NXP LPC 1768 ARM processor(20 No's) <ul style="list-style-type: none"> • The mbed micro controller for prototyping • 32 bit Cortex-M0 Applications • Battery powered designs • USB Devices 4. Zedboard(30 No's) <ul style="list-style-type: none"> • Zynq-7000 AP SoC XC7Z020-CLG484 • Dual-core ARM Cortex A9 • Memory:512 MB DDR3, 256 Mb Quad-SPI Flash • 4 GB SD card • Onboard USB-JTAG Programming • 10/100/1000 Ethernet • USB OTG 2.0 and USB-UART • PS & PL I/O expansion (FMC, Pmod™, XADC) • Multiple displays (1080p HDMI, 8-bit VGA, 12x 32 OLED I²S Audio CODEC 5. Galileo(20 No's) <ul style="list-style-type: none"> • Intel® Quark™ SoC X1000 application processor, operating at speeds up to 400 MHz. • Support for a wide range of industry standard I/O interfaces, including a full-sized mini-PCI Express* slot, 100 Mb Ethernet port, microSD* slot, USB host port, and USB client port. • 256 MB DDR3, 512 kb embedded SRAM, 8 MB NOR Flash, and 8 kb EEPROM standard on the board, plus support for microSD card up to 32 GB.
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		<ul style="list-style-type: none"> • Hardware and pin compatibility with a wide range of Arduino Uno R3 shields. • Programmable through the Arduino integrated development environment (IDE) that is supported on Microsoft Windows*, Mac OS*, and Linux host operating systems. • Support for Yocto 1.4 Poky* Linux release.
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	NIL
7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

7. Details of research papers published by the faculty and students in refereed journals. (With title of the paper, author's name, name of the journal, year of publication, Vol no., page no. (In the standard abbreviation).

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	<ol style="list-style-type: none"> 1. Vignesh and S. Selvakumar, "Design of an Abstraction Layer for Communication with BOSH XMPP Server", ACM SIGSOFT SEN, March 2015. (Accepted for Publication in March'15 issue) 2. Sangeeta Bhattacharya and S. Selvakumar, "SSENet-2014 Dataset: A Dataset for Detection of Multiconnection Attacks", IEEE Proceedings of the 3rd International Conference on Eco-friendly Computing and Communication Systems (ICECCS 2014), NITK Surathkal, Mangalore, 18 - 21, December 2014 3. Suriender Singh and S. Selvakumar, "Detection of Distributed Denial of Service Attacks using Panel of Experts", Bilingual International Conference on Information Technology: Yesterday, Today, and Tomorrow, DRDO, New Delhi 19-21, Feb.'15
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	1. T.Veni and S. Mary Saira Bhanu, MDedup++: Exploiting Temporal and Spatial page sharing behaviors in virtual environments, The Computer Journal, Dec. 2014
6.	Dr. R. LEELA VELUSAMY	1. U. Venkanna, Jeh Krishna Agarwal & R. Leela Velusamy, "A Cooperative Routing for MANET Based on Distributed Trust and Energy Management", published online in Wireless Personal Communications An International Journal by Springer on

		<p>November 2014</p> <p>2. U. Venkanna, and R. Leela Velusamy, "TEA-CBRP: Distributed Cluster Head Election in MANET by using AHP" published online in Peer-to-Peer Networking and Applications an International Journal by Springer on December 2014.</p>
7.	Dr. R. MOHAN	<p>1. Mohan .R and N. P. Gopalan, Dynamic Load Balancing Using Graphics Processors. International Journal of Intelligent Systems and Applications, Volume 6, No 5, pp. 70-75, April 2014.</p> <p>2. Mohan .R and N. P. Gopalan, Task Assignment for Heterogeneous Computing Problems using Improved Iterated Greedy Algorithm. International Journal of Computer Network and Information Security, Volume 6, No 7, pp.50-55, June (2014).</p>
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	1. Kunwar Singh, C. Pandu Rangan, A. K. Banerjee: "Lattice Based Identity Based Resplittable Threshold Public Key Encryption Scheme", International Journal of Computer Mathematics (SCI), pp. 1-19, June 2014, Taylor & Francis. Accepted.
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

8. Details of Research Scholars who have completed Ph.D.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	NIL
2.	Dr. K. VISWANATHAN IYER	NIL
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	1. Ms. Ipsita Mohanty Roll no. 306110003, Title of the thesis: Acquisition and Analysis of Live Data to Extract Application level Digital Evidence Completed in 2014(MS by research)
7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

9. Any other important achievement, which is worthy of inclusion in the Institute Day report.

S.No	Staff Name	Achievements
1.	Dr. S. SELVAKUMAR	NIL
2.	Dr. K. VISWANATHAN IYER	Won a 20% waiver on the registration fee payable to attend the CSEIT2014 conference in Singapore based on merit.
3.	Dr. N. RAMASUBRAMANIAN	NIL
4.	Dr. C. MALA	Information not given
5.	Dr. S. MARY SAIRA BHANU	NIL
6.	Dr. R. LEELA VELUSAMY	NIL
7.	Dr. R. MOHAN	NIL
8.	Mrs. S. JAYANIRMALA	Information not given
9.	Mr. KUNWAR SINGH	NIL
10.	Dr. E. SIVASANKAR	NIL
11.	Ms. B. NITHYA	Information not given
12.	Mrs. B. SHAMEEDHA BEGUM	Information not given
13.	Mrs. M. SRIDEVI	NIL
14.	Mr. A. SANTHANA VIJAYAN	Information not given
15.	Mrs. M. BRINDHA	Information not given

Placement Details Summary

S.No.	Name of Company	No. of Recruits
1	Qualcomm	4
2	Adobe	4
3	Alcatel Lucent	2
4	Altisource	1
5	Amazon	3
6	Cisco	1
7	Citicorp	3
8	Credit Suisse	2
9	Edgeverve	1
10	Fidelity Investments	3
11	Flipkart	4
12	Goldman Sachs	1
13	J P Morgan	2
14	Matrimony.com	2
15	Microsoft IDC	2
16	Microsoft IT	2
17	Morgan Stanley	1
18	MuSigma	1
19	o9	1
20	Oracle	7
21	Ramco Systems	1
22	RBS	1
23	Samsung	15
24	SanDisk	1

25	Schlumberger	1
26	Siemens	1
27	Temenos	1
28	Visa	1
29	Walmart Labs	1
30	Wipro Star	4
31	Cognizant	3
	Total	77

DEPARTMENT OF COMPUTER APPLICATIONS**1. NOTABLE ACHIEVEMENTS****1.1 Faculty: Nil****2. CONFERENCE****2.1 Organised****International: Nil****National**

S. No	Coordinator	Programme	Period
1	Dr. S. Nickolas, Dr. A. Vadivel, Dr. MarySairaBhanu S.	National Conference on Big Data and Cloud Computing	20-21 March 2015
2	Dr. P. J. A. Alphonse, Dr. R. Ponalagusamy, Dr. T.N. Janakiraman	Frontiers in Applied Sciences and Computer Technology	6-7 March 2015

2.2 Papers presented by the Faculty / Students**International**

S. No.	Author (s)	Details
1	Shanthi, P., and S. R. Balasundaram	“An Efficient Clique Cloak Algorithm for Defending Location-Dependent Attacks in Location Based Services” in Proceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies, pp. 22. ACM, 2014.
2	SanthanaVijayan and S.R.Balasundaram	“Integrated Semantic Recommendation System Using Ontology for E-Learning.” In Proceedings of the 2 nd International Conference on “Emerging Research in Computing, Information, Communications and Applications”, ERCICA 2014 (Vol. 3, pp.122-129, Elsevier, 2014).
3	P. Shanthi and A. Vadivel(2014)	Emotion Estimation using Geometric Features from Human Lower Mouth Portion, in the Proceedings of the 23 rd International Conference on Systems Engineering, August 19- 21, 2014, Las Vegas, USA (pp701-706)
4	Shaila S G and A. Vadivel	Cognitive Based Sentence Level Emotion Estimation through Emotional Expressions, In the Proceedings of the Twenty-Third International Conference on Systems

		Engineering, August 19-21, 2014, Las Vegas, (pp 707-713)
5	T.Vetriselvi and A. Vadivel(2014)	Sentiment and Emotion Prediction through Cognition: A Review, In the Proceedings of the Twenty-Third International Conference on Systems Engineering, August 19-21, 2014, Las Vegas, USA, (pp 719-722)
6	Shaila S.G, A Vadivel and Shanthi P	Constructing Event Corpus from Inverted Index for Sentence Level Crime Event Detection and Classification, W. Kim et al. (Eds.): JIST 2013, Nov. 28-30 November 2013, LNCS 8388, pp. 195–208, 2014.
7	Dr. S. Nickolas, S. Thiruselvan	Effective Tariff Selection on Cloud Services: A consumer Perspective,” International Conference on Contemporary Computing and Informatics, IC ³ I 2014, Mysuru, India
8	M. Sivakumar and U. Srinivasulu Reddy	“A Short Review for Mobile Applications of Sentiment Analysis on Various Domains” in Progress in Systems Engineering: Proceedings of the Twenty-Third International Conference on Systems Engineering, Advances in Intelligent Systems and Computing, Springer International, pp 723-726.
9	AnandkumarPrakasam , Nickolas S.	“Metaheuristic Algorithms and Polynomial Turing Reductions: A Case Study Based on Ant Colony Optimization,” International Conference on Information and Communication Technologies (ICICT 2014), Kochi. December, 2014

National: Nil

3. WORKSHOPS/ SEMINARS

3.1 Organized

S. No.	Coordinator	Title	Period
1	Dr. S. Nickolas, Dr. U. Srinivasulu, Dr. S. MarySairaBhanu	Workshop on Big Data Analytics	December 12-13, 2014.
2	Dr.S.Nickolas, Dr.N.Thamaraiselvan	FDP on Data Mining and Data Analytics	November 24-28, 2014
3	Dr.S.Nickolas	BIG Data and Current IT Industrial Scenario	May 11, 2014
4	Dr.S.Nickolas	TCS-iON Train-The-Trainers Workshop	January 29, 2015
5	Dr.S.Nickolas	Workshop on Creativity and Problem Solving	October 16, 2014

3.2 Attended

S. No.	Faculty	Details
1	Dr. S.R. Balasundaram	IPv6 Road show Organised by ERNET India at IIT Madras on 02/05/2014
2	Dr. R. Eswari	Train-the-Trainer Program on “TCS-iON Learning Exchange” under TEQIP II, organized by Department of CSE and Department of Computer Applications, NIT Trichy on 29 January 2015

4. INVITED/ GUEST LECTURES DELIVERED BY FACULTY

S. No.	Faculty	Topic	Programme	Place & Date
1	Dr. S.R. Balasundaram	Semantic Web	FDP on Research Issues in Semantic Web Organized under TEQIP	Alagappa Chettiar College of Engineering and Technology, Karaikudi, May 23, 2014
2	-do-	Multimedia Teaching Methods	ISTE STTP on “Pedagogy”	At King’s College of Engineering, Pudukkottai on 09/12/2014
3	Dr. A. Vadivel	Object Tracking		BDU Trichy
4	Dr. A. Vadivel	Object Tracking		MIT, Anna University Chennai
5	Dr. S. Nickolas	Data Mining and its Applications	Intelligent Data Engineering Workshop	PSNA Engineering college, Dindugal.
6	Dr. U. Srinivasulu Reddy	Prospects of Advanced Computing Techniques in Big Data	National Conference	K. Ramakrishna College of Technology, Tiruchi
7	Dr. U. Srinivasulu Reddy	Prospects of Bio Inspired Algorithms for Biodiversity	workshop on “Hands on Training in Biodiversity Web Application Development using Python-Django Framework	Jamal Mohamed College, Tiruchy, Tamil Nadu.
8	Dr. U. Srinivasulu Reddy	Big Data	National Conference on Big Data and Cloud Computing	Theivanai Ammal College for women, Villupuram

5. Sponsored Projects undertaken: Nil.

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh): Nil.

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Extracting easy to understand summary using differential evolution algorithm	Nandhini, Kumaresh, and Sadhu Ramakrishnan Balasundaram	Swarm and Evolutionary Computation	2014, Vol.16, pp.19-27, Elsevier
2.	Event Pattern analysis and Prediction at sentence Level using Neuro-Fuzzy Model for Crime Event Detection	Vadivel A and Shaila SG, (2014)	International Journal of Pattern Analysis and Applications, Springer	In Press, Article DOI: 10.1007/s10044-014-0421-7, ISSN: 1433-7541 (print version), ISSN: 1433-755X (electronic version)
3.	Event coreference resolution using particle swarm optimization'	Shaila S.G, A VadivelandShanthi.P (2014)	Int. Journal Knowledge Engineering and Soft Data Paradigms	Inderscience, Vol. 4(3), pp.261–271
4.	“Discovering of gapped motifs using particle swarm optimization”	U. Srinivasulu Reddy*, Michael Arock and A.V. Reddy	Int. J. Comput. Intelligence in Bioinformatics and Systems Biology	Vol. 3, No. 8, pp. 234-256.
5.	A Survey On NGS-Short Read Alignment In High Performance Computing	G. Raja and U. Srinivasulu Reddy	IJRET: International Journal of Research in Engineering and Technology	Vol. 3, pp 84-88

National Journal: Nil.

8. PhD AWARDED

S. No.	Name of the Research Scholar	Guide/Supervisor	University/ Institute
1.	Ms. R.Eswari (405909001)	Dr. S. Nickolas	NIT Trichy
2.	Mrs. N.Gayathri(405107052)	Dr. S. Nickolas	NIT Trichy
3.	Ms. K. Nandhini, (405108052)	Dr. S.R. Balasundaram	NIT Trichy

9. DETAILS OF BOOK ANY AUTHORED BY FACULTY

Dr.Michael Arock, <i>Fundamentals of Programming with C</i>, YesDee Publishing Private Limited, ISBN No.9789380381411, 2014

10. Patent if any obtained by faculty: Nil.

11. Other Important Points**12. Summary**

S.No	Details	Total nos			
1.	International Journals	5			
2.	National journals				
3.	International conference publications	9			
4.	National conference publications				
5.	Sponsored Project	No's:		Amount:	
6.	No of Ph.D produced	3			
7.	No of Patents obtained	-			
8.	No of books published	1			

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**1. NOTABLE ACHIEVEMENTS****1.1. Faculty Members**

S. No.	Name	Details of Prizes/Awards	Organization
1	Dr. N. AmmasaiGounden	Distinguished Alumni Faculty Award for serving personnel at NIT Trichy	NIT Trichy
2	Dr. C. Nagamani	Nominated as External Review Committee Member, NIT Puducherry	B.O.G., NIT Puducherry
3	Dr. S. Arul Daniel	Distinguished Alumni Faculty Award for serving personnel at NIT Trichy	NIT Trichy
4	Dr. S. Sudha	Distinguished Alumni Faculty Award for serving personnel at NIT Trichy	NIT Trichy

1.2. Students

S. No.	Name	Details of Prizes/Awards	Organization
1	N. SaiKiran	4*400 relay silver 200 meters running bronze	Sports Fete

		Cricket runners up Volleyball runners up	2014
2	SatrujitMohanty	Gold medal at "udghosh" inter college football	IIT Kanpur
		1st prize in inter department football	NIT Trichy
		2nd runners up at inter NIT football tournament	NIT Warangal February 2015.
3	P.Bharath Chandra	Participated in Sangam, Pragyan'15	NIT Trichy
4	AkshayAnantharaman	Headed the first prize winning team in Sangam, Pragyan' 15	Pragyan'15, NIT Trichy
5	Dilruba N	1. Gold medal in 800 mtrs race, Silver in 400 mtrs race and Silver in 4*100 mtrs relay in Udgoosh 2014, Inter University Sportsfete	IIT Kanpur
		2. Gold medal in 800 mtrs race and Silver in 200 mtrs race	Inter Dept Sports Fete 2014
6	Guru Raghav R	Cargil Global Scholarship of USD 2500 per year for three years	Cargill, Inc., through the Institute of International Education (IIE)
7	Guru Praanesh R	Cargill Global Scholarship of USD 2500 for three years and leadership development seminars on national and global levels	Cargill Inc., through the Institute of International Education
		First prize in Carnatic Instrumental Solo in Shrutilaya, organized by Club Amruthavarshini, Festember 2014.	NIT Trichy
8	Naveen K	3rd prize in Sangam in non circuital division in Pragyan 15	NIT Trichy

9	Arun Philips	Captain of the first prize winning EEE Table Tennis Team at Sports Fete	Sports Fete
10	K S Ilangovan	3rd place in Saarang' 15	IIT Madras
		2nd place in dance	Unmaad' 15, IIMB and Pravega' 15 at IISc B
		Secured 1st place in dance	Chrysalis Loyola Institute of Business Administration chennai in February 2015
11	Nishit kumar	Part of the EEE football team. Champions of sports fete 2015.	NIT trichy
13	Alok Kumar	2 nd Prize in the Tamilnadu East Zonal level of the All India Essay writing Competition	Shri Ram Chandra Mission and United Nations Information Centre for India and Bhutan
14	Sri Harsha D	Runner-up in cricket	SportsFete'15, NITT
15	Harikapasham	Won gold medal in udgosh	IIT Kanpur
		Third place in 100 meters relay	sports fete
16	Ramanathan RM	Second place in chess	IIT Kanpur

		First place in chess	Colosseum, Sastra University
17	Hari Anirudh	Triumphant EEE basketball team	Inter department Sports Fete 2015

2 CONFERENCE / SEMINARS / SYMPOSIUM / SPECIAL LECTURES

2.1. Organised

S. No	Coordinator	Programme	Period
1	Dr. N. Ammasai Gounden	Wind Energy scenario in Australia	January 23, 2014
2	Dr. K. Sundareswaran	EE405– Industrial Electronics for final year / 7 th semester Btech	One semester 2014-2015
3	Dr. K. Sundareswaran, Dr. Sishaj P Simon and Dr. P. SrinivasaraoNayak	Two Day Workshop on Implementation of Algorithm in SCILAB and μ -Controller Firefly	October 10-11, 2014
4	Dr. K. Sundareswaran, Dr. Sishaj P Simon and Dr. P. Srinivasarao Nayak	One Day Workshop on Particle Swarm Optimization, Applications and Implementation on a Microcontroller	March 8, 2014

5	Dr. C. Nagamani	Workshop on FACTS controllers “Thyristor based FACTS controllers – SVC, TSC; Thyristor based FACTS controllers –TCSC”	July 25-26, 2014
6	Dr. C. Nagamani	Short Term Course on ‘Application of Power Electronics to Renewable Energy Systems and Micro Grids’ “Power control of DFIG under Unbalanced grid conditions”	8 th – 10 th February 2015
7	Dr. N. Kumaresan	Sophisticated Testing and Measuring Equipment for Power Electronic Systems	12th December, 2014
8	Dr. N. Kumaresan	EE008 – Electrical Safety (Global Elective)	B.Tech -final year / 7 th semester (2011-15) Batch For one semester (2014-2015)
9	Dr.S.Sudha	Operating Systems – “Device Management”	B.Tech - Pre-final year / 6 th semester (2011-15) Batch In the month of march for 9 days
10	Dr. N. Kumaresan	EE208 – Measurement and Instrumentation	B.Tech - final year / 7 th semester (2012-16) Batch For one semester (2014-2015)

11	Dr. M. P. Selvan	Power System Engineering Studies using ETAP	18 th & 19 th June, 2014.
12	Dr.Sishaj P Simon & Dr. T. K. Radha Krishnan	Three -Day Hands-on Workshop on Real Time Signal Acquisition & Processing using Open Source Software SCILAB	15-17 December 2014
13	Dr.S.P.Simon, Dr.R.Murugesan, Dr.K.Prem Kumar	A Three-Day Workshop on Communication & Soft Skills For Engineers and Architects	June 16-18, 2014
14	Dr. M. VentakaKirthiga	ASLK Analog kit – training programme	3rd September, 2014
15	Dr. M. VentakaKirthiga	Linear Integrated Circuits “Transistor Scaling”	For all Students 22 nd August, 2014.
16	Dr. M. VentakaKirthiga	Introduction to TI Microcontrollers and Applications in various industries	31 st January 2015 (As a part of CURRENT’s)
17	Dr. M. VentakaKirthiga	System on Check (SoC) Design	1 st Febrary2015 (As a part of CURRENT’s)

2.2. Papers presented by the Faculty / Students

S. No.	Author(s)	Details
1	C. Nagamani, NikhileshPrasannakumar	C2000 Launch Pad base Generic Motor Control System, IEEE International Conference on CAS – Texas India Educators Conference (TIEEC 2014), April 2014.

2	Dr. N. Kumaresan	Evaluator for the Technical session V Electrical and Power Electronics in TEQIP- II Sponsored International Conference on “Energy and Environmental Engineering” (ICEEE’ 14), organized by the Department of Petrochemical Technology, Anna University, Tiruchirappalli, November 6-7, 2014.
3	Dr. N. Kumaresan	Key note speakerin 8th International Conference on Science, Engineering and Technology (SET), organized by VIT, Vellore, during 6-8 May 2014.
4	Dr. N. Kumaresan	Key note speaker in International Conference on “Advancements in Automation and Control (ICAAC 2014)” in Association with Journal of Applied Mechanics and Materials held on 11-04-2014, organized by Department of Electrical & Electronics Engineering, Syed Ammal Engineering College, Ramanathapuram – 623 502, during 11-12, April 2014.
5	N.Hemavathi and Dr. S.Sudha	“Hardware Realization of Fuzzy based Cluster Head Selection in Wireless Sensor Networks” International Conference on Electronic Design, Computer Networks & Automated Verification held during 29 th -30 th January, 2015.
6	N.Hemavathi and Dr.S.Sudha	“A Fuzzy Based Predictive Cluster Head Selection Scheme for Wireless Sensor Networks” International Conference on Sensing Technology (ICST) 2014, Liverpool, UK Technically co sponsored by IET and IOP Date: 2.9.2014-4.09.2014

7	ShobhitNagpal and Dr. S. Sudha	“Two Level Fuzzy based fire prediction scheme using Wireless Sensor Network” accepted in the IEEE international Conference on Advances in computing & communication engineering to be held during 1 st – 2 nd May, 2015.
8	V. Sankaranarayanan, SowmyaRavichandran and SowmyaRanjanSahoo	"Torque-sensor less control of human-elelectric hybrid bicycle." will be presented in IEEE ICIC at PUNE, INDIA.
9	SowmyaRanjanSahoo, Brsilla Marry and V. Sankaranarayanan	"Disturbance observer based adaptive sliding mode control: An application to single machine infinite power system." in Proc. of IEEE SPICES at NIT-Calicut, Kerala, INDIA, Jan. 2015.
10	SowmyaRanjanSahoo, Brsilla Marry and V. Sankaranarayanan	"Stabilization of Single Machine Infinite Bus Power System using Adaptive Sliidng Mode Controller ." in Proc. First Indian Control Conference at IIT-Madras, Chennai - INDIA, Jan. 2015.
11	Dr.Sishaj P Simon	“Artifical Neutral Network predictor for Grid connected solar photovoltaics installation at atmospheric temperature” International Conference Advance in green energy (ICAGE), 2014.
12	Dr.Sishaj P Simon	2 nd IEEE conference “Day Ahead prediction of Solar Power Ouput for Grid connected solar photovoltaics installations using Artifical Neutral Networks” during 3 rd – 6 th December, 2014

13	C.S.Sandeep and Dr.M.VenkataKirthiga	“Optimal Planning of Autonomous Micro-grid” 18th National Power Systems Conference during 18th – 20th December, 2014 organized by the Department of EEE, Indian Institute of Technology, Guwahati, Assam, India.
14	Sundaravaradan N A, Rajaraman P, Suzith D, Dilip Kumar M, Abilash G, M Jaya Bharata Reddy and D. K. Mohanta	Wavelet Based Transmission Line Fault Analysis : A Literature Survey”, 14th IEEE International conference on Environment and Electrical Engineering, (EEEIC-2014), 10-12th May 2014, Poland.(DOI: 10.1109/EEEIC.2014.6835874).
15	ChakrapaniMishra,D.K.Mohanta and M.JayaBharata Reddy	Impact of Adaptive Relaying in Smart Grid”, 14th IEEE International conference on Environment and Electrical Engineering, (EEEIC-2014), 10-12th May 2014, Poland.(DOI: 10.1109/EEEIC.2014.6835858).
16	Dr. M. P .Selvan	18 th National Power Systems Conference , NPSC 2014 at Guwahati, December 18 th – 20 th 2014
17	Dr. S. Moorthi	18 th National Power Systems Conference , NPSC 2014 at Guwahati, December 18 th – 20 th 2014
18	Dr. P .Raja	18 th National Power Systems Conference , NPSC 2014 at Guwahati, December 18 th – 20 th 2014
19	Dr.M.VenkataKirthiga	18 th National Power Systems Conference , NPSC 2014 at Guwahati, December 18 th – 20 th 2014

2.3. Attended by the Faculty / Students - NIL

3. SUMMER SCHOOL / WINTER SCHOOL / WORKSHOPS

3.1.Organised

S. No	Co-ordinator	Title	Period
1	Dr.C.Nagamani and Dr.G.Saravanallango	Workshop on 'FACTS controllers'	July 25-26, 2014
2	Dr.C.Nagamani and Dr.G.Saravanallango	Industrial Workshop on 'PLC & VSD' by SIEMENS Ltd.	November 7, 2014
3	Dr.C.Nagamani, Dr. M. Jaya Baharth Reddy and Dr.G.Saravanallango	Short Term Course on 'Application of Power Electronics to Renewable Energy Systems and Micro Grids'	February 8- 10, 2015
4	Dr. S. Moorthi&Mrs.Mageshwari	Workshop on Real time controller design using TI C200 Microcontroller	September 26-28, 2014
5	Dr. N. Kumaresan	Programmable Logic Controllers (PLCs)	September 2, 2014
6	Dr.B. SenthilArasu Dr.N.Thamaraiselvan& Dr. N. Kumaresan.	Art of teaching: pedagogical tools and techniques season-II, Under the Self- Financed Category	November 17 – 21, 2014
7	Dr. S. Sudha	Workshop on Wireless Sensor Network- Hardware & Software	August 12, 2014
8	Dr. S. Sudha	Faculty Development Programme on Wireless Sensor Networks and its Applications	May 12–16, 2014
9	Dr. S. Sudha	Workshop on Simulation and Analysis of MANETs using Network Simulator (NS- 2)	March 6, 2015

10	Dr. Jaya Bharatha Reddy	TEQIP-II sponsored workshop on Recent trends in Smart Grid Technologies	April 26, 2014
11	Dr.Sishaj P Simon Dr. N. Siva Kumaran & T. K. Radha Krishnan	Real Time Signal Acquisition and Processing using open source software SCILAB	December 15–17, 2015
12	Dr.S. Moorthi, Dr. P. Raja, Dr. M. P .Selvan	Low Power Controller Design using MSP430	June 20-21, 2014
13	Dr. M. VentakaKirthiga, Dr. M. P. Selvan and Dr.S. Moorthi	Understanding IGBT : from device to inverter	April 8, 2014
14	Dr. M. VentakaKirthiga, Dr. M. P. Selvan and Dr.S. Moorthi	Power system Modelling and Simulation with PSCAD “Fundamentals and Introduction to PSCAD/EMTDC”	May 12–13, 2014
15	Dr. M. VentakaKirthiga, Dr. P. Raja	Two week workshop on Control Systems IIT, Kharagpur	December 2– 12, 2014

3.2. Attended

S. No	Faculty / Students	Details
1	Dr. N. Kumaresan	One day conclave on R&D in New and Renewable Energy organised by the Ministry of New and Renewable Energy, Government of India at VigyanBhavan, New Delhi, India on 05.08.2014
2	Dr. S. Sudha	LABVIEW and Data Acquisition Seminar 29.4.2014
3	Dr. S. Sudha	Workshop on Video Analytics at MIT, Chennai, October 10-11, 2014
4	Dr. M. P. Selvan	Presented paper at NPSC 2014, IIT Guwahati, December 17, 2014

5	Dr.Sishaj P Simon	IEEE International Conference on Electronics and Communication system IICECS-14, Karpagam College of Engineering, Februray 14, 2014
6	Dr.Sishaj P Simon	Training Programme on Research Methodology and Intellectual Property Rights by Equate India, New Delhi, February 3-7, 2014
7	Dr.G.SaravanaIlango	National Conference on Fast Forward with Solar Mission Thrust Areas and Institutional Intiatives in Innovation Entrepreneurship and Human Resource Development, Dayalbagh Educational Institute, Agra
8	Dr. S. Senthil Kumar	Workshop at MS Ramaiah institute of Technology, Bangalore.
9	Dr. P. Raja	National conference NPSC 2014, Assam
10	Dr. P .Raja	Challenges Oppurtunites for R & D in the Indian Power Sector, Organised by CPRI, 26 th July 2014.
11	Dr.M.VenkataKirthiga	Workshop on “ Real time controller design using TI C200 microcontroller” 26 th – 28 th September, 2014
12	Dr.M.VenkataKirthiga	Challenges Oppurtunites for R & D in the Indian Power Sector, Organised by CPRI, 26 th July 2014.
13	S.L. Arun, P. Muthuvel (Research Scholars)	National Seminar on “Solar power plants for residential commercial, utility and off-grid applications”, organized by Department of EEE, NIT Calicut during 17 th & 18 th December 2014

4. INVITED / GUEST LECTURES DELIVERED BY FACULTY

S. No	Faculty	Topic	Programme	Place & Date
1	P. R. Venkateshwaran, Senior Engineer, Welding Research Institute	EE405– Industrial Electronics	B.Tech - final year / 7 th semester (2011-15) Batch	NIT Trichy, For one semester (2014-2015)
2	Dr. S. Dhamalingam General Manager Quality, BHEL, Trichy	EE008 – Electrical Safety (Global Elective)	B.Tech - final year / 7 th semester (2011-15) Batch	NIT Trichy For one semester (2014-2015)
3	Mr. K. Rajbabu Senior system Engineer IT solution and services BHEL ,Trichy.	Operating Systems – “Device Management”	B.Tech - Pre-final year / 6 th semester (2011-15) Batch	NIT Trichy, March
4	Dr. Jayashriravishankar Lecturer in Energy Systems, School of Electrical Engineering and Telecommunications Kensington	Wind Energy scenario in Australia	Faculty, M.Tech., Research scholars & first year students	NIT Trichy, January 23, 2014
5	Dr. S. Dhamalingam General Manager Quality, BHEL, Trichy	EE208 – Measurement and Instrumentati on	B.Tech - final year / 7 th semester (2012-16) Batch	NIT Trichy, For one semester (2014-2015)

6	Dr.N.Ammsai Gounden	Design of Power Electronic controllers for PV applications	International conference	SA college of Engg. Ramanathapuram.
6	Dr.N.AmmsaiGounden	Challenges in engineering education	TEQIP sponsored workshop	NIT Trichy
7	Dr.N.AmmsaiGounden	Power Electronic controllers in Renewable Energy	National Conference	Don Bosco Engineering College, Bangalore October 31, 2014
8	Dr.K.Sundareswaran	Electrical Drives and controls	Guest speaker for anna university sponsored FDTP	PA College of Engineering and Technology, Coimbatore, June 20, 2014
9	Dr.K.Sundareswaran	Fuzzy Systems	Expert lecture in FDP under TEQIP II reg.	TKM College of Engineering and Technology, Kerala. May 02, 2014
10	Dr.K.Sundareswaran	Electrical Drives and Controls	Guest Speaker for Anna University Sponsored FDTP	P.A. College of Engineering and Technology, Coimbatore, June 20, 2014
11	Dr.K.Sundareswaran	Genetic Algorithm and its application	To Guest Speaker for Two Days Workshop on	P.A. College of Engineering and Technology , Coimbatore, September 29-30, 2014

12	Dr.K.Sundareswaran	Advanced Control Theory for Electrical Engineering Applications	To the AICTE sponsored one week short term course	Coimbatore Institute of Technology, Coimbatore, October 16, 2014
13	Dr. C. Nagamani	Emerging trends in renewable energy sources and management	UGC sponsored three week refresher course, Interaction programmes, Four week Orientation Course and One week Short Term Course	UGC-Academic staff college, JNTUH, Kukatpally, Hyderabad June 16, 2014
14	Dr. C. Nagamani	Power Electronics in Distributed Generation	Short term course National Mission on Power Electronics(NAMPE T), DIT, Govt. Of India	NIT Surathkal February 7-9, 2014
15	Dr. S. Arul Daniel	Need for interdisciplinary research in the current era	International Conference in recent advances in synthetic biology (RASB 2015)	Bishop Heber College, January 9, 2015
16	Dr. S. Arul Daniel & Dr. S. Senthil Kumar	Control of Wind Driven Induction Generator	Short Term Course on Integrated Power Electronic Converter and Digital Control Technique	Pondicherry Engineering College, February 8, 2015
17	Dr. N. Kumaresan	DST sponsored National Seminar on Integration of Renewable Energy	Guest lecture	Vivekanandha College Of Engineering For Women, Namakkal February 25, 2014

18	Dr. N. Kumaresan	Power Electronic Controllers For Renewable Energy Applications- Wind Energy	8th International Conference on Science, Engineering and Technology (SET)	VIT, Vellore, 6-8 May 2014
19	Dr. N. Kumaresan	Analysis of Self-Excited Induction Generators using Genetic Algorithm techniques	International Conference on Advancements in Automation and Control (ICAAC 2014) in Association with Journal of Applied Mechanics and Materials	Department of EEE, Syed Ammal Engineering College, Ramanathapuram, 11-12 April 2014
20	Dr. N. Kumaresan	Wind-driven induction generators for supplying isolated loads	Short-term course on Renewable Energy Conversion Technology, Jointly organized by Power Electronics Group, CDAC, Thiruvananthapuram and North-Eastern Hill University (NEHU), Shillong under (NaMPET Phase-II)	Department of Electronics and Information Technology (DeiTY), Govt. of India, September 23-24, 2014 at NEHU, Shillong, Meghalaya (24.09.2014).
21	Dr. N. Kumaresan	Microteaching	3-day TEQIP II sponsored Faculty Development Programme on The Art of Teaching: Pedagogical Tools and Techniques	Govt. College of Engineering Salem 11, from 9.12.2014 to 11.12.2014 (11.12.2014).

22	Dr. V. Sankaranarayan	Control of mobile Robots	Guest lecture for final and Pre final year students	Government college of Engineering, Tirunelveli, September 9, 2014.
23	Dr. V. Sankaranarayan	Control of quad rotor	Guest lecture for second year students	Scad Francis Xavier Engineering College, Tirunelveli, September 1, 2014,
24	Dr. V. Sankaranarayan	Advances in Energy and Control System	To be a Resource Person for Five – Day National Level FDP	Shri Vishnu Engineering College for Women, AP, April 23-24, 2014
25	Dr. V. Sankaranarayan	Adaptive Technologies for Sustainable Growth	Gave keynote speaker in International Conference (ICATS'14)	Paavai Engineering College, Namakkal, May 9, 2014
26	Dr. M. Jaya Bharata Reddy	Phasor Measurement Units Applications in Power systems	International Workshop on Synchrophasor measurement for Smart Grid	MVGR College of Engineering, Vizianagaram, Andhra Pradesh, November 21 -22, 2014
27	Dr. M. P. Selvan	Power System Stability	Expert Lecture	Sree Vidyanikethan Engineering College, Tirupati, October 25, 2014
28	Dr. Sishaj P Simon	Applications of FACTS in UCP using Swarm Intelligent Techniques	Expert Lecture in FDP under TEQIP II	T.K.M. College of Engineering , Kerala 2.5.2014

29	Dr.Sishaj P Simon	Application of Evolutionary Computation Techniques on Power System	TEQIP II sponsored Short Term Training Program	SardarVallabhbhai National Institute of Technology, Surat, July 14-16, 2014
30	Dr.Sishaj P Simon	Applications of Neutral Networks in Electrical Engineering	Resource person	SAINTGITS college of Engineering, Kottayam, November 25, 2014
31	Dr.Sishaj P Simon	Smart Grid and its Technologies	Chief Guest and resource person – National Seminar.	Kamaraj College, November 14, 2014, Viruchunagar
32	Dr.Sishaj P Simon	Ant Colony Optimization	Special lecture in a two day workshop	SCTT, Anna University , Coimbatore, December 23-24, 2014
33	Dr. S. Senthil Kumar	Control of Induction Generators	Guest Lecture	ACCET, Karaikudi, June 2, 2014
34	Dr. S. Senthil Kumar	Compensator design for DC- DC power converters	Resource Person for faculty development programme	Saranathan College of Engineering, Trichy June 24, 2014
35	Dr. S. Senthil Kumar	Fuzzy Systems	Guest Lecture	CARE Group of institutions Trichy, May 8, 2014,
36	Dr. S. Senthil Kumar	Permanent Magnet Synchronous Motors	Guest lecture	Karunya University, Coimbatore, November 11, 2014

37	Dr. S. Moorthi	Recent Trends in VLSI	Guest Lecture	K. Ramakrishna college of Technology, Trichy. August 19, 2014
38	Dr. S. Moorthi	Recent Trends in VLSI	To be Resource person for symposium “Enigma – 14”	Kings college of Engineering, Chennai, November 23, 2014
39	Dr. P .Raja	Transients in Intregrated Power Systems	Guest Lecture	K. Ramakrishna college of Technology, Trichy. April 16, 2014
40	Dr.M.VenkataKirthi ga	HVDC Transmisson	Institution of Engineers, Local Area Sector	BHEL, Trichy 27 January, 2015

5. SPONSORED PROJECTS UNDERTAKEN

S. No.	Coordinator	Name of the Project	Sponsor	Amount (Rs. in Lakhs)
1.	Dr.C.Nagamani and Dr.G.SaravanaIlango	Electrification work & design of circuit systems in new go-downs in Punakulam	TNCSC 2014	1.00
2.	Dr.M.JayaBharata Reddy	Development of a Microgrid Test-Bed for Renewable Energy Management Systems.	Science and Engineering research Board(SERB)	20.85
3.	Dr.K.Sundareswaran	Corporate Sustainable Development Project	BHEL	32.00
4.	Dr.K.Sundareswaran	Design and development of Multi – input 10KVA online UPS	BHEL	15.00

5.	Dr.K.Sundareswaran, Dr.Sishaj P Simon & Dr.P.SrinivasaraoNayak	Design and optimization of feedback controller for boost type DC -DC converter using artificial immune system	CPRI	8.64
6.	Dr.Sishaj P Simon	A pilot Project on Economic Demand response management through online Monitoring.	SERB	24.39
7.	Dr. N. Kumaresan, Dr.M.P.selvan Dr. S. Moorthi	A Novel Hybrid System for Supplying Isolated Loads with FPGA Based Energy Managements Scheme,	Centre for Wind Energy Techonology, Chennai	73.26
8.	Dr.V.Sankaranarayanan	Study and Implementation of Different Power Saving Techniques for the Efficient Utilization of Air Conditioner by Using Renewable Power Resources.	MHRD	63.98
9.	Dr.P.SrinivasaraoNayak, Dr.Sishaj P Simon& Dr.K.Sundareswaran	Design, Development and Analysis of Bio-inspired Control strategies for stand-alone solar powered LED lighting systems	MHRD	44.74
10.	Dr.P.Raja	Maximum Power Extraction from Off – shore Wind-driven Generators through HVDC Transmission system	MHRD	38.56
11.	Mrs.S.Mageshwari	Power Optimization Controller in Switched Mode Power Supplies Connected with Renewable Energy Sources	MHRD	35.24

12.	Dr.Sishaj P Simon	Maximum Demand Control through Modern Algorithms	Southern Railway	01.00
13.	Dr.G.SaravanaIlango	Design and Development of improved shunt active filter with enhanced signal processing with due consideration for distorted utility	DST	14.50

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.) :

S.No	Equipment	Amount (Rs. In Lakhs)
1.	Dspace	14.00
2.	ETAP Software	15.00

7. Research Papers Published in National / International Journals

7.1. Faculty

S.No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Modelling, analysis and control stand-alone self excited induction generator – PWM rectifier systems feeding constant dc voltage applications	S. Senthilkumar, N. Kumersan, M.Subbiah and Mahendharrageeru	International Journal On IET Generation, Transmission & Distribution	Volume 8, Issue 6, Pages 1140-1155, June 2014
2.	An Improved Delta-Star Switching Scheme for Reactive Power Saving in Three-Phase Induction Motors	P.Raja, N. Kumaresan and M. Subbiah	Journal of Frontiers in Energy	Volume 8, Issue 3, pp 364-370, September 2014

7.2. Students and Faculty

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Speed sensor-less maximum power point tracking and constant output power operation of wind-driven wound rotor induction generators	Krishnasamy Vijayakumar, Natarajan Kumaresan, Nanjappagounder Ammasaigounden	International Journal on IET Power Electronics	2014, Vol. 8(1), pp. 33-46
2.	Simple power electronic controller for photovoltaic fed grid-tied systems using line commutated inverter with fixed firing angle	D.R. Binu Ben Jose, N. AmmasaiGounden, Jayashri Ravishankar	International Journal on IET Power Electronics	2013, Vol. 7(6), 61424 – 1434
3.	Hybrid Power Electronic Controller for combined operation of Constant Power and MPPT for single phase Grid-tied PV Systems	D.R. Binu Ben Jose, N. AmmasaiGounden and A.Vasanth	IET Power Electronics	2015, Vol. 7(12), pp. 3007-3016
4.	Power Electronic Interface with MPPT using Line Commutated Inverter for Grid-connected Permanent Magnet Synchronous Generator	D. R. Binu Ben Jose, N. AmmasaiGounden and V. Rajesh	Electric Power Components and Systems	2015, Vol. 43 (5), 543-555
5.	An improved Power Electronic controller with unity power factor for single-stage grid tied PV systems	Krithiga.S and Ammasai Gounden	International Journal on Arabian Journal of Science and Engineering (Springer)	2014, Vol. 39(10), 7173-7182

6.	Application of a combined particle swarm optimization and perturb and observe method for MPPT in PV systems under partial shading conditions	V. Vigneshkumar , K. Sundareswaran and S. Palani	International Journal on Renewable Energy	2015, Volume 75, 308–317
7.	Dual input autonomous solar photovoltaics powered motor drive system for industrial applications	Kevin Ark Kumar, K. Sundareswaran and P.R. Venkateswaran	Journal of Renewable and Sustainable energy	2015, Vol. 7(1), 1-13
8.	Enhanced Energy Output From a PV System Under Partial Shaded Conditions Through Artificial Bee Colony	Sundareswaran.K, Sankar P, Nayak P, Simon.S. , Palani. S	IEEE transactions on Sustainable Energy, early access publication	2015, Vol. 6(1),
9.	Performance study on a grid connected 20 kW solar photovoltaic installation in an industry in Tiruchirappalli (India)	Kevin Ark Kumar, K. Sundareswaran and P.R. Venkateswaran	Energy for Sustainable Development	DEC 2014 DOI : 10.1016/j.esd.2014.10.002, 23:294-304, 01 ST
10.	Feedback controller Design for a Boost Converter Through Evolutionary Algorithms	K.Sundareswaran, Devi V, S. Sankar, P. Srinivasa Rao Nayak, P. Sankar	IET Power Electronics	2014, Vol. 7(4), 903 – 913,
11.	A control scheme for improving the efficiency of DFIG at low wind speeds with fractional rated converters	Venkata Rama Raju Rudraraju, Chilakapati Nagamani, G. Saravanallango	International Journal of Electrical Power & Energy Systems	2015, Vol. 70, 61–69

12.	Positioning of PV panels for reduction in line losses and mismatch losses in PV array	Srinivasa Rao Potnuru, Dinesh Pattabiraman, SaravanaIlango Ganesan , Nagamani Chilakapati	Elsevier, Renewable Energy	2015, Vol. 78, 264-275.
13.	An Effective Reference Generation Scheme for DFIG With Unbalanced Grid Voltage	M. A. Asha Rani, C. Nagamani, G.SaravanaIlango and A. Karthikeyan	IEEE Transactions on Sustainable Energy	2014, vol.5(3), 1010-1018.
14.	A Novel Self-Consistent Model Based Optimal Filter Design for the Improved Dynamic Performance of 3-phase PLLs for Phase Tracking Under Grid Imperfections - Part 1: Theory and Mathematical Basis	NagamaniChilakapati, Sambhav R Jain, PradhyumnaRavikirthi	J Control AutomElectr System	June 2014
15.	A Novel Self-Consistent Model Based Optimal Filter Design for the Improved Dynamic Performance of 3-phase PLLs for Phase Tracking Under Grid Imperfections - Part 2: Analysis and Verification	NagamaniChilakapati, Sambhav R Jain, PradhyumnaRavikirthi	J Control AutomElectr System	June 2014
16.	Sizing of PMSG-PV hybrid system for battery charging of electric vehicles	M.M. RajanSingaravel, S. Arul Daniel	Frontiers in energy	2015, Vol. 9(1), 68-74
17.	Analysis and Control of wind- driven standalone doubly fed induction generator with reactive support from stator and rotor side	K. Navin Sam, N. Kumaresan , N. AmmasaiGounden and Rajesh Katyal	Wind Engineering	Vol. 39, issue. 1, pp. 97-112, Feb. 2015

18.	Adaptive Fault Identification and Classification Methodology for Smart Power Grids Using Synchronous Phasor Angle Measurements	P. Gopakumar, M. Jaya Bharata Reddy and D. K. Mohanta	IET Generation, Transmission & Distribution	2015, Vol.9(2), 133-145.
19.	Intelligent optimization of renewable resource mixes incorporating the effect of fuel risk, fuel cost and CO2 Emission	Deepak Kumar, D. K. Mohanta and M. Jaya Bharata Reddy	Frontiers in Energy (Springer publication)	2015, Vol.9(1), 91-105
20.	Smart Fault Location for Smart Grid Operation Using Remote Telemetry Unit (RTU) and Computational Intelligence Techniques	M. Jaya Bharata Reddy, D.Venkata Rajesh, P. Gopakumar, and D. K. Mohanta	IEEE Systems Journal	2014, Vol.8(4), 1260-1271
21.	A Multifunctional Real Time Power Quality Monitoring System using Stockwell Transform	M.JayaBharata Reddy, K. Sagar and D.K Mohanta	IET Science Measurement and Technology	2014, Vol.8(4), 155-169
22.	Stability Control of Smart Power Grids with Artificial Intelligence and Wide Area Synchrophasor Measurements	P. Gopakumar, M. Jaya Bharata Reddy and D. K. Mohanta	International Journal on Electric Power Components & Systems (Taylor & Francis Publications)	2014, Vol.42(10), 1095-1106
23.	Cost Benefit analysis on SVC and UPFC in a Dynamic Economic Dispatch Problem	S Sreejith, Sishaj P Simon	International Journal of Energy Sector Management	Volume 8, Issue 3, 2014/8/26, Pages 10-10.

24.	Maximum Power Point Tracking of Photovoltaic Generation System using Artificial Neural Network with Improved Tracking Factor.	K Arthishri, R Balasubramanian, ParkaviKathirvelu, Sishaj P Simon, RengarajanAmirtharajan	Journal of Applied Sciences	2014, vol. 14 (16)
25.	An energy efficient switching scheme with reduced switching transients for a Wind Driven Induction Generator.	C. K. Aravind, G.SaravanaIlango, C. Nagamani	International Journal on Electric Power Components and Systems	2014, Vol. 42(16), 1826 – 1838
26.	A smooth coordination control for a Hybrid Autonomous Power System (HAPS) with Battery Energy Storage (BES)	C.K.Aravind, G.Saravana Ilango and C. Nagamani	Frontiers in energy	2015, Vol. 9(1), 31-42
27.	A Control Scheme with Performance Prediction for a PV fed Water Pumping System	PankajRaghav P, Ramesh K. Govindarajan and G.SaravanaIlango	International Journal On Springer, Frontiers in energy	2014, Vol. 8(4), 480–489

8. PhD AWARDED (April 2014- Tilldate)

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1.	Mrs. S. Krithiga	Dr.N.AmmasaiGounden	National Institute of Technology Trichy, 2015.
2.	Mr. P.Srinivasa Rao Nayak	Dr. K. Sundareswaran	National Institute of Technology Trichy, 2014.
3.	Ms. M.VenkataKirthiga	Dr. S. Arul Daniel	National Institute of

			Technology Trichy, 2014.
4.	Ms. B. Vasumathi	Dr. S. Moorthi	National Institute of Technology Trichy, 2014.

9. Details of Book any authored by faculty: NIL

10. PATENT IF ANY OBTAINED BY FACULTY

S. No.	NAME	TOPIC	DETAILS
1.	Dr. K. Sundareswaran, Kevin Ark Kumar, Venkateswaran	Arc Voltaic Conversion Using Photovoltaic Module in Straight Tub Butt Welding Machine	Application No.: 504/KOL/2014
2.	Kevin Ark Kumar, Sishaj P. Simon, K. Sundareswaran, Srinivasa Rao Nayak, TT Anilkumar, CH Ramjeth Malani and Ratchanniya Samuel	A batteryless solar photovoltaic power generation system to supply electrical power during all seasons to the utilities throughout the day	Application No: 1231/Kol/2014 Date of Filing : 25-11-2014
3.	Sishaj P Simon, K. Sundareswaran, SrinivasaraoNayak, C H Ram Jethmalani	A System with Multiple transmission Loss Co-efficient for Dynamic Economic Generator Dispatch	Filed by National Institute of Technology Date of Filing: 10/07/2014 Application No: 3413/CHE/2014 Journal No:32/2014
4.	Dr.M.P.Selvan and Dr. S. Moorthi	S3 Grid-Tie Inverter	Filed on 09-05-2014, 2313/CHE/2014

5.	Dr.M.P.Selvan and Dr. S. Moorthi	S3 Sine Wave Inverter	Filed on 09-05-2014, 2311/CHE/2014
6.	Dr.M.P.Selvan and Dr. S. Moorthi	Analog Signal Acquisition Card (ASAC) for ADC Channel Enhancement in FPGA Boards to Suit for Power Electronic Applications	Filed on 09-05-2014, 2314/CHE/2014

11. Other Important Points

- **B.Tech (EEE) Programme was accredited for 5 years by National Board of Accreditation (NBA)**

Department : ELECTRONICS AND COMMUNICATION ENGINEERING

1. Notable Achievements

1.1 Faculty Members

S.No	Name	Details of Prizes / Awards	Organization
1.	Dr.M. Bhaskar	Best Paper award in International conference	1 st International conference on Microelectronics, Circuits and Systems (MICRO-2014), July 2014, Kolkata.

1.2 Students

S.No	Name	Details of Prizes / Awards	Organization
1.	S. Anand	OSA Best paper award Optical Society of America Conference (IONS 2014), Kharagpur)	IIT - Kharagpur
2.	T D Rahul Raj	Won second prize in Web Designing	S.B.O.A School and Junior college
3.	T D Rahul Raj	Won first prize in Zonal Competition	Robotics And Embedded System Of USA
4.	Kartheshwar	Won second prize in Spark, a innovative idea contest and got qualified for its final round to be conducted in IIT Bombay	Currents, Symposium NITT
5.	Kartheshwar	Won second prize in Paper presentation	Probe, Symposium, NITT
6.	Jayadevi D ,Saloniyadav ,Abinaya.C	Won second prize in ‘hack a thing’ by TCS during Kshitij(iitkharagpur)	IIT Kharagpur
7.	VineetVinayakPasupulety	Special Mention , Best delegate in the council of INTERPOL	MUN Appulse 2014
8.	VineetVinayakPasupulety	Special Mention , Best paper presentation	Greenville, Pragyam 2015, NITT
9.	VineetVinayakPasupulety	Won third prize for best speaker	Horizons 2014, NITT

2. Conference

2.1 Organised

International

S.No	Coordinator	Programme	Period
1.	Dr. S. Raghavan	Organizing Chair for INDIAN ANTENNA WEEK (Workshop cum Conference on Advanced Antenna technology), Chandigarh.	26-30, May 2014

National

S.No	Coordinator	Programme	Period
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2.2 Papers presented by the Faculty / Students

International

S.no	Author (s)	Details
1	Rajeshkumar, S. Raghavan	A Compact Split Ring Monopole Antenna (SRMA) for WLAN/WAVE/ITU Band Applications, IEEE International Conference on Signal Processing, Informatics Communication and Energy Systems (IEEE SPICES 2015), National Institute of Technology Calicut (NITC), India.
2	Rajeshkumar, S. Raghavan	A CPW Fed Compact UWB Antenna with Modified Ground Plane and Corrugated Fractal Patch for Bandwidth Enhancement, Antennas and Propagation Symposium (APSYM), CUSAT, Dec-2014.
3	S. Imaculate Rosaline, S. Raghavan	Compact dual band antenna for GSM/WiMAX applications, International Conference on Signal Processing, Communications and Networking, Madras Institute of Technology Campus, Anna University, Chrompet, Chennai-600044. March 26-28,2015.
4	S. Imaculate Rosaline, S. Raghavan	Metamaterialinspired patch antenna for WLAN application, International Conference on Signal Processing, Communications and Networking, Madras Institute of Technology Campus, Anna University, Chromepet, Chennai-600044. March 26-28, 2015.
5	C.Sudheer Reddy, S.Raghavan	Rhombic CSRR based dual band antenna for wireless applications, IEEE International Conference on Electronics and Communication Engineering 2015 (ICECS'15), Coimbatore.
6	Gouravkumar Mehta, S.Raghavan	Design of Quadruple Meander slot to microstrip

		patch antenna for RF energy scavenging system, IEEE International Conference on Electronics and Communication Engineering 2015 (ICECS'15).
7	P.Chakrapani, S.Raghavan	Reconfigurable antenna for wireless communication bands, IEEE International Conference on Electronics and Communication Engineering 2015 (ICECS'15).
8	Deepthi P, S Raghavan, Manju Mohan	PSoC based Ultra low frequency meter, IEEE International Conference on Circuit, Power and Computing Technologies, ICCPCT.
9	ParichayKalra, Anand A. Kukde, B.Venkataramani	CORDIC Based BPSK Modulator," (ICCCT-2014), NIT Allahabad, India, 26-28 Sep 2014
10	Anand A. Kukde, S.Kumaravel, B.Venkataramani	A Low Power Folded Cascode Low Noise Amplifier for Multi-Standard Wireless Applications," (ICCCT-2014), 26-28 Sep 2014, NIT Allahabad, India.
11	Phani and B.Malarkodi	Augmentation of spectrum sensing in cognitive radio networks, International conference ICCCI, Jan 8-10 2015
12	Deepak and B.Malarkodi	NRZ encoded pilots for semi blind channel estimation, International conference ICECS, Feb 26-27 2015
13	Nithishkumar V, Koteswara Rao Nalluri and Lakshminarayanan G	Design of Area and Power Efficient Digital FIR Filter Using Modified MAC Unit, 2nd International Conference on Electronics & Communication Systems, Coimbatore, February 2015
14	Kokila Bharti Jaiswal, Nithish Kumar V, PavithraSeshadri and Lakshminarayanan G	Low Power Wallace Tree Multiplier using modified Full Adder, accepted in 3rd International Conference on Signal Processing, Communication and Networking (ICSCN), Chennai, 2015
15	S. Hariharan, K. Chaitanya, P. Muthuchidambaranathan	Analytical Expression of Average Detection Probability for a Linear MMSE Combiner in Cognitive Radio Networks. ICECS 2015, Coimbatore, Feb. 2015.
16	SeshannaKatam, P. Muthuchidambaranathan	Low complexity SLM-PTS Method for Reduction of PAPR in OFDM systems, ICECCS 2014, NIT Surathkal, Dec. 2014
17	SeshannaKatam, P. Muthuchidambaranathan	Modified SLM Method For Reduction of PAPR in OFDM Systems Using Decimal Sequences, International Conference on Signal Processing , Informatics Communication and Energy Systems (SPICES 2015), NIT Calicut, Feb. 2015
18	Jagadeesh V K, ArpitaChoudhary, Muthuchidambaranathan , Francis. M Bui	P Characterization of Channel Impulse Responses for NLOS Underwater Wireless Optical Communications, IEEE Fourth International Conference on Advances in Computing and Communications, Aug. 27th-29th, pp. 77-79, 2014
19	Bhaskar.M, SrinivasGantasala and Venkataramani.B	1 st International conference on Microelectronics, Circuits and Systems (MICRO-2014), July 2014, Kolkata.

20	S. Anand, and D. Sriram Kumar	Graphene based antennas for GHz and THz communications, Indian Institute of Science (IISc), Bangalore, January 28-30, 2015.
21	S. Anand, and D. Sriram Kumar	Fluorine-doped Tin Oxide Based Optically Transparent Reconfigurable Terahertz patch Antenna, International OSA Network of Students (IONS – Asia 6 Kharagpur), Indian Institute of Technology (IIT) - Kharagpur, December 10–12, 2014, Optical Society of America (OSA) (Best paper award).
22	S. Anand, and D. Sriram Kumar	Performance Analysis of MWCNT Loaded Fluorine-doped Tin Oxide based Optically Transparent Terahertz Patch Antenna, 6th IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE) - 2014, Malaysia, December 08-10, 2014, IEEE Proceedings.
23	M. S. Darak, S. Anand, and D. Sriram Kumar	Bandwidth Enhancement of a Patch Antenna by Loading Complementary K-shaped Artificial Magnetic Conductors in Ground Plane, 6th IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE) - 2014, Malaysia, December 08-10, 2014, IEEE Proceedings.
24	S. Anand, S. Gobalakrishnan, and D. Sriram Kumar	Impedance Performance Analysis of Graphene Based Flexible antenna for Conformal Load Bearing Applications, 2nd International Conference on Emerging Electronics (ICEE), Indian Institute of Science (IISc), Bangalore, December 03-06, 2014, IEEE Proceedings.
25	Sudheer Reddy, P and P.Palanisamy	Multitaper Spectrum Sensing using Sinusoidal Tapers with overlapping time series, Proc. of International Conference on Control, Instrumentation, Communication and Computational Technologies, July 2014.
26	K. G. Digish, R.Thilagavathy	ASIC Implementation of Physical Downlink Shared Channel for LTE, International Conference on Control, Instrumentation, Communication and Computational Technologies, ICCICCT 2014, Kumaracoil, 10-11 July 2014
27	Sandeep K, R.Thilagavathy	Performance Comparison of Physical Downlink Control Channel (PDCCH) for LTE employing QPSK and 16QAM as Modulation Schemes, International Conference on Control, Instrumentation, Communication and Computational Technologies, ICCICCT 2014, Kumaracoil, 10-11 July 2014
28	R Rahul, R.Thilagavathy	A Low Phase Noise CMOS Voltage- Controlled Differential Ring Oscillator, International Conference on Control, Instrumentation, Communication and Computational Technologies, ICCICCT 2014, Kumaracoil, 10-11

		July 2014
29	Kunkunuru Srikanth Babu, R.Thilagavathy	Rapid Estimation of Circuit Performance, International Conference on Computing, Communication and Sensor Network, CCSN2014, Puri, Odisha, 12-14 December 2014
30	D T Teja, Pamoti Venkatesh, S Hemanth Kumar, N.Gunavathi	Compact CPW-fed Antenna for Mobile Handset with metal strip for reduced SAR, IEEE International Conference on Electronics and Communication System (ICECS -2015), Coimbatore, Tamilnadu. February, 2015
31	D T Teja, Pamoti Venkatesh, S Hemanth Kumar, N.Gunavathi	A Compact CPW-Fed circular Slot Antenna for WLAN and WiMAX applications, IEEE International Conference on Electronics and Communication System (ICECS -2015), Coimbatore, Tamilnadu. February, 2015
32	Rebekka B, Vinay Kumar B, Malarkodi B	Radio Resource Allocation with Energy efficiency- Throughput Balancing for LTE Downlink, ICECS 15, 26-27 February 2015, Coimbatore
33	V. Sudha, Bhukya Anilkumar, D.Sriramkumar	Low-Complexity Modified SLM method for PAPR Reduction in OFDM systems, IEEE International conference on Electronics and Communication Systems (ICECS -2015). Coimbatore.
34	S.Deivalakshmi, K.Chaitanya and P.Palanisamy	Detection of Table Structure and Content Extraction From Scanned Documents, International Conference on Communication and Signal Processing, April 3-5, 2014, India
35	Ayesha Khalid, Prasanna Ravi, Anupam Chattopadhyay and Goutam Paul	One Word/Cycle HC-128 Accelerator Design via State-Splitting Optimization, INDOCRYPT 2014, 15th international conference on cryptology organized by SAG, DRDO, New Delhi (14th - 17th December 2014)

National

Author (s)	Details
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3. Workshops / Seminars

3.1 Organized

Coordinator	Title	Period
P.Palanisamy and R.Murugesan	Economics of Information and Internet Economics-Impact of Communication Technology on Economics	8.1.2015 to 10.1.2015
D. Sriram Kumar	Special talk on "Advanced antenna configurations for future technologies" by P. Hanumantha Rao, Scientist, SAMEER – Centre for electromagnetics, Chennai.	February 18, 2015.

D. Sriram Kumar	Special talk on “Photonic Integrated circuits” by T. Srinivas, Associate Professor, Dept. of ECE, Indian Institute of Science (IISc), Bangalore.	July 24, 2014.
G.Lakshminarayanan	UKIERI Sponsored Workshop on Advances in Cognitive Radio and its Hardware Implementation	Dec. 23 & 24, 2014

3.2 Attended

Faculty	Details
R.Thilagavathy	Attended two day workshop on “Big Data Analytics organized by Department of Computer Applications and Department of Computer Science & Engineering , NITT on 12 th & 13 th December, 2014
R.Thilagavathy	Attended three day workshop on Real Time Signal Acquisition & Processing Using Open Source Software SCILAB organized by the Department of Instrumentation and Control Engineering , NITT on 15 th to 17 th December, 2014

Students	Details
AnanyaParameswaran	Attended one day workshop on CST software conducted on 1st November 2014 at IIST (Indian Institute of Space Science and Technology) Valiamala.
S. Anand	INUP workshop on Nanofabrication Technologies, Indian Institute of Science (IISc), Bangalore, January 28-30, 2015.
S. Anand	One Day workshop Terahertz Technology and its Applications, IIT Kharagpur, August 01, 2014.
MayurSudeshDarak	One Day workshop Terahertz Technology and its Applications, IIT Kharagpur, August 01, 2014.
T D Rahul Raj	Probe Workshop – IoT by Technophilia
T D Rahul Raj	Spider Workshop – By NITT
T D Rahul Raj	Guest lecture by PAUL HALPERN about Robotics, Physics, Life, and the Universe; Countdown to Apocalypse; The Quest for Alien Planets etc.,
VineetVinayakPasupulety	MATLAB & Simulink Training Workshop, 2014 at NITK Surathkal
VineetVinayakPasupulety	Image Processing Workshop, Currents 2015
VineetVinayakPasupulety	Introduction to Labview and data acquisition, Probe 2015
VineetVinayakPasupulety	Introduction to Robotics, Genesis 2014
VineetVinayakPasupulety	Introduction to Linux and Python, GLUG-T 2014
VineetVinayakPasupulety	Introduction to the Raspberry Pi and working with Python,

	2014
Vineet Vinayak Pasupulety	Introduction to Monte Carlo Simulations and its applications, PESIT Bangalore, 2014
Vineet Vinayak Pasupulety	Aeromodelling for beginners workshop, 2014
Vineet Vinayak Pasupulety	Workshop on personality development and leadership, VOICE Pune, 2014
Vineet Vinayak Pasupulety	In-Plant Training at Bajaj Automobiles Private Limited, Chakan, Pune, 2014
K. Chaitanya	Presented a real time demonstration of Multi Band Spectrum Sensing with WARP V3 Kit in Workshop on Advances in Cognitive Radio and its Hardware Implementation, 23 rd and 24 th -Dec-2014 organized by Heriot Watt University, Edinburgh, UK and NITT.

4. Invited / Guest Lectures Delivered by the Faculty

Faculty	Topic	Programme	Place & Date
Dr.S. Raghavan	Microwave Education	IMaRC 2014, IEEE International Conference	Bangalore, 14-16 December.
Dr.S. Raghavan	Microwave in Health	Telemedicon'14	AIIMS, Bhopal, 7th – 9th November 2014
Dr.P.MuthuChidambara Nathan	Electromagnetic Concepts and applications	EEE Association	MOUNT ZION College of Engineering & Technology, Pudukkottai 21.08.2014
Dr.P.MuthuChidambara Nathan	Concepts and applications of Cellular Technology	ECE department	Saranathan College of Engineering, Trichy 28 .01.2015

5. Sponsored Projects undertaken.

Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
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6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S. No.	Equipment	Amount (Rs. In Lakhs)
1.	High Frequency System simulation software (ADS)	14.63 Lakhs
2.	IE3D Software Purchase	≈5 Lakhs
3.	CST Microwave Studio	≈5 Lakhs
4.	S-Band Microwave Components	19 Lakhs
5.	WARP kit- 2 Nos. for VLSI lab	9 lakh

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1	SRR based Polygon Ring Penta-band Fractal Antenna for GSM/WLAN/WiMAX/IT U band Applications	V.Rajeshkumar and S. Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Accepted
2	Bandwidth enhanced compact fractal antenna for UWB applications with 5–6 GHz band rejection	V.Rajeshkumar and S. Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Vol. 57, No. 3, March 2014
3	A Compact dual band antennas with an ENG SRR cover for SAR Reduction	S. Imaculate Rosaline, S. Raghavan	Microwave and Optical Technology Letters ,Wiley Publications,	Vol. 57, No. 3, March 2014
4	A Compact Metamaterial Inspired Triple band Antenna for Reconfigurable WLAN/WiMAX Applications	V.Rajeshkumar and S. Raghavan	AEUE - International Journal of Electronics and Communications, Elsevier,2014.	Vol. 69, No.1, January 2015
5	Real-time measurement of meteorological parameters for estimating low-altitude atmospheric turbulence strength (Cn2)	ArockiaBazil Raj, ArputhaVijayaSelvi and S.Raghavan,	IET Science, Measurement & Technology, IET	Vol. 8, No. 6, November 2014.
6	Histogram Variance Controlled Bleeding Detectors for Wireless Capsule Endoscopic Images	M. Ramaraj and S. Raghavan	Journal of Medical Imaging and Health Informatics, American Scientific Publishers,	Vol.4, No.4, August 2014.
7	Trapezoidal ring quad-band fractal antenna for WLAN/WiMAX applications	V.Rajeshkumar and S. Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Vol. 56, No.11, pp. 2545-2548, November 2014.
8	A Current Steering Positive Feedback Improved Recycling Folded Cascode OTA	S. Kumaravel and B. Venkataramani	WASET, International Journal of Electrical, Electronic Science and Engineering	Vol:8 No:3, pp 544-551, April 2014
9	Design and Verification of	K.Swaminathan,	Elsevier Journal of	Vol. 40, Issue

	an Efficient WISHBONE-based Network Interface for Network on Chip	G.Lakshminarayana, Seok-Bum Ko	Computers & Electrical Engineering	6, August 2014, Pages 1838–1857
10	Low Power and Area Efficient Carry Select Adder	Nithish Kumar V, PaniPrithvi Raj, Lakshminarayana, G and MathiniSellathurai	Journal of Low Power Electronics	Vol. 10, No. 4, December 2014, pp. 593-601
11	Multiuser MIMO Transceiver design for Uplink and Downlink with Imperfect CSI	M. Raja and P.Muthuchidambaranathan	Wireless Personal Communications, Springer	Vol. 75, No.2, pp 1-20, March 2014
12	Cooperative MIMO Based Reporting System for IEEE 802.22 Standard Over Fading Channels	S. Hariharan, P.Muthuchidambaranathan	Springer-Wireless Personal Communications	Vol.80, No. 1 pp. 1-12, 2014
13	Analysis of Linear Equalizers for Cooperative Multi-User MIMO Based Reporting System	S. Hariharan, P.Muthuchidambaranathan	WASET-International Journal of Electrical, Robotics, Electronics and Communications Engineering	Vol. 8, No. 5, pp. 811 – 815, 2014
14	Centralized Cooperative Spectrum Sensing with MIMO in the reporting Network over $\kappa - \mu$ fading channel	S. Hariharan, K. Chaitanya, P.Muthuchidambaranathan	WASET -International Journal of Electrical, Computer, Electronics and Communication Engineering	Vol. 8, No.11, pp. 1665 – 1670, 2014
15	Dynamic Self controllable surfing for differential on-chip wave pipeline serial interconnect	Bhaskar. M, SrinivasGantasala, Venkataramani. B	WSEAS Transactions on Circuits and Systems,	Vol. 13, 2014, pp. 117-128
16	Differential voltage mode transceiver for on-chip global interconnects	M.Bhaskar and B.Venkataramani	Journal of Low Power Electronics, American Scientific Publishers	Vol. 10, No 2, June 2014.
17	Bidirectional differential on-chip wave-pipelined serial interconnect with surfing	Bhaskar.M, SrinivasGantasala and Venkataramani.B	Microsystem Technologies, Springer 2015	DOI- 10.1007/s00542-015-2463-1
18	Analysis on Effect of Low Dielectric Permittivity on Indium-doped Tin Oxide based Optically Transparent Terahertz Patch Antenna	S. Anand, MS Darak, and D. Sriram Kumar	Physica E: Low-dimensional Systems and Nanostructures, Elsevier	In press
19	Various modulation techniques for FSO systems	K. Prabu, D. Sriram Kumar	Wireless Personal Communications, Springer, 2014	Accepted
20	Performance analysis of FSO systems under strong atmospheric turbulence	K. Prabu, D. Sriram Kumar, T. Srinivas	Optik - International Journal for Light and Electron Optics,	Vol. 125, pp. 5573-5581, 2014.

	conditions using various modulation schemes,		Elsevier	
21	Performance Analysis and Comparison of ITO and FTO Based Optically Transparent Terahertz U-shaped Patch Antennas	S. Anand, and D. Sriram Kumar	Physica E: Low-dimensional Systems and Nanostructures, Elsevier	66, 52-58, 2015.
22	Analysis of graphene based optically transparent patch antenna for terahertz communications,	S. Anand, M.S. Darak, and D. Sriram Kumar	Physica E – Low dimensional systems and nanostructures, Elsevier	66, 67-73, 2015.
23	Investigations on Titanium-doped Indium Oxide based Optically Transparent Terahertz U-shaped Patch Antenna	S. Anand, M.S.Darak, and D. Sriram Kumar	Journal of Computational and Theoretical Nanoscience, ASP	12, 660-664, 2015.
24	Analysis of Titanium-doped Indium Oxide Based Optically Transparent Patch Antenna for Terahertz Communications,	S. Anand, M.S.Darak, D. Sriram Kumar, and M. Chavali	Journal of Computational and Theoretical Nanoscience, ASP	12, 341-344, 2015.
25	Graphenenanoribbon based terahertz antenna on polyimide substrate,	S. Anand, D. Sriram Kumar, R J Wu, and M. Chavali	Optik – International journal for light and electron optics, Elsevier	125, 5546–5549, 2014.
26	Analysis and design of optically transparent antenna on photonic band gap structures	S. Anand, D. Sriram Kumar, R J Wu, and M. Chavali	Optik – International journal for light and electron optics, Elsevier	125, 2835-2839, 2014.
27	Iterative Computed Tomography Reconstruction from Sparse-View Data	Varun P. Gopi, P. Palanisamy, Khan A. Wahid, Paul Babyn, David Cooper	Journal of Medical Imaging and Health Informatics	Accepted for Publication
28	Multiple Regularization based on MRI Reconstruction	Varun P. Gopi, P. Palanisamy, Paul Babyn and Khan A. Wahid,	Elsevier-Signal processing	Vol.103,2014 , pp. 103-113
29	MR Image Reconstruction Based on Framelets and nonlocal total variation using Split Bregman method	VarunP.Gopi, P.Palanisamy, Khan A.Wahid and Paul Baby	Journal of Computer assisted radiology and surgery	Vol.9, No. 3, 2014, pp.459-472
30	Neural network based class-conditional probabilitydensity function using kernel trick for supervised classifier	E.S.Gopi and P.Palanisamy	Elsevier journal on Neuro computing	Available online 6th December 2014
31	Maximizing gaussianity	E.S.Gopi and	Elsevier journal	144, 329-

	using kurtosis measurement in the kernel space for kernel linear discriminant analysis.	P.Palanisamy	on Neuro computing	337, 2014
32	Estimation of resonant frequency and bandwidth of compact unilateral coplanar waveguide-fed flag shaped monopole antennas using artificial neural network	N. Gunavathi and D. Sriramkumar	Microwave and Optical Technology Letters	Vol. 57, Issue 2, pages 337-342, February 2015
33	Priority-based quality of service guaranteed radio resource allocation in long term evolution network	B.Rebekka, S.Sudheep, B.Malarkodi	International Journal of Information and Communication Technology, Inderscience publishers	Accepted
34	An Optimal and Priority Based Rate Guaranteed Radio Resource Allocation Scheme for LTE Downlink	B.Rebekka, S.Sudheep, B.Malarkodi	Wireless Personal Communications, Springer	Accepted
35	Meandered CPW-fed Hexagonal Split ring resonator monopole antenna for 5.8 GHz RFID applications	R. Pandeewari and S.Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Vol. 57, No. 3, March 2014
36	Microstrip Antenna with Complementary Split Ring Resonator Loaded Ground Plane for Gain Enhancement	R. Pandeewari and S.Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Vol. 57, No. 2, Feb 2015
37	Broadband monopole antenna with split ring resonator loaded substrate for good impedance matching	R. Pandeewari and S.Raghavan	Microwave and Optical Technology Letters , Wiley Publications	Vol. 56, No.10, October 2014.
38	Peak-to-Average Power Ratio Reduction of OFDM Signals by applying Low Complexity SLM and Clipping Hybrid Scheme.	V. Sudha and D. Sriram Kumar	International Journal on Electrical Engineering and Informatics.	June 2014 Vol. 6, No. 2, pp. 394-403

National Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
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7.2 Students

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	QR Code Based Security System To Prevent Unauthorized Access	Kartheshwar	International Journal of Scientific and Engineering Research	

National Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
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8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1.	M. Bhaskar.	Dr. B.Venkataramani	NITT
2.	R. K. Jeyachitra	Dr. J.Martin Leo Manickam	AnnaUniversity, Chennai
3.	E.S.Gopi	Dr.P.PALANISAMY	NITT
4.	Varun P Gopi	Dr.P.PALANISAMY	NITT
5.	M. Levy	Dr. D. Sriram Kumar	NITT
6.	K.Swaminathan	Dr.G.Lakshminarayanan	NITT

9. Details of Book any authored by faculty.

1. **E.S.Gopi**, Digital speech processing using Matlab(2014) , ISBN 978-81-322-1676-,Springer publications
2. **E.S.Gopi and P.Palanisamy** (2014). Scatter matrix versus the proposed distancematrix on linear discriminant analysis for image pattern recognition Advanced computing, Networking and Informatics-volume 1, Springer series on Smart innovations, Systems and Technologies (proceedings of the second internationalconference on Advanced Computing, Networking and Informatics)

10. Patent if any obtained by faculty

NIL

11. Other Important Points

X Antony Xavier Glittas visited Heriot Watt University, Edinburgh, United Kingdom for three months from Oct-2014 to Dec 2014 under UKIERI project

12. Summary

S.No	Details	Total nos			
9.	International Journals	38			
10.	National journals	0			
11.	International conference publications	36			
12.	National conference publications	0			
13.	Sponsored Project	No's:	0	Amount:	---
14.	No of Ph.D produced	6			
15.	No of Patents obtained	0			
16.	No of books published	2			

DEPARTMENT OF HUMANITIES

1. Notable Achievements (Prizes/Awards): Nil

2. CONFERENCE

2.1 Organised

International: Nil.

National

S. No	Coordinator	Programme	Period
1.	Dr. Sathyaraj V.	Glocal Trends and Issues in English Language Teaching: Challenges and Opportunities.	January 24-26, 2014.

2.2 Papers Presented by the Faculty/ Students

International

S. No.	Author(s)	Details
1.	Dr. R. Joseph Ponniah, J. Mary Jennifer.	“Pleasure Reading: A Cure for Readicide” in International Conference on Trends and Innovations in Language Teaching organized by the IEEE and Sathyabama University (November 14-15, 2014)
2.	Dr. R. Joseph Ponniah, J. Priya.	“Acquired Knowledge of Grammar and its Role in Output Production: An Investigation with Adult ESL Students” in International Conference on Trends and Innovations in Language Teaching organized by the IEEE and Sathyabama University (November 14 -15, 2014)
3.	Dr. R. Joseph Ponniah, M. K. Senthil Babu.	“The More We Read, the Better is our Language: A Comparison Between Avid Readers and Moderate Readers” in International Conference on Trends and Innovations in Language Teaching organized by the IEEE and Sathyabama University (November 14-15, 2014)

National

S. No.	Author(s)	Details
1.	Dr. Sathyaraj V.	"Reproduction in Crisis: Infertility in Tamil Cinema" in UGC sponsored National Conference on Film, Film Studies and Ideology, Sree Kerala Varma College, Thrissur, Kerala (November 12-14, 2014).
2.	Dr. Sathyaraj V.	"Testing Times: The Q-Factor and English Language Testing." English for Specific Purposes: A Reappraisal, Department of English, Anna University, Chennai (March 7-8, 2014).

3. WORKSHOPS/ SEMINARS

3.1 Organized

S. No.	Coordinator(s)	Title	Period
1.	Dr. R. Murugesan (with Dr. Sishaj P.Simon and Prof. K. Premkumar)	Communication and Soft skills for Engineers and Architects (NIT Trichy)	June 16-18, 2014
2.	Dr. R. Murugesan	Short term course in Data Analysis for Research in Social Sciences and Management (NIT Trichy)	January 27-31, 2015
3.	Dr. R. Murugesan (with Dr.P.Palanisamy)	Economics of Information and Internet Economics: Impact of Communication Technology on Economics (NIT Trichy)	January 8- 10, 2015
4.	Dr. V. Vinod Balakrishnan	Creative Writing as Therapy, Hewlett-Packard Asia Pacific Office, Singapore	August 13-17, 2014
5.	Dr. V. Vinod Balakrishnan	“Writer’s Workshop” under the aegis of the International Conference on Creative Writing, Sherubtse College, Kanglung, Bhutan (invited by the Royal University of Bhutan)	September 25- 27, 2014.
6.	Dr. S. Mekala (with N.Thamaraiselvan, B.Senthilarasu)	Imparting soft skills for success and Life Skills for Survival at the Workplace, NIT Trichy.	November 24-28, 2014

3.2. Attended: Nil

4. INVITED / GUEST LECTURES DELIVERED BY THE FACULTY

S.No.	Faculty	Topic	Programme	Venue/Period
1	Dr. R. Joseph Ponniah	First Language pleasure reading habit promotes Second Language Reading (Invited)	TILT’ 2014 Conference by AIEEE	Sathyabama University, Chennai. November 14-15, 2014
2.	Dr. V. Vinod Balakrishnan	Indian English is Indian and it is Indian: Crafting the Dialect for our Time	3 rd Dr. Jane Mangalam Stephen Endowment Lecture in Linguistics.	Lady Doak College, Madurai, February 26, 2015.
3.	Dr. S. Mekala	Transcendental Humanism in the select novels of Graham Greene	Viva-Voce Examination of Ms.G.Keerthi	Periyar University, Salem. September 4, 2014.

5. Sponsored Projects undertaken: Nil.

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.): Nil.**7. RESEARCH PAPERS PUBLISHED IN NATIONAL / INTERNATIONAL JOURNALS**

S. No	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Pleasure Reading and the acquisition of second language by adult ESL students	R. Joseph Ponniah and J. Priya	International Journal of Foreign Language Teaching	January 2014, Vol. 8.1, 16-22
2.	Impact of Sociolinguistic Factors on Second Language Acquisition / Learning of a set of Regional Medium Students	M.P. Shabitha and S. Mekala	Language Forum - Special Issue on Sociolinguistics. New Delhi: Bahri Publications.	January - December 2014, Vol.40.1-2, 139 - 152.
3.	A study on improving Listening Proficiency of Students Majoring in English Literature	C.Shanmugapriya and S. Mekala	IJELLS	October 2014, Vol.3.3, 257-261.
4.	The Impact of Negative Transfer of L1 Grammar on L2 Writing	M. Ponmani and S. Mekala	Conference Proceedings on 'Enlightening the people about the Richness of English Language and Literature'	August 2014, 187-200.
5.	A Case Study in Bilingualism.	C.Shanmugapriya and S. Mekala	Conference Proceedings on 'Enlightening the people about the Richness of English Language and Literature'	August 2014, 180-186
6.	AIDS in Cultural Bodies: Textualizing the Virus in Indian Writing in English.	Dr. Sathyaraj V.	<i>Recent Trends in Indian English Literature. [Book Chapter]</i>	2014. 219 - 223. [ISBN: 978-93-83809-79-0]

8. PhD AWARDED**Faculty**

S. No.	Name/Designation	Thesis Title	University/Institute
1.	Dr. G. Nagasubramanian Associate Professor	<i>Psychological Aspects of Entrepreneurship Development</i>	Bharathidasan University, Tiruchirappalli

Students

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1.	M.P. Shabitha (Viva held on 27 th March 2015)	Dr. S. Mekala	NIT Trichy

9. Details of Book(s) authored by faculty: Nil.

10. Patent if any obtained by faculty: Nil.

11. Other Notable Achievement

Mr. R. Gururaj, Associate Professor, was part of the faculty team led by Director, NIT Trichy, which visited the following UK universities for project discussion: Brunel, Cambridge, Aston, Birmingham, Reading Universities and Oxbridge College & TWI.

12. SUMMARY

S. No.	Details	Total no
1.	Prizes/Awards	0
2.	Conference Organized	1
3.	Papers Presented	5
4.	Workshops organized	6
5.	Invited lectures	3
6.	Journals/Conference Proceedings	6
7.	PhD awarded	1
8.	PhD submitted	1

Department : INSTRUMENTATION AND CONTROL ENGINEERING**1. Notable Achievements****1.1 Students**

S.No	Name	Details of Prizes / Awards
1.	Ms. Josephine Selvarani Ruth Ph.D. scholar	Participation in the Meeting of National Innovation Clubs during the Festival of Innovations at President's Estate, Rashtrapati Bhavan on 10 March, 2015.
2	Prajval Kumar	<ul style="list-style-type: none"> ➤ Presented Project in Finals of International Conference on Advanced Computing and Communications 2014, ARM design contest. ➤ Quarter Finalists in Texas Instruments Design Contest. ➤ Represented Cricket Team at IIT KANPUR UDGOSH in 2014 and inter-NIT competition 2014.
3	Hari Haran	<ul style="list-style-type: none"> ➤ Winner of WIPRO EARTHIAN 2015. ➤ Finalist at ADCOM 2015 DESIGN CONTEST. ➤ Presented project in finals of international conference on Advanced computing and communications 2014, ARM design contest.
4	Shreyas Prakash	<ul style="list-style-type: none"> ➤ Presented project in finals of international conference on advanced computing and communications 2014, ARM design contest. ➤ Quarter Finalists in Texas Instruments Design Contest. ➤ Secured second place in Fidelity-Innovation Challenge.
5	Anisha Mohan	<ul style="list-style-type: none"> ➤ REVELS 15'(Manipal Open Tournament)-2nd place in 4x100m relay,3rd place in 100m. ➤ SPORTS FETE 2015(INTER NIT)-1st place 100m,1st place in 4x400m relay ➤ UDGOSH 2014(IIT KANPUR)-3rd place in 100m,2nd place in 4x100m relay
6	Sumangal Vinjamuri	<ul style="list-style-type: none"> ➤ Proficiency Certificate from NATIONAL STOCK EXCHANGE INDIA -"Investment Analyst Pro" ➤ NSE Certified Market Professional-Level 1

7	Renuka	<ul style="list-style-type: none"> ➤ ‘SPORTS FETE 2015(Inter NIT)-3rd place in 200m,2nd place in 100m,2nd place in 4x100m relay,1st place in throw ball.
8	Praveen	<p>‘SPORTS FETE 2015(Inter NIT Competition)-</p> <ul style="list-style-type: none"> ➤ 1st place in 100m,2nd place in 200m,1st place in 4x100m relay,2nd place in triple jump ➤ REVELS 15’(Manipal Open Tournament)-1st place in long jump,2nd place in 4x100m relay.
9	A Pradeep	Won 1 st place in NIRMAAN(project demonstration)
10	A Lokeshkumar	Won 1 st place in NIRMAAN(project demonstration)
11	Ria Narayan	<ul style="list-style-type: none"> ➤ Served as Academic Mentor for 5 first year students in the sophomore year <p style="text-align: center;"><u>Cultural Activities:</u></p> <ul style="list-style-type: none"> ➤ Runners-up in Pond’s Femina Miss India Campus Princess pageant 2014. ➤ Participated in MUN’14(Model United Session) <p style="text-align: center;"><u>Sports Activities:</u></p> <ul style="list-style-type: none"> ➤ 1st place in All-India INTER-NIT Sports Meet in girls Badminton 2014. ➤ Gold Medalist in Girls Badminton All-India Sastra Sports Tournament –Colosseum-2014. ➤ Winner in Badminton inter-department Sports Fete 2015. ➤ Winner in Throw ball inter-department Sports Fete 2015. ➤ Vice captain of the College Badminton Team currently. ➤ Active Member of the National Sports Organization (NSO). Aug 2013-Present ➤ Member of the Organizing Committee of the ALL INDIA INTER-NIT SPORTS MEET 2014

12	Sushma Sivampett	<p><u>SPORTS FETE 2015</u></p> <ul style="list-style-type: none"> ➤ 1st place in 1500m race ➤ 1st place in 4X400m relay ➤ 2nd place in 800m race ➤ 2nd place in 4x100m relay ➤ Captain for Kho –Kho team <p><u>UDGOSH IIT KANPUR</u></p> <ul style="list-style-type: none"> ➤ 1ST Place in kho-kho ➤ 2nd place for best cadet in NCC annual camp ➤ Participated in marathon at Bangalore conducted by TCS in 2014 <p><u>NIT FETE 2014</u></p> <ul style="list-style-type: none"> ➤ 2nd place in 800mm meter race ➤ 3rd place in long jump & High jump <p>NCC Team won 2nd place in annual camp</p>
13	<ul style="list-style-type: none"> ➤ Rishabh Rajasekar ➤ RK Arvind ➤ Akshay P Roy ➤ Rohit B S ➤ Prajval Kumar 	<p>Achievements in Cricket</p> <ul style="list-style-type: none"> ➤ Semi-finalist in Manipal Open Tournament (Revels) in the year 2014. ➤ Semi-finalist in Inter-NIT cricket Tournament in the year 2014. ➤ Overall First in Cricket SPORTS FETE' 15.
14	<ul style="list-style-type: none"> ➤ PraveenPrabhakar ➤ Anisha Mohan ➤ Jia Chakma ➤ Renuka ➤ Sushma Shivampet 	<p>Overall First in Athletics SPORTS FETE' 15</p> <ul style="list-style-type: none"> ➤ Overall Third in IIT-Kanpur (Udgosh 2014) ➤ Secured Gold and Silver in events – Long jump, Relay , 100m , 200m in Manipal Open tournament(Revels)
15	<ul style="list-style-type: none"> ➤ Priyanka Swami 	<p>Volley Ball:</p>

	➤ Meghana G	➤ Part of College Volley Ball Team ➤ □ Quarter Finalist in IIT-Kanpur (Udgosh 2014)
16	➤ Ishan Bodele ➤ Ria Narayan ➤ Ram Chander	Badminton: ➤ Gold Medal in Sports FETE'. ➤ Finalist in IIT-Kanpur(Udgosh 2014)
17	➤ N.Ramakrishnan	FootBall: ➤ Gold Medal in IIT-Kanpur(Udgosh 2014) ➤ Bronze Medal in Inter-NIT (MNIT-Allahabad)

Internships/Summer Projects

S.No	Name	Details
1.	Atul Acharya III rd year	Qualcomm.
2.	Tejas Salunkhe III rd year	Texas Instruments, India
3.	Shreyas Prakash III rd year	Mitacs Globalink Research Internships, Canada 2015 Globalink Research Internship Program, where you will conduct a summer research internship entitled "Implementing Solar PV Charging Stations for Electric Vehicles" with Jose Etcheverry at York University – Toronto, Ontario, Canada. The Globalink Research Internship is 12 weeks in duration and will require that you work a total of 40 hours per week. Through this award, he will receive housing, medical insurance, visa permit, travel costs and a stipend of \$200 per week as a living allowance.
4.	Sumangal Vinjamuri	CBL International Cambridge Summer Institute at Magdalene college 2014
5	Kadri Manasa III rd year	Mitacs Globalink Research Internships, Canada, DAAD, German Summer Fellowship

GATE Examination Performance by ICED

S.No.	Name	Roll No	Gate Rank	GATE Score
1.	Rahul Srivastava	110111064	24	825
2.	Satya Ravi Teja	110111077	238	662
3.	A Sai Srikar	110111009	293	641
4.	K V Aditya Prakash	110111035	543	552
5.	Ravi Kiran V	110111067	1150	493
6.	D Sai Rameshwar	110111023	1238	484
7.	Pushpak	110111058	1422	424
8.	Kumar Samar Vijay Singh	110111041	1527	416

2. Conference**2.2 Papers presented by the Faculty / Students****International**

S. No.	Author (s)	Details
1	D. Josephine Selvarani Ruth, K. Dhanalakshmi and S. SunjaiNakshatharan	Intelligent driving assistance system using shape memory alloy as variable impedance actuator, Proceedings of the 22nd International Symposium on Smart Structures and Materials & Non destructive Evaluation and Health Monitoring SPIE - 15, San Diego, California, 8-12 March 2015
2	S. Krishna Chaitanya and K. Dhanalakshmi	Design and Investigation of a Linear Smart Actuator, Proceedings of the 22nd International Symposium on Smart Structures and Materials & Nondestructive Evaluation and Health Monitoring SPIE - 15, San Diego, California, 8-12 March 2015.
3	Pankaj Shivhare, G. Uma , Y. Sujana, M. Umopathy,	“Sensitivity Improvement of a Silicon Nitride Beam Resonant Pressure Sensor”, International Conference on MEMS and Sensors (ICMEMSS 2014) to be held at Indian Institute of Technology Madras, Chennai, December 18-20, 2014. (Accepted) .

4	Pandiyan.P, G. Uma , M. Umopathy, Y. Sujan,	“Design and Simulation of Chevron Type MEMS Digital to Analog Converters”, International Conference on MEMS and Sensors (ICMEMSS 2014) to be held at Indian Institute of Technology Madras, Chennai, December 18-20, 2014. (Accepted) .
5	Pandiyan. P, G. Uma , M. Umopathy, K. Suresh,	“Sensitivity Improvement of Resonant Sensor With PID Controller”, Proceedings of the 2014 IEEE Students Technology Symposium (IEEE TechSym 2014) held at Indian Institute of Technology Kharagpur, Kharagpur, 2014, pp 170-175.
6	Pankaj Shivhare, G. Uma , M. Umopathy,	“A Micro Gripper for High Force Application Using In-Plane Chevron Electrothermal Actuator”, Proceedings of International Conference on Microelectronics, Circuits & Systems (Micro-2014), July 11-13, 2014.
7	P. Pandiyan, G. Uma , M. Umopathy,	“Design and simulation of 3-bit MEMS electro thermal compliant actuator based analog to digital converter”, Proceedings of 7 th International Conference on smart materials, structures and systems (ISSS-2014), Bangalore, July 8-11, 2014.
8	S. Sathiya, B. Vasuki, Y Sujan	“Flowrate Enhancement for a resonance based liquid pump with 2-DOF resonators” Proceedings of 7 th International Conference on smart materials, structures and systems (ISSS-2014), Bangalore, July 8-11, 2014.
9	B Indhu, N.Sivakumaran , VPS Naidu, A Srikanth	Miniature Aerial System Simulator: A Laboratory Set Up, Id.69, CCIP 15,3-5 March 2015,pp.11.
10	Chinmay Sahu, T.K.Radhakrishnan, N.Sivakumaran	Real time closed loop data based estimation and explicit model based control of an air conditioning system implemented in hardware in loop scheme, International conference on Robotics, Automation, Control and Embedded systems 2015, Hindustan University Chennai (2015).
11	S.Sankaranarayanan, N.Sivakumaran , G.Swaminathan	Optimal Network Design for Flow Process, International conference on Green Technology for Environmental Pollution Prevention and Control 2014, NIT Tiruchirappalli, pp.239.
12	V Kirubakaran, TK Radhakrishnan, N Sivakumaran	Insulin on Board Based Aversion of Hypoglycemia in Type I Diabetics Using Multi Parametric Model Predictive Control, International Conference on Advances in Chemical Engineering and Technology, Elsevier India,150-153, 2014
13	Chinmay Sahu, V.Kirubakaran, T.K. Radhakrishnan, N. Sivakumaran ,	Closed loop building data based estimation and energy efficient model predictive control of Heating Ventilation and air conditioning system, International conference on Green Technology for Environmental Pollution Prevention and Control 2014, NIT Tiruchirappalli, pp.239.
14	E.Sathish, N.Sivakumaran , Raji Sundarajan	Classification of intracranial EEG signals using adaptive neuro fuzzy inference system, ESA, Annual Meeting on Electrostatics, University of Notre Dame, USA, June 17-19, 2014
15	Abhinav Srivastava and K.Srinivasan	Clock-less positioning of sampling pulse for extraction of critical information adding advantage on fixed rate and level based

		sampling' IEEE proceedings of International Conference on Advances in Computing and Communications (ACC-2014)
16	Abhinav Srivastava and K.Srinivasan	Signal dependent adaptive level based sampling technique to minimize quantization error' IEEE proceeding of International conference <i>TENCON-2014</i>
17	Satyaravi Teja, Sai srikar, Kusha V and Srinivasan K	Photosensitive Security System for Theft Detection and Control using GSM technology'' IEEE proceeding of International Conference SPACE 2015, Kerala

National

S.No	Author (s)	Details
1	Devi C. Arati, S. Narayanan, Sivakumaran	A study on MIMO control system design, Proceedings of the National Conference on RTIC - 2015, MIT Campus, Anna University. Page 90-97

3. Workshops / Seminars

3.1 Organized

S.No	Coordinator	Title	Period
1	Dr.N.Sivakumaran and Dr.K.Srinivasan	Product Design Technologies and Entrepreneurship Awareness Program.	March 15, 2015
2	Dr. G. Uma, Dr. D. Ezhilarasi, Dr. M. Umapathy	MEMS-Its CAD Tools and Smart Structures	Jan 5 th -9 th , 2015
3	Dr. A. Ramakalyan	Intelligent Systems for Flight Control	October 7, 2014
4	Dr.N.Sivakumaran, Dr. Sishaj P Simon and Dr. T. K. Radhakrishnan	Real Time Signal Acquisition and Processing using open source software SCILAB.	Dec 15 -17, 2014



Mr PV Kannan,MD,Micromax systems and Rahul Jalan, Cofounder BIZIGA Alumni ICE address during workshop on “Product Design Technologies and Entrepreneurship Awareness Program”.

3.2 Attended

S.No	Faculty	Details
1	Dr. A. Ramakalyan	“Human Cyber Physical System Interaction: Control for the Human Welfare,” IFAC & IEEE-CSS sponsored International Workshop, Paris, Sept 22-23, 2014

4. Invited / Guest Lectures arranged by the Department

S.No	Faculty	Topic	Program	Place & Date
1	Dr. Arun K.Tangirala Department of Chemical of Engineering, IIT Madars	System Identification	II year M.Tech Research Scholars	NIT Trichy, March 28 th , 2015
2	Mr. A. Gowthaman, Senior Engineer, Maintanance Dept., CPCL, Chennai	Instrumentation in Petrochemical Industry	II year M.Tech Research Scholars	NIT Trichy, March 24 th , 2015
3	Dr.S.P.Natarajan Professor and Head, 4Department of EIE, Annamalai University	Research Issues in Control Engineering	II year M.Tech Research Scholars	March 23 rd , 2015 at 10.00
4	Prof. Dr. Vijay K. Arora, Faculty of Electrical Engineering (FKE), Department of Electronics and Computer Engineering, Universiti Teknologi Malaysia, UTM Skudai	"Carbon: The Soul of Future Nano electronics"	M. Tech Research Scholars	NIT Trichy & March 7 th , 2015
5	Dr. M. Chidambaram	'Process Control'	M. Tech Research Scholars	NIT Trichy, & 21 st and 22 nd Feb, 2015
6	National Instruments, Bangalore	Software and Hardware Training	II year M.Tech Research Scholars	NIT Trichy & Feb.14,15,27 and 28



Guest Lecture by Prof. Dr. Vijay K. Arora, Faculty of Electrical Engineering (FKE), Department of Electronics and Computer Engineering, Universiti Teknologi Malaysia, UTM Skudai



Guest Lecture by Mr. A. Gowthaman, Senior Engineer, Maintenance Dept., CPCL, Chennai



Guest Lecture by Dr. Arun K.Tangirala, Department of Chemical of Engineering,IIT Madars

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

S. No	Title	Author(s)	Journal	Year Vol. (No) Page
1	Sliding Mode Control of SMA Actuated Structures for Vibration Control	K Dhanalakshmi, M. Umapathy and D Ezhilarasi	International Journal of Modelling, Identification and Control	23(3), 2015
2	Cantilever beam with trapezoidal cavity for improved energy harvesting	A Rami Reddy, M Umapathy, D Ezhilarasi , G Uma	International Journal of Precision Engineering and Manufacturing	Accepted for publication
3	Modelling and experimental investigations on stepped beam with cavity for energy harvesting	A Rami Reddy, M Umapathy, D Ezhilarasi , G	Smart Structures and Systems	Accepted for publication

		Uma		
4	Improved energy harvesting from vibration by introducing cavity in a cantilever beam, Journal of Vibration and Control	A Rami Reddy, M Umopathy, D Ezhilarasi , G Uma	Journal of Vibration and Control	24th Nov, 2014
5	‘SMA Actuated Structural Control with Discrete Time Sliding Mode using Multirate Output Feedback’	K Dhanalakshmi, M. Umopathy and D Ezhilarasi	Journal of Vibration and Control	July 2014
6	Unmasking of atrial repolarization waves using modified limb lead system,	J. Sivaraman, G. Uma, S. Venkatesan, M. Umopathy, M.S. Ravi	Anatolian Journal of Cardiology	2015
7	Normal limits of ECG measurements related to atrial activity using a modified limb lead system	J. Sivaraman, G. Uma, S. Venkatesan, M. Umopathy, V.E. Dhandapani	Anatolian Journal of Cardiology	Vol. 15, 2-6, 2015.
8	A study on atrial P and Ta wave morphology: An approach using P wave signal averaging method	J. Sivaraman, G. Uma, S.Venkatesan, M. Umopathy, N. Keshavkumar	Journal of Medical Imaging and Health Informatics	Vol. 4, 675-680, 2014
9	“A Review Of Acoustic Energy Harvesting”,	Minu A Pillai and Ezhilarasi Deenadayalan,	International Journal Of Precision Engineering And Manufacturing,	Vol. 15, No. 5, Pp. 949-965, May 2014
10	‘Servo control of an under actuated system using antagonistic shape memory alloy’	S. SunjaiNakshatharan, K. Dhanalakshmi and D. Josephine Selvarani Ruth	Smart Structures and Systems	14(4), Oct 2014
11	‘Design and investigation of a shape memory alloy actuated gripper’	S. Krishna Chaitanya and K Dhanalakshmi	Smart Structures and Systems	14(4), Oct 2014
12	Meta heuristic Patient Estimation Based Patient-Specific Fuzzy Aggregated Artificial Pancreas Design,	V Kirubakaran, TK Radhakrishnan, N Sivakumaran	Industrial and Engineering Chemistry Research	53 (39), 15052–15070, 2014.
13	Diagonally dominant backstepping autopilot for atrcrafting with unknown actuator failures and severe winds.	S.Ismail, A A Pashilkar,R Ayyagari & N Sundararajan,	The Aeronautical Journal(of the Royal Aeronautical Society,UK)	Vol.118,No .1207,pp.20 14

14	Improved Neural-aided sliding mode controller for autoland under actuator failures and severe winds,”	Ismail, A A Pashilkar,R Ayyagari & N Sundararajan	J.Aerospace Science&Technolo gy	Vol.33,pp.5 5-64,2014
15	“Advanced driver assistance system for AHS over communication links with random packets dropouts,”	S.Seshadhri and R Ayyagari	J.Mech.Systems and Signal Processing	Vol.49,pp.5 3-62,2014
16	Simple and Straight proofs of stability criteria for LTIL Systems,”	P.Kavitha and R .Ayyagari	Transaction of the Institute of measurement & control	Vol.36,No. 4,pp.523- 528,2014
17	Design of RTDA Controller for Industrial Process Using Sopdt Model With Minimum or Non Minimum Zero	Anbarasan K and Srinivasan K	ISA Transactions	Accepted for Publication

8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1	S.Ismail	Dr.A.Ramakalyan	NIT Trichy
2	J.Sivaraman	Dr.G.Uma	NIT Trichy

9. Details of Book any authored by faculty.

1.	Title of Book:	Micro and Smart Devices and Systems
	Title of the Chapter:	Electronic Circuits for Piezoelectric Resonant Sensors
	Authors:	M. Umapathy, G. Uma and K. Suresh
	Publisher:	Springer
	Year of publication:	2014

11. Other Important Points

Sensor'15 - National Level Symposium of Instrumentation and Control Engineering Department of NIT Trichy was inaugurated on 16th March at Institute's EEE Auditorium, by Mr. Jaywant Kulkarni, who is a Hardware Architect at Intel, India. This edition of Sensors also saw a record breaking 1,555 participants from colleges all over South India turning up to take part in various events and workshops conducted over a span of two days. There were four workshops - Flight Instrumentation, Speech Controlled Robotics, Website Development and Investment in the share market. All the workshops were successfully conducted by

students involved in various interest groups in the department. Among the events General Quiz and Tech Crossword saw huge participation. Moore's Labyrinth, Tech Tac Toe and Encypher were all lauded for their interesting problem statements. Project Demonstration was a great success, with students eagerly explaining in detail their innovative solutions and ideas to an engaged audience. The success of the current edition could be measured by the ground breaking 60,104 page visits and 4,767 site visits. Sensors 2015 has surpassed all previous editions with its amazing teams, participation and enormous success. It is indeed a tour de force that has set the benchmark for the future



Mr. Jaywant Kulkarni, Hardware Architect at Intel, India address the students during Inaugural function of SENSORS 15.

Industrial Visits

S.No	Faculty Coordinator	Organization	Venue & Date	Offered To
1	Dr. M. Umapathy Dr. B. Vasuki Dr. G .Uma	Aditya Birla Ultra Tech Cement Ltd	Reddipalayam Ariyalur & September 29, 2014.	B.Tech - Second year / 3rd semester (2013-17) Batch.
2	Dr.S.Narayanan	BHEL	Trichy & November 1,2014	M.Tech - I year / 1 st semester

3	Dr.K.Srinivasan	Mahindra AFS	Chengalpattu February 25,2015	B.Tech - Third year / 6 th semester (2012-16) Batch
4	Dr.M.Umapathy	Neyveli Lignite Corporation	Neyveli & March 18,2015	B.Tech - Second year / 4 th semester (2013-17) Batch

12. Summary

S.No	Details	Total nos			
17.	International Journals	17			
18.	National journals	NIL			
19.	International conference publications	17			
20.	National conference publications	1			
21.	Sponsored Project	No's:	NIL	Amount:	
22.	No of Ph.D.completed	2			
23.	No of Patents obtained	NIL			
24.	No of books published	1			

DEPARTMENT OF MANAGEMENT STUDIES

1. Notable Achievements

1.2 Students

S.No	Name	Details of Prizes/Awards	Organization
1	Shilpa.S,Sonam Jaiswal,Parveen Chowdhary, Swati Ojha, Kumkum Das, Yashasvini Verma	I Prize – Trichy Fashion Project	IIM Trichy
2	Vamsi	Winner- Marketing Event	IIM Trichy
3	Bharadwaj	Winner – Marketing Event in Pragyan	NIT,Trichy

2. Conference

2.2 Papers Presented by the Faculty/Students

Author(s)	Details
P.Sridevi(Faculty), Shashank Gupta, Arun.N,Pankaj Sind,Vijay Krishna	Paper entitled “Developing an agile based supply chain model for Indian Agro-based products” in the proceedings of International Conference on Advances in Design and Manufacturing ‘ 2014

International

3. Workshops/Seminars

3.1 Organized

Coordinator	Title	Period
Mrs.P.Sridevi	FDP on Data Mining and Data Analysis	24 th -28 th November,2014

3.2 Attended

Faculty	Details
Mrs.V.Lavanya	1.Data Analytics for Research in Management & Social Sciences – 30 th Oct- 1 st Nov’2014 in NIT Trichy 2. FDP on Data Mining and Data Analytics – 24 th Nov to 28 th Nov’2014, NIT Trichy

Students	Details
Glady S, Esther Princess, Daniel Inbaraj	FDP on Data Mining and Data Analytics – MAM Engineering College, Trichy from 23.01.15 to 06.02.15

4. Invited /Guest Lectures Delivered by the Faculty

Faculty	Topic	Programme	Place &Date
Mrs.P.Sridevi	Introduction to Data Mining, SVM & ANN	FDP on Business Analytics Techniques for Decision Making	MAM Engineering College, Trichy

5. Sponsored Projects undertaken

Coordinator	Name of the project	Sponsor	Amount (Rs.In Lakhs)
Dr.G.Muruganatham	Social Cause Advertisement	ICSSR New Delhi	3 lakhs
Dr.M.Punniyamoorthy, Dr.Murugesan & Mrs.V.Lavanya	Dalit Women Empowerment	Institute	30 Lakhs

6. Major Equipment/Software Purchased (more than Rs.5.00 lakhs) **

Nil

7. Research Papers Published in National /International Journals

7.1 Faculty

International Journal

S.No	Title	Author(S)	Journal	Year Vol.(No) Page
1	A study on Job Satisfaction in Service Institution- Context and Model bound approach	Dr.M.Punniyamoorthy & V.Lavanya	IJLGE	

7.2 Students

Nil

8. PhD Awarded

S.No	Name of the Research Scholar	Guide/Supervisor	University/Insitute
1	Janarthanan Balakrishnan	Dr.N.Thamaraiselvan	NIT Trichy
2	M.Jeevananthan	Dr.B.Senthil Arasu	NIT Trichy
3	Ravi Shankar Bhakat	Dr.G.Muruganantham	NIT Trichy

DEPARTMENT OF MATHEMATICS**1. Notable Achievements: Nil.****2. CONFERENCE****2.1 Organised****National**

S. No	Coordinator	Programme	Period
1	Dr. R. Ponalagusamy	(i) Chairman , National Conference on Analysis And Applied Mathematics (NCAAM 2014), Department of Mathematics, NIT Trichy (ii) Convener , National Conference on Frontiers in Applied Sciences and Computer Technology (FACT'15), Department of Mathematics and Department of Computer Applications, NIT Trichy	November 27-28, 2014 March 6-7, 2015
2	Dr. V. Shanthy	National Conference on Analysis and Applied Mathematics (NCAAM)	November 27-28, 2014

2.2 Papers Presented by the Faculty/Students

S. No.	Author(s)	Details
1	Ms. S. Priyadharshini	A Study on Flow of Hershel-Bulkley Fluid through A Tapered Arterial Stenosis with Dilatation in 59 th Congress of ISTAM (International Meet) held at Alliance University, Anekal, Bangalore, December 17-20, 2014.
2	Dr. T. N. Janakiraman	Reviewed two research papers as a referee for the 3rd International Conference on Civil Engineering and Urban Planning, Wuhan, China, June 20-22, 2014.
3	Dr. T. N. Janakiraman	Reviewed two research papers as a referee for the Indian Journal of Pure and Applied Mathematics, 2014.
4	M. Chandru, V. Shanthy	An efficient numerical method for a coupled system of singularly perturbed reaction-diffusion equations with discontinuous source term. International Winter Workshop on Differential Equations and Numerical analysis (DEANA 2015), January 5-7, 2015, Bishop Heber College, Tiruchirappalli

5	M. Chandru, V. Shanthi	An asymptotic Schwarz method for singularly perturbed fourth order ordinary differential equation of reaction diffusion type with discontinuous source term. International Winter Workshop on Differential Equations and Numerical analysis (DEANA-2015), 5-7 January 2015, Bishop Heber College, Tiruchirappalli
6	P. Mahabub Basha, V. Shanthi	A parameter-uniform numerical method for a coupled system of two singularly perturbed linear reaction-diffusion equations with discontinuous source term subject to mixed type boundary conditions. International Conference on Mathematical Sciences (ICM 2014), 21-23 August 2014, School of Mathematics, Madurai Kamaraj University
7	T. Prabha, M. Chandru, V. Shanthi	A Numerical method for second order singularly perturbed convection diffusion problem with discontinuous source term in International Conference on Mathematical Sciences (ICM 2014), August 21-23, 2014, School of Mathematics, Madurai Kamaraj University

3. WORKSHOP/SEMINARS

3.1_Organized: Nil.

3.2 Attended

S. No.	Faculty/Students	Details
1	Dr. T. N. Janakiraman	National seminar on "Recent advancement in Modern Mathematics" Ramanujam club of PG and Research Department of Mathematics, Srimad Andavan Arts & Science College, Srirangam, Tiruchirappalli, February 23, 2015
2	M. Chandru, P. Mahabub Basha, T. Prabha	Active participants of Local Organizing Committee, National Conference on Analysis and Applied Mathematics (NCAAM-2014), 27-28 November 2014, Department of Mathematics, NIT Trichy

3	M. Chandru, P. Mahabub Basha, T. Prabha	International Winter Workshop on Differential Equations and Numerical analysis (DEANA-2015), 5-7 January 2015, Bishop Heber College, Tiruchirappalli
4	M. Chandru	Numerical methods for singularly perturbed differential equations , National Meet of Research Scholars in Mathematical Sciences, Dept. of Statistics, University of Jammu, J&K, 08-12 December 2014

4. INVITED GUEST LECTURES DELIVERED BY THE FACULTY

S. No.	Faculty	Topic	Programme	Place & Date
1	Dr. K. Murugesan	Guided tour in Mathematics -II	TEQIP Seminar	Government College of Engineering, Salem, February 13, 2015
2	Dr. T.N. Janakiraman	On the applications of Graphs in different fields	UGC seminar	E.V.R. College, Trichy, 2014
3	Dr. T.N. Janakiraman	Mathematics and applications on Graph Theory and its applications,	National Seminar	Sona college of engineering, Salem 8-9 January 2015
4	Dr. P. Saikrishnan	Role of Mathematics in Engineering	National Seminar	BDU, Perambalur 26 February 2015

5. Sponsored Projects undertaken: Nil

6. Major Equipment/Software purchased(more than Rs.5.00 lakhs.): Nil

7. RESEARCH PAPERS PUBLISHED BY FACULTY/STUDENTS

S. No	Title	Author(s)	Journal	Year , Vol. (No) Page
1	Brief Communications: Two-layered Model (Casson-Newtonian) for Blood Flow Through an Arterial Stenosis with Axially Variable Slip Velocity at the Wall”	R. Ponalagusamy and R. Tamil Selvi	International Journal of Engineering Science, Advanced Computing and Bio-Technology	2014, Vol. 4 (4), pp.71-74
2	“Influence of Magnetic Field and Heat Transfer on Two-Phase Fluid Model for Oscillatory Blood Flow in an Arterial Stenosis”	R. Ponalagusamy and R. Tamil Selvi	Meccanica	2015, Vol.50, pp. 927-943.
3	Bio rheological model on Flow of Herschel-Bulkley Fluid through a Tapered Arterial Stenosis with Dilatation	S.Priyadharshini and R. Ponalagusamy	Applied Bionics and Biomechanics	Volume 2015(2015), Article ID 406195, 12 pages.
4	Microstructural Observation, Consolidation and Mechanical Behaviour of AA 6061 Nanocomposites Reinforced by γ - Al_2O_3 Nanoparticles	Jeyasimman, K. Sivaprasad, S. Sivasankaran, R. Ponalagusamy , R.Narayanasamy and Vijayakumar Iyer	Advanced Powder Technol	2015, Vol. 26, 139-148
5	The Effects of Various Reinforcements on Dry Sliding Wear Behaviour of AA 6061 Nanocomposites	D. Jeyasimman, R. Narayanasamy, R. Ponalagusamy , V. Anandkrishnan and M. Kamaraj	Materials & Design	2014, Vol. 64, pp. 783-793.
6	“A Parallel Fourth Order Rosenbrock Method: Construction, Analysis and Numerical Comparison”	R. Ponalagusamy and K. Ponnammal	Int. J. Appl. Comput. Math	2015, Vol. 1, 45–68
7	Graceful Labeling of Roman rings with size C_m connected in a Path $P_{\square\square\square\square\square}$	T.N.Janakiraman and G.Sathiamoorthy	Global Journal of Pure and Applied Mathematics	2014, Vol. 10 (2), pp.153-158
8	Graceful Labeling of hanging θ -graphs Connected in a path, $\square\square\square\square\square$	T.N.Janakiraman and G.Sathiamoorthy	International Journal of Applied Engineering Research	2014, Vol 9(11), pp. 1619-1623
9	Approximation Algorithm for Total Dominating Set using the Method of Search of Dynamic Maximum Weighted Edge in General Graphs with Improved	T.N. Janakiraman and Lakshmi Prabha S	Global Journal of Pure and Applied Mathematics	2014, Vol. 10(2), 177-186.

	Performance Ratio			
10	An Approximation Single Phase Algorithm for Connected Dominating Set of a given Graph	T.N. Janakiraman and Lakshmi Prabha S	International Journal of Applied Engineering Research	2014, 9(18), 4595-4610.
11	Characterizations and Edge Partitions of the Boolean Graphs $BG_2(G)$, $BG_3(G)$ and their Complements, International Journal of Engineering Science,	T.N.Janakiraman, M.Bhanumathi, S.Muthammai	Advanced Computing and Bio-technology	2014, Vol. 5(1), pp. 1-23
12	Perfect, Split and Non-split domination of the Boolean graph $BG_2(G)$ and its complement	T.N.Janakiraman, M.Bhanumathi, S.Muthammai	International Journal of Engineering Science Advanced Computing and Bio-technology	2014, Vol. 5(2), pp. 37-48
13	Equi-eccentric point set graph, Glue graph and Complement Glue graph of a graph	T.N.Janakiraman, M.Bhanumathi, S.Muthammai	International Journal of Engineering Science Advanced Computing and Bio-technology	Volume no.5, issue no.3, (2014), pp. 66-75.
14	“Two Polynomial-time Approximation Algorithms for finding Totally Comfortable Team in any given Social Network”	Lakshmi Prabha S and T.N. Janakiraman	Accepted in Proceedings of <i>International Conference on Humanities and Social Science, China</i>	2014, 29-30 June
15	ON THE BOOLEAN FUNCTION GRAPH $B(K_p, INC, \square K_q)$ OF A GRAPH’	T. N. Janakiraman and S. Muthammai	International Journal of Engineering Science Advanced Computing and Bio-technology	2014, Vol. 5(4), pp. 110-125.
16	Graph equations connecting glue graphs, complement glue graphs, line graphs and eccentric graphs’	T.N.Janakiraman, M.Bhanumathi and S.Muthammai	International Journal of Engineering Science Advanced Computing and Bio-technology	2015, Vol. 6(1), 10-25
17	“A parameter-uniform numerical method for a coupled system of two singularly perturbed linear	P. Mahabub Basha and V. Shanthi	Mathematical Sciences International	2014, Vol.3(2), pp. 862-

	reaction-diffusion equations with discontinuous source term subject to mixed type boundary conditions”		Research Journal	866
18	“A uniformly convergent scheme for a system of two coupled singularly perturbed reaction-diffusion Robin type boundary value problems with discontinuous source term”	P. Mahabub Basha and V. Shanthi	American Journal of Numerical Analysis	Accepted for publication
19	“A Hybrid Difference Scheme for a Second-Order Singularly Perturbed Reaction-Diffusion Problem with Non-smooth Data”	M. Chandru, T. Prabha, V. Shanthi	International Journal of Applied and Computational Mathematics (Springer)	2015, Vol.1(1), pp. 87-100, DOI: 10.1007/s40819-014-0004-8
20	“Fitted Mesh Method for Singularly Perturbed Robin Type Boundary Value Problem with Discontinuous Source Term”	M. Chandru, V. Shanthi	International Journal of Applied and Computational Mathematics (Springer)	2015, DOI : 10.1007/s40819-015-0030-1
21	“A Numerical method for second order singularly perturbed convection diffusion problem with discontinuous source term”	T. Prabha, M. Chandru, V. Shanthi	Mathematical Sciences International Research Journal	2014, Vol.3(2)
22	Non-similar solutions for Unsteady flow over a yawed cylinder with non-uniform mass transfer through slot	Revathi. G, P. Saikrishnan and A. Chamkha	Ain Shames Engineering Journal	2014, Vol.5, 1199-1206
23	Effects of chemical reaction and heat generation/absorption on unsteady mixed convection MHD flow over a vertical cone with non-uniform slot mass transfer	Ravindran.R Ganapathirao. M	International Journal of Heat and Mass Transfer	73(2014)743-751 2.522(SCI)
24	unsteady mixed convection boundary layer flow over a vertical cone with non-uniform slot suction(injection)	Ganapathirao. M Revathi.G Ravindran. R	Meccanica	49, 2014 673-686 1.815(SCI)
25	Effects of chemical reaction and heat generation/absorption on unsteady mixed convection boundary layer flow over a wedge with heat generation/absorption in the presence of suction or injection	Ganapathirao. M Ravindran. R Momoniat, E	Heat and Mass Transfer	55(2015) 289-300 929(SCI)

8. PhD AWARDED

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1	V. Balakumar	Dr. K. Murugesan	NIT Trichy
2	G. Revathi	Dr. P. Saikrishnan	NIT Trichy
3	Mr. Ganapathirao Maradana	Dr. R. Ravindran	NIT Trichy
4	Ms. S. Lakshmiprabha	Dr. T. N. Janakiraman	NIT Trichy

9. Details of books authored by Faculty: Nil

10. Patent if any obtained by faculty: Nil

11. OTHER IMPORTANT POINTS**International Member of Program and Organizing committee for Conferences:**

- 1. Program Committee Member**, 7th International Conference on Bio-science and bio-Technology (BSBT 2014), 20-23 December, 2014, [Hainan University](#), Hainan China.
- 2. Program Committee Member**, 3rd Annual International Conference on Computational Mathematics, Computational Geometry and Statistics (CMCGS 2014), April 03- 04, 2014, Hotel Fort Canning, Singapore.
- 3. Program Committee Member**, 10th International Conference on Computer Vision Theory and Applications (VISAPP 2015), 11-14 March, 2015, Berlin, Germany.
- 4. International Organizing Committee Member**, The 3rd Science One International Conference on Information Technology (ICIT 2015), Dubai, UAE, January 21-23, 2015.
- 5. Program Committee Member**, 4th Annual International Conference on Computational Mathematics, Computational Geometry and Statistics (CMCGS 2015), January 26 - 27, 2015, Hotel Fort Canning, Singapore.
- The 15th International Conference on Bioinformatics and Computational Biology (BIOCOMP'14), U.S.A.
- The 12th International Conference on Scientific Computing (CSC'14), U.S.A.

8. The 12th International Conference on Embedded Systems and Applications (ESA'14), U.S.A.
9. The 18th International Conference on Image Processing, Computer Vision, & Pattern Recognition (IPCV'14), U.S.A.
10. The 10th International Conference on Modeling, Simulation and Visualization Methods (MSV'14), U.S.A.
11. The 20th International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA' 14), U.S.A.
12. The 12th International Conference on Software Engineering Research and Practice (SERP'14) , U.S.A.

Subject Expert in Faculty Selection Committee:

- (1) Member of Selection Committee (Subject Expert) for faculty recruitment in the Department of Applied Mathematics, Sardar Vallabhbhai National Institute of Technology, Surat – 395007, December, 2014.

12. Summary

S. No	Details	Total Nos.
1	International Journals	24
2	National Journals	-
3	International Conference Publications	1
4	National Conference publications	-
5	Sponsored Project	--
6	No. Ph. D Produced	4
7	No. Patents obtained	--
8	No. books published	--

MECHANICAL ENGINEERING DEPARTMENT

1. Notable Achievements

1.1. Faculty Members

S.No	Name	Details of Prizes/Awards	Organization
1.	Dr. S. Suresh	Young Scientist Award	DST
2.	Dr. R. Anand	2015 Endeavour Executive Fellowship	Australian Government

1.2. Students

S.No	Name	Details of Prizes/Awards	Organization
1	Sujith Kumar C S	Young Scientist Award	DST
2	Sujith Kumar C S	Canadian Commonwealth scholarship	Canadian Government
3.	Baja Team 2014-15 (Krishnan Rohit & Co.)	Overall : 1st Runner Up Traction Event - (1st) Winner Sales Event - 1st Runner Up "Baja Student India 2015", A National Level Design, Fabrication and Racing Event	NIT, Jamshedpur

2. Conference / Seminars / Symposium / Special Lectures

2.1. Organised

International

S. No.	Coordinator	Programme	Period
1.	Dr. S.P. Sivapirakasam	International	13-15, June, 2014

	Dr. K.R. Balasubramanian Dr. R. Anand	Mechanical Engineering Congress (IMEC)	
2.	Dr.K.Sankaranarayananasamy Dr. T. Ramesh Dr. N. Siva Shanmugam	ICAD&M'14 Conference	5-7, December 2014

2.2. Papers presented by the Faculty / Students

International

Sl.No	Author(s)	Details
1.	A. S. Praveen, J. Sarangan, S. Suresh	Effect of HVOF parameters on porosity of WC-Co/NiCrSiB coatings. 6 th Asian Thermal Spray Conference (ATSC – 2014), 24-26 th November, 2014, Hyderabad, India
2.	Sujith Kumar C.S., S. Suresh, C.R. Aneesh, K. Raji	Flow boiling heat transfer enhancement using porous coatings, 2nd USA International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA), May 19-22, 2014 at Rice University, Houston Texas (USA)
3.	Naresh Kumar Gurusala, V.Arul Mozhi Selvan	Optimization of Biodiesel Production from Waste Chicken Fat Through Two-Step Catalyzed Process, International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control, Tiruchirappalli, 27- 29 September 2014
4.	C.N. Kowthaman, V.Arul Mozhi Selvan	Microalgae & its Characteristics as a Potential Biofuel - A Review, International Conference on Green Technologies For Environmental Pollution

		Prevention And Pollution Control, Tiruchirappalli, 27- 29 September 2014
5.	M. Kirubakaran, V.Arul Mozhi Selvan	Experimental Investigations On Algal Oil Production For A Sustainable Biofuel Feedstock, International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control, Tiruchirappalli, 27- 29 September 2014
6.	H. Mohit, V.Arul Mozhi Selvan	A Review On Natural Fiber Reinforced Composites For Green Environment, International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control, Tiruchirappalli, 27- 29 September 2014
7.	P.Sethumadhavan, V.Arul Mozhi Selvan	Experimental Investigations On Biomethanation As A Sustainable Waste Management Solution For Temples In India, International Conference on Green Technologies For Environmental Pollution Prevention And Pollution Control, Tiruchirappalli, 27- 29 September 2014
8.	Narayanan, K. S., Anand, R. B.	Scientific analysis of pyrolytic yield of plastic waste for value added and pollution free waste management, Proc. international conference on green technology for environmental pollution, prevention and control, September 27 - 29, 2014
9.	Srinivasa Rao, Anand, R. B.	Production and characterization of pongamia biodiesel, Proc. international conference on green technology for environmental pollution, prevention and control, September 27 - 29, 2014
10.	G. Kumaresan S. Venkatachalapathy	Heat Transfer Studies on Circular heat pipes using CuO Nanofluids”, IRF International Conference, Bangkok, Thailand, August 17, 2014
11.	J.RonaldAseer, K.Sankaranarayananasamy, P. Jayabalan	“Die Electric Properties of Chemically Modified Municipal Solid Waste and Banana Fiber Composites”, International Conference on Advances in Design and Manufacturing (ICAD&M’14), Dec 5-7, Volume II, 1009-1014.

12.	KuruvaGopanna, K.Sankaranarayananasamy, H.K.Ganguly, K.Muthukumar	“A Comparative Study of commercially Pure Aluminium Processed by ECAP Using Conventional and New Die” Materials and manufacturing Processes, 29 (10), 1172-1178
13.	P.Velmurugan, K.Sankaranarayananasamy, K.Pazhanivel	“Analytical Investigation on Ride Comfort Analysis for Tractor Semitrailer”, International Conference on Advances in Design and Manufacturing (ICAD&M’14), Dec 5-7, Volume III, 1648-1648.
14.	M.ArunKumar, N.SivaShanmugam, A.Sundararajan, K. Sankaranarayananasamy	"Prediction of Temperature Distribution in the welds of SS304L Plate through Transient Thermal Analysis and Validation of Results”, International Conference on Advances in Design and Manufacturing (ICAD&M’14), Dec 5-7, Volume III, 1633-1639
15.	A. Karpagaraj, N. Siva Shanmugam K. Sankaranarayananasamy	The Effect of Process Parameters on TIG Welding of Thin Ti-6Al-4V Sheets International Conference on Mechanical and Production Engineering (ICMPE2014)

3. Workshops/ Seminars

3.1. Organised

Sl. No	Coordinator	Title	Period
1.	Dr. S. Suresh	Two- week ISTE workshop on Fluid Mechanics	20 th – 30 th May 2014
2.	Dr.K.R.Balasubramanian	Fluid Mechanics	20.05.2014 to 30.05.2014
3.	Dr.K.Sankaranarayananasamy Dr. T. Ramesh	Faculty Development Program on ANSYS – An Introductory Training, (Self-Supported)	06.06.2014 to

	Dr. N. Siva Shanmugam		08.06.2014
4.	Dr.K.Sankaranarayananasamy Dr. T. Ramesh Dr. N. Siva Shanmugam	Course Coordinator - Faculty Development Program on Engineering Graphics (Self-Supported)	19.06.2014 to 2.06.2014
5.	Dr.K.Sankaranarayananasamy	Faculty Development Program on ANSYS – An Introductory Training (Self-Supported)	06.06.2014 to 08.06.2014
6.	Dr. K.Sankaranarayananasamy Dr. S.P.Sivapirakasam Dr. K.R. Balasubramanian	IGCAR sponsored safety training programme at Kalpakkam	01.09.2014 to 04.09.2014
7.	Dr. S.P.Sivapirakasam Dr. K.R. Balasubramanian Dr. K.Sankaranarayananasamy	Two-day self-financed course on "Advancement in Industrial Safety Engineering"	29.09.2014 to 30.09.2014
8.	Dr. S. Venkatachalapathy Dr. S. Suresh Dr. V. Senthilkumar	Short term course on Application of CFD in Mechanical Engineering (Self Financed)	8 th - 9 th Oct 2014
9.	Dr. K.Sankaranarayananasamy Dr. S.P.Sivapirakasam Dr. K.R. Balasubramanian	IGCAR sponsored safety training programme at Kalpakkam	27.10.2014 to 30.10.2014
10.	Dr. S. Suresh Dr. S. Venkatachalapathy Dr. V. Senthilkumar	Short term course on Applications of Nanotechnology (Self Financed)	31 st Oct – 01 st Nov 2014
11.	Dr. V. Arul Mozhi Selvan Dr. R. Anand Mr. V. Mariappan	Faculty development Program on Recent Trends in renewable energy Technologies (Under Self-Financed Category)	26-27, September, 2014

12.	Dr. V. Arul Mozhi Selvan Dr. R. Anand	Short Term Course on Engine Research (Under Self-Financed Category)	07-08, October, 2014
13.	Dr.K. R. Balasubramanian	One day workshop on Training, Placement and Entrepreneurship Awareness Programme	22.01.2015

4. Invited / Guest Lectures Delivered by the Faculty

	Faculty	Topic	Programme	Place & Date
1	Dr. V. Arul Mozhi selvan	“Production and Effective Use of Biofuels in Energy Sector”	CSIR Sponsored Seminar on Biofuels for Automotive Use-Benefits and Application	Shree Venkateswara Hi-Tech Engineering College, Gobichettipalayam, Erode on 20 th September, 2014
2	Dr. V. Arul Mozhi selvan	Biofuels for Green Energy”	Mechanical Engineering Association Inauguration	K.Ramakrishnan College of Technology, Tiruchirappalli on 22 nd August, 2014
3	Dr. V. Arul Mozhi selvan	Energy Scenario and Biofuels Research for Sustainable Future”	TEQIP-II Sponsored Faculty Development Program (FDP) on Powering the Engineering College Campus with Renewable Energy	PSG College of Technology, Coimbatore on 18 th March, 2014
4	Dr. V. Arul Mozhi selvan	Creating Awareness and Enhancing Rural	National Seminar on Renewable Energy	Karpagam College of Engineering, Coimbatore on 18 th

		Development”	Technologies	March, 2014
5	Dr.S. Venkatachalapathy	Role of Mechanical Engineers in the present scenario	Mechanical Engineering Symposium	Mahendra Institute of Engineering & Technology Sept. 19, 2014
6	Dr.K.Sankaranarayananasamy	Industrial Safety to Employees (Scientists, Supervisors and Workers)	Training program	IGCAR,
7	Dr.K.Sankaranarayananasamy	Plant-Based Natural Fibers for Polymer Composites:An Overview	International Conference on Advancements in Polymeric Materials (APM-2015)	ISSC-Bangalore, Feb 20, 2015

5. Sponsored Projects undertaken

S.No	Co-ordinator	Name of the Project	Sponsor	Amount (Rs. In Lakhs)
1	Dr. S. Suresh	Experimental investigation on heat transfer characteristics of hybrid PCM in Thermal storage system (TES) for solar applications	DST-SERI	63,80,200/-
2	Dr. S. Suresh	Experimental Investigation of Heat Transfer Enhancement for Electronic Heat Sink Coated with Vertically Aligned CNT and Metal Nanowires	DST	56,30,400/
3	Dr. S. Suresh	Sonochemical preparation of metal nanoparticles and application of fuel cell	Indo Taiwan Programme	22,78,800/-

		catalyst		
4	Dr. S.P.Sivapirakasam Dr. K.R.Balasubramanian	IGCAR sponsored consultancy project titled, " Analysis of Welding fumes for the consumables used in the manufacture of Nuclear components	Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam	17,21000
5	Dr. V. Arul Mozhi Selvan	Studies on Growth, Lipid Extraction, and Biodiesel Conversion Characteristics of Micro-Algae as a Potential Alternate Fuel for Compression Ignition Engines	MHRD	38,42,880/-
6	Dr.K.R.Balasubramanian	Modeling of A-TIG welding of austenitic stainless steels and prediction of residual stresses	UGC-DAE-CSR Research	11,07000
7	Dr.R.Anand	Experimental Studies on a Direct Injection Diesel Engine Using Waste Cooking Oil Based Biodiesel and Its Blends	MHRD	36,81,000
8	Dr.K.Sankaranarayanan	Design and Analysis of Leak Proof Joints for Supercritical Boiler Tubes Test Facility	BHEL, Trichy	9,04,000
9	Mr.V. Mariappan	Investigations of generator absorber heat exchange (GAX) vapour absorption refrigeration system with plate heat exchangers	MHRD Sponsored Scheme	34,65,600

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S.No.	Equipment	Amount (Rs. in Lakhs)
1.	Plasma Enhanced Hot Filament Chemical Vapour Deposition (PEHFCVD) unit	40
2.	Flame Assisted Spray Pyrolysis	6.7
3.	Bomb Calorimeter	11.96475

4.	Five Gas Analyzer	19.93888
5.	Multi Cylinder Petrol Engine	6.72325
6.	Multi Cylinder Diesel Engine	8.83881
7.	Smoke Meter	19.9700

7. Research Papers Published in National / International Journals

Sl.No.	TITLE	Author (s)	Journal	Year Vol. (No) Page
1.	Investigation of Environment and Machining Aspects in Electrical Discharge Machining (EDM) Using Different Work pieces and Tool Electrode	S.P.Sivapirakasam, S.Thiyagarajan, Jose Mathew, M.Surianarayanan A.S. Sathya Sai Nathan	Applied Mechanics and Materials	2014, Vols. 592- 594, pp 2513-2517
2.	Strategies for Controlling Welding Fumes at the Source - A Review	Sreejith Mohan, S.P.Sivapirakasam, P. Bineesh, K.K. Satpathy	Applied Mechanics and Materials	2014, Vols. 592- 594 pp 2539-2545
3.	Microcalorimetry and Kinetics of Biodiesel	Dr.S.P.Sivapirakasam, A.Afsal Khan, Mane Yogesh G, Dr. R.Anand	Applied Mechanics and Materials	2014, Vols. 592- 594 pp 1647-1651
4.	Hazard Identification in Electrical Discharge Machining (EDM) Process Using What-If Analysis	S.P.Sivapirakasam, S.Thiyagarajan, P.Bineesh, Jose Mathew, M.Surianarayanan	Applied Mechanics and Materials	2014, Vols. 592- 594 pp 2508-2512
5.	Study of Posture and discomfort in handling machines in manufacturing industry	K. R. Balasubramanian, S. P. Sivapirakasam, Nanda Naik Korra, Kranti Kumar dhruw	Applied Mechanics and Materials	2014, Vols. 592- 594 pp 2552-2556
6.	Analysis of Chemical	K R Balasubramanian,	Applied	2014,

	Degradative Effects on Low Voltage PVC Insulation using DSC	S P Sivapirakasam, Jose Mathew	Mechanics and Materials	Vols. 592-594 pp 2475-2480
7.	Investigation of Whole body vibration on Urban Midi Bus	M Jaganmohan Rao, S.P Sivapirakasham, K.R Balasubramanian, Sreenath K.T.	Applied Mechanics and Materials	2014, Vols. 592-594 pp 2066-2070
8.	Experimental Investigations on a 1.00 m ² Solar Gel Pond	N Sozhan, T Senthilvelan, T Kaliyappan, E Vijayakrishna Rapaka, S.P.Sivapirakasam	Applied Mechanics and Materials	2014, Vol 592-594 pp 2360-2364
9.	Reduction of Welding Fumes by Nano TiO ₂ Coating on Electrodes	Sreejith Mohan, S.P. Sivapirakasam, M.C. Santhosh Kumar, M. Surianarayanan	Journal of Materials Processing Technology	2015, vol 219, pp 237-247
10.	An experimental investigation on flow boiling heat transfer enhancement using spray pyrolysed alumina porous coatings	S Kumar, S Suresh, Q Yang, CR Aneesh	Applied Thermal Engineering	2014, 71 (1), 508-518
11.	An Experimental Study of Forced Convective Fluid Flow in Divergent Minichannels Using Nanofluids	A Dominic, Sarangan, S Suresh, VS Devah Dhanush	Applied Mechanics and Materials	2014, 592, 1418-1422
12.	Flow boiling heat transfer enhancement on copper surface using Fe doped Al ₂ O ₃ -TiO ₂ composite coatings	CS Kumar, S Suresh, CR Aneesh, MC Kumar,	Applied Surface Science	2014

		AS Praveen, K Raji		
13.	Flow boiling heat transfer enhancement using carbon nanotube coatings	S Kumar, S Suresh, L Yang, Q Yang, S Aravind	Applied Thermal Engineering	2014,65 (1), 166-175
14.	An experimental study on heat transfer characteristics of paraffin wax in horizontal double pipe heat latent heat storage unit	SP Jesumathy, M Udayakumar, S Suresh, S Jegadheeswaran	Journal of the Taiwan Institute of Chemical Engineers	2014
15.	Performance analysis of an in-pond heat exchanger of a salt gradient solar pond	K Karunamurthy, K.Murugumohankumar S Suresh	Applied Solar Energy	2014,50 (2), 84-89
16.	Heat Transfer Performance of Al_2O_3 /Water Nanofluids in a Mini Channel Heat Sink	A Dominic, J Sarangan, S Suresh, M Sai	Journal of nanoscience and nanotechnology	2014,14 (3), 2368-2376
17.	Turbulent Heat Transfer and Pressure Drop Characteristics of Dilute Water Based Al_2O_3 -Cu Hybrid Nanofluids	S Suresh, KP Venkitaraj, MS Hameed, J Sarangan	Journal of nanoscience and nanotechnology	2014,14 (3), 2563-2572

18.	Thermal Performance of Ethylene Glycol Based Nanofluids in an Electronic Heat Sink	P Selvakumar, S Suresh	Journal of nanoscience and nanotechnology	2014,14 (3), 2325-2333
19.	Laminar Heat Transfer and Friction Factor Characteristics of Carbon Nano Tube/Water Nanofluids	P Rathnakumar, K Mayilsamy, S Suresh, P Murugesan	Journal of nanoscience and nanotechnology	2014,14 (3), 2400-240
20.	Performance and Emission characteristics of CI engine fuelled with diesel and oxygenated fuel blends	Ramabalan,S., Pushparaj.T., V. Arul Mozhi Selvan	International Journal of Global Warming	Vol. 7, No. 2, pp 173-183
21.	Effects Of Alumina Nanoparticles In Waste Chicken Fat Biodiesel On The Operating Characteristics of A Compression Ignition Engine,	Naresh Kumar Gurusala, V. Arul Mozhi Selvan	Clean Technology and Environmental Policy	2014, DOI 10.1007/s10098-014-0825-5
22.	Effect of Cerium Oxide Nanoparticles and Carbon Nanotubes as fuel-borne additives in Diesterol blends on the performance, combustion and emission characteristics of a variable compression ratio engine	V. Arul Mozhi Selvan, R.B. Anand, M. Udayakumar	Fuel	2014, 130 (2014) pp 160-167
23.	Effect of EGR on Combustion and Emissions Characteristics of a CI Engine Fuelled with Waste Chicken Fat Biodiesel	Naresh Kumar Gurusala , Richu Zachariah, V. Arul Mozhi Selvan	Applied Mechanics and Materials	2014, Vol. 592 – 594, pp 1481-1486

24.	Performance Evaluation of A Novel Low Cost Biogas System For Rural Application	P.Sethumadhavan, V. Arul Mozhi selvan	International Journal of Advanced Technology & Engineering Research	Vol 4, Spec.Issue 2, pp 98-102
25.	Multi-objective optimization of activated tungsten inert gas welding of duplex stainless steel using response surface methodology	Nanda Naik Korra, M. Vasudevan and K. R. Balasubramanian	International Journal of Advanced Manufacturing Technology, Accepted	Vol 77, Issue 1-4, pp 67-81, 2015.
26.	Numerical studies on heat transfer and fluid flow during laser welding of thin sheet	K. R.Balasubramanian, T. Suthakar, K.Sankaranarayananamy G. Buvanashakaran	Applied Mechanics and Materials	2014 , Vol. 592-594, pp. 571-578
27.	Finite element simulation of A-TIG welding of duplex stainless steel 2205 using SYSWELD	K.N. Naik, K. R.Balasubramanian, M. Vasudevan	Applied Mechanics and Materials	2014 , Vol. 592-594, pp. 374-379
28.	Thermo - Mechanical Analysis of TIG Welding of AISI 316LN Stainless Steel	K. C. Ganesh, M. Vasudevan , K. R.Balasubramanian, N. Chandrasekhar P. Vasantharaja	Materials and Manufacturing Processes	2014, Vol. 29, pp. 903-909
29.	Numerical analysis and experimental validation of hardness and microstructural changes during laser transformation hardening of low alloy steel plates	P. Dinesh Babu, G. Buvanashakaran K. R. Balasubramanian	Proceedings of the Institution of Mechanical Engineers, Part L, Journal of Materials: Design and Applications	Vol. 228(3) 217-230. 2014.
30.	Artificial Neural Network Approach To Study The Effect Of Injection Pressure and Timing On Diesel Engine Performance Fueled	G. R. Kannan, K. R. Balasubramanian R. Anand	International Journal of Automotive Technology	Vol. 14, No. 4, pp. 507-519, 2013

	With Biodiesel			
31.	“Performance, combustion and emission characteristics of a diesel engine using carbon nanotubes blended Jatropha methyl esters emulsions”,	Sadhik Basha, J., Anand, R. B.	Alexandria Engineering Journal	2014, pp. 259 – 273.
32.	., “Techniques to improve the performance while reducing the pollutants level in the exhaust gases of compression ignition engines – A Review”,	Muthe Srinivasarao, Anand, R. B.	Journal of Engineering and Applied Sciences,	2014, Vol. 9, No. 5, pp. 828 – 844.
33.	“Experimental investigation on optimization of parameters of thermocatalytic cracking process for H.D.P.E. & P.P. mixed plastic waste with synthesized alumina-silica catalists”, ,.	Narayanan, K. S., Anand, R. B.	Applied Mechanics and Materials	2014, pp. 307 – 311.
34.	“Working characteristics of a C.I. engine fuelled with oxygenates as additives in Jatropha biodiesel”, ,.	Prabu, A., Anand, R. B.	Applied Mechanics and Materials	2014, pp. 1842 – 1846.
35.	“Working characteristics of a DIC engine by using water emulsion biodiesel fuels”, ,	Srinivasa Rao, Anand, R. B.,	Applied Mechanics and Materials	2014, pp. 1847 – 1851
36.	“Experimental investigation on DIC engine by using chemical and nano additives blended biodiesel”,	Arun, R., Srinivasa Rao, M., Prabu, A., Anand, R. B.	Applied Mechanics and Materials	2014, pp. 1575 – 1579
37.	Parametric study of pool boiling heat transfer with nanofluids for the enhancement of critical heat flux: A review	R. Kamatchi and S. Venkatachalapathy	International Journal of Thermal Sciences	2015, (87), 228-240

38.	Comparative Study on Heat Transfer Characteristics of Sintered and Mesh Wick Heat Pipes using CuO Nanofluids	G. Kumaresan, S. Venkatachalapathy L. G. Asirvatham S. Wongwises	International Communications in Heat and Mass Transfer	2014, (57), 208-215.
39.	Heat Transfer Studies on Condensation using Heat Pipes	Punit Singh, S. Venkatachalapathy G. Kumaresan	Applied Mechanics and Materials	2014, (592), 1617-1621
40.	Biodiesel production from waste cooking oil using KBr impregnated CaO as catalyst	Sneha E.Mahesh, R.Anand, K.M.Meera S.Begum, Anantharaman Narayanan	Energy Conversion and Management	2015, 91, 442-450
41.	Workability study on 99.04 % pure aluminum processed by ECAP	Surendarnath.S, K.Sankaranarayanan B. Ravisankar	Materials and manufacturing Processes	2014, 29 (6), 1-6.
42.	Experimental investigation on performance of New equal Channel Angular Pressing Die	Surendarnath.S, K.Sankaranarayanan B. Ravisankar	IOP Conference Series- Materials Science and Engineering	2014, 63, 1-8.
43.	A Comparative Study of commercially Pure Aluminium Processed by ECAP Using Conventional and New Die	Surendarnath.S, K.Sankaranarayanan B. Ravisankar	Materials and manufacturing Processes	2014, 29 (10), 1172-1178
44.	Thermoeconomic analysis of R134a-DMAC vapour absorption refrigeration system,	V. Mariappan, M. Udayakumar, Sah Md Fahim Anwar	International Journal of Applied Mechanics and Materials	Vols. 592-594 (2014), pp 1837-1841.
45.	Thermodynamic analysis of	A. Kathiravan,	International	Vols. 592-

	heat and mass transfer enhancement for R134a-DMAC/CNT vapour absorption refrigeration system	E.Karthikeyan, V.Mariappan, C. T. Muthiah	Journal of Applied Mechanics and Materials	594 (2014), pp 1832- 1837.
46.	Numerical Modeling of Year-Round Performance of a Solar Parabolic Dish Thermoelectric Generator, ,	G. Muthu, S. Shanmugam, AR.Veerappan	Journal of Electronic Materials	2015 In Press
47.	Mathematical Modeling of Thermoelectric Generator with Solar Parabolic Dish	G. Muthu, S. Shanmugam, AR.Veerappan	Applied Mechanics and Materials,	2015 Vols. 669, pp. 558 – 563.
48.	Solar Parabolic Dish Thermoelectric Generator with Acrylic Cover	G. Muthu, S. Shanmugam, AR.Veerappan	Energy Procedia	2014 Vol. 54, pp. 2 – 10
49.	Determination of collapse loads in pipe bend with ovality and variable wall thickness under internal pressure and in-plane opening moment	A. Buckshumiyan, AR. Veerappan, S. Shanmugam	International Journal of Pressure Vessels and Piping	2014 Vol. 123 - 124, , pp. 1 – 9.
50.	Thermal performance of solar dryer with oscillating-bed for drying of non-parboiled paddy grains	S. Shanmugam, P. Kumar, AR. Veerappan,	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects,	2014 Vol. 36 (17), pp.1877 – 1885.
51.	Experimental evaluation of energy and exergy efficiency of solar parabolic dish thermoelectric power generator	S. Shanmugam, AR. Veerappan, M. Eswaramoorthy,	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	2014 Vol. 36 (17), pp. 1865 – 1870.
52.	Study on Effect of Shape Irregularities on Collapse Loads of Pipe Bends with	Sumesh Sasidharan, Arunachalam Veerappan,	Applied Mechanics and	2014 Vols. 592- 594, pp.

	Critical Circumferential Throughwall Crack Under In-plane Closing Bending,	Subramaniam Shanmugam,	Materials	980-984.
53.	Effect of shape imperfections on thin-walled pipe bends under out-of plane moment and internal pressure,	A. Buckshumiyam, AR. Veerappan, S. Shanmugam,	Applied Mechanics and Materials	Vols. 592-594, 2014, pp. 1050-1054.
54.	Energy and Exergy Analysis of Solar Parabolic Dish Thermoelectric Generator,	G.Muthu, S.Shanmugam, AR.Veerappan,	Applied Mechanics and Materials	Vols. 592-594, 2014, pp. 2437-2441.
55.	Modeling and analysis of solar parabolic dish thermoelectric generator,	S. Shanmugam, M. Eswaramoorthy, AR. Veerappan,	Energy Sources, Part A: Recovery, Utilization, and Environmental Effects,	Vol. 36, 2014, pp. 1531 – 1539.

8. Ph.D Awarded

S.No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1.	M. Nalla Mohamed	Dr. S.P.Sivapirakasam	N.I.T., Trichy
2	Naresh Kumar Gurusala	Dr. V. Arul Mozhi Selvan	N.I.T., Trichy
3	J. Ronald Aseer	Dr.K.Sankaranarayananasamy	N.I.T., Trichy

12. Summary

S.No	Details	Total Nos		
1.	International Journals	55		
2.	National Journals	-		
3.	International conference publications	15		
4.	National conference publications	-		
5.	Sponsored Project	Nos:	9	Amount: Rs.2,90,10,880

6.	No of Ph.D produced	3
7.	No of patents obtained	-
8.	No of books published	-

Department : METALLURGICAL AND MATERIALS ENGINEERING**1. Notable Achievements**

Dept. received **five year NBA accreditation for B.Tech Programme** with effect from July 2014. The NBA committee commended the role played by the faculty across various domains of Research, Teaching and consultancy activities. Also, they appreciated the efforts taken in procuring advanced equipments like XRD, Friction Stir Welding unit, Vacuum induction melting furnace etc.,.

1.1 Faculty Members

S.No	Name	Details of Prizes / Awards	Organization
1.	Dr. K. Sivaprasad	Sir Dorabji Tata – TR Anantharaman faculty fellowship	University of Texas, USA
2.	Prof. S. Natarajan	Golden Jubilee Distinguished alumni Award for Serving Personnel at NIT, Trichiruppalli on July 19, 2014	NITT

1.2 Students

S.No	Name	Details of Prizes / Awards	Organization
1	Apoorva Saraf (IV year)	Selected as student ambassador under Advanced Student Admission Programme (ASAP)	SP Jain School Management, Singapore Campus
2	Sriram G	Selected to represent India in WSC 2015	Sao Paulo, Brazil under Graphic Design Category
3	Mukka Anudeep -	Awardee of Indian Ministry of steel scholarship	Government of India
4	Vrindaa Somjit	DAAD scholarship MITACS scholarship; Cargill global scholars award	
5	Kunduru Tejaswini	Awardee of Indian Ministry of steel scholarship	Government of India
6	Vijay Adithya	Awardee of Indian Ministry of steel scholarship	Government of India

2. Conference**2.1 Organized**

International (Being arranged)

S.No	Coordinator	Programme	Period
1.	Dr. S. Kumaran, Dr. S. Muthukumaran and Prof. S. Raman Sankaranarayanan	AMMA 2015 (Advances in Materials, Manufacturing and Applications)	9-11 th April 2015

2.2 Papers presented by the Faculty / Students**International**

Author (s)	Details
1) G.Kondaiah, K.Chandra Sekhar, B.Chaitanyakrushna, B.Ravisankar , S.Kumaran	“Characterization of mechanically alloyed Al5083 alloy and composite and consolidation by equal channel angular pressing” International conference on Engineering and Technology Innovation (ICETI 2014) held at Kenting, Taiwan during 31 October – 04 November 2014.
2) M. Siva Prasad, M. Ashfaq, N. Kishore Babu, A. Sreekanth, K. Sivaprasad , V. Muthupandi,	Effect of Micro Arc Oxidation on Corrosion Behavior of Mg AZ31 Alloy GTA Welds”, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli , India, December 5-7, 2014, pp.670-674.
3) K.S.V.B.R. Krishna, M.Ashfaq, V. Varun, K. Sivaprasad , K. Venkateswarlu, Sarma SR. Akella	“Microstructural Characterization and Mechanical Properties of Cryorolled AA8090 Alloy”, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli , India, December 5-7, 2014, pp.675-678.
4) I. Narasimha Murthy, K. Sivaprasad , J. Baburao	“Low Melting and High Strength Bulk Nanocrystalline Lead Free Sn-07Cu Solder Alloy by Mechanical Alloying”, Proceedings of International Conference on Advances in Design and Manufacturing, National Institute of Technology Tiruchirappalli , India, December 5-7, 2014, pp.718-723.
5) E. Edward Anand,S. Natarajan	Effect of Carbon Nano Tube addition on the Corrosion behavior of pulse electro deposited Nano Crystalline Co – W coatings.Presented on International Conference on Electro Chemical Science and Technology, ICONEST 2014 , IISc Bangalore, August 9 – 11, 2014

6) M. Adam Khan,S. Sundarrajan S. Natarajan	Assessment on Plasma coatings towards Hot Corrosion behavior of Inconel 617 through factorial design for gas turbine applications Presented on International Conference on Electrochemical Science and Technology, ICONEST 2014 , IISc Bangalore, August 9 – 11, 2014
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National

Author (s)	Details
1. M. Adam Khan, S. Sundarrajan,S. Natarajan	Evaluation of thermal barrier coatings on Inconel 617 for gas turbine applications Presented on 17 th National Congress on Corrosion Control at CSIR – CECRI, Karaikudi organized by National Corrosion Council of India , Karaikudi, August 21 – 23, 2014
2. Susanti Vijaykumar, M.G.Sethuraman	Robust method of biogenic synthesis of Silver Nano Particles on Advancements and Innovations in Chemical Sciences(NCAICS) conducted by University of Mumbai
3. Mohammad Ittefaque Raza, Indraveer Singh Rajawat,S.Kumaran	Microstructural studies and Mechanical Properties of interrupted and rolled 7xxx (Al-12Zn-2.5Cu) Al alloy in multifunctional material Structure and Applciations (ICMMSA - 2014)" organised by the Centre of Interdisciplianry Research(CIR), Motilal Nehru National Institute of Technology, Allahabad.
4. Mohammad Ittefaque Raza, Indraveer Singh Rajawat,S.Kumaran	Precipitation hardening behaviour of Squeeze cast (Al-12Zn-3Mg-2.5Cu) Al alloy - structure property correlation; International Symposium for Research Scholars by the department of Metallurgical and Materials Engineering, IIT Madras.

3. Workshops / Seminars

3.1 Organized

Coordinator	Title	Period
1) Prof. V. Muthupandi	Microscopic techniques in materials characterization	Oct 10, 2014
2) Prof. V. Muthupandi	Structural Characterization	Oct14,2014

3) Dr. S. Muthukumar & Dr. S.P. Kumaresh Babu	Structural Failure Analysis	Oct 2014

3.2 Attended

Faculty	Details
1) Prof. S. Raman Sankaranarayanan, Dr. Kumaresh Babu, Dr. S. Muthukumar & Dr. S. Jerome	AWS / IWS one day programme in WRI BHEL; January 2015
2) Dr. B. Ravisankar & Dr.S.Kumaran	International conference on Engineering and Technology Innovation (ICETI 2014) held at Kenting, Taiwan during 31 October – 04 November 2014.

Students	Details

4. Invited / Guest Lectures Delivered by the Faculty

Faculty	Topic	Programme	Place & Date
1) Prof. V. Muthupandi	Chief Guest	One day National Level Student Symposium for Students - SMTECH 15	Shanmugha College of Engineering and Technology & 13th Feb 2015
2) –do-	X-Ray diffraction Techniques	Advanced Characterization Techniques of Materials ACTM - 2015	Department of Mechanical Engineering, College of Engineering, Anna University, Guindy on 23.2.2015
3) Prof. S. Raman Sankaranarayanan	Opportunities and Challenges in Steel industry	Invited Lecture	PSG Tech, Coimbatore; June 20, 2014
4) Dr. B. Ravisankar	ECAP of steels for high performance	National workshop on Metallurgy of high performance steels	PSG College of Technology, Coimbatore, April 04, 2014
5) –do-	Mechanism of Plastic Deformation	National workshop on Advances Metal Forming	Anna University – Regional Centre, Coimbatore, April 09, 2014
6) –do-	ECAP of Steels	UGC-NRCM workshop on “Severe Plastic Deformation”	Indian Institute of Science, Bangalore, May 12, 2014.

7) -do-	Severe Plastic Deformation	TEQIP Sponsored course on "Advances in Materials and Processes"	PSG College of Technology, Coimbatore, May 26, 2014
8) Dr. N. Rameshbabu	Development of nanostructured oxide and oxide/hydroxyapatite composite coatings on metallic implant materials by plasma electrolytic oxidation	Three Days National conference on Bio-Nanotechnology (BIONANO' 14) organized by Department of Nanotechnology Sri Ramakrishna Engineering College, Coimbatore	21 st Aug 2014
9) -do-	Development of nanostructured ceramic coatings on metallic implant materials by plasma electrolytic oxidation	Second International Conference on Nanostructured Materials and Nanocomposites (ICNM 2014) organized by International and Interuniversity Centre for Nanoscience and Nanotechnology (IIUCNN), Mahatma Gandhi University, Kerala, India.	19-21 Dec 2014
10) Dr. K. Sivaprasad	Electron Microscopy	Short term course on Microscopic Techniques in Materials Characterization, Dept. of MME, NIT Trichy.	10 th October, 2014
11) Dr.S.P.Kumaresh Babu		Lecture on Advanced materials and processing, TEQIP II sponsored program by PSG College of Technology, Coimbatore	23-29 may 2014

5. Sponsored Projects undertaken.

Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
1) Dr. N. Ramesh Babu	Surface Modification of biodegradable magnesium alloys by plasma electrolytic processing for	DST, New Delhi	39.03

	orthopaedic implant applications		
2) Dr. N. Ramesh Babu	Doped hydrogenated amorphous silicon carbon alloys (a-SiC:H) for artificial heart valve and stent applications	DBT, New Delhi	3.10
3) Dr. S. Muthukumaran	Friction welding of tube to tube sheet or plate by adopting an external tool	UGC- DAE	7.00
4) Dr. Durai Selvam and S. Muthukumaran	Structural Integrity evaluation studies on high speed transmission shaft for turbo engine application.	GTRE	49.00
5) Dr.S.Kumaran	Development of Nanostructured SiGe thermo-electric materials by high energy ball milling and Spark Plasma Sintering	ISRO	18.00
6) Dr.S.Kumaran	Synthesis and characterization of SiGe thermo-electric materials by high energy ball milling and Spark Plasma Sintering	MHRD	52.00

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S. No.	Equipment	Amount (Rs. In Lakhs)
1.	Formability tester	10
2	Seebeck Co-efficient and Electrical Resistivity Measuring Set up	32

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

S. No	Title	Author(s)	Journal	Year Vol. (No) Page
1	Strengthening Mechanisms in Multiwalled Carbon Nanotubes Reinforced Co-W Pulse Electrodeposited Coatings	E. Edward Anand,S. Natarajan	Materials and Manufacturing Processes Taylor & Francis	DOI10.1080 /10426914.2015.1004697:
2	Effect of Carbon Nanotubes on Corrosion and Tribological Properties of Pulse-Electrodeposited Co-W Composite Coatings	E. Edward Anand,S. Natarajan	Journal of Materials Engineering and Performance	January 2015, Volume 24, Issue 1, pp 128-135
3	Degradation mechanism for high temperature erosion in surface modified IN718 superalloy.	K.G.Thirugnanasambantham, S. Natarajan	Surface Engineering Maney Publishing UK	Volume: 31, Issue: 1, Jan 2015, pp. 24 - 28
4	Hot corrosion behaviour of Inconel 617 in mixed salt environment at 900 and 1000°C for gas turbine applications High Temperature Materials and Processes	M. Adam Khan ,S. Sundarrajan & S. Natarajan	DE GRUYTER GERMANY	DOI: 10.1515/htmp-2014-0054 , June 2014
5	Preparation and characterisation of nano crystalline cobalt–phosphorus coatings reinforced with carbon nanotubes	E. E. Anand, S. Natarajan	Surface Engineering Maney Publishing UK	2014;30(10),716-721
6	Influence of plasma coatings on Inconel 617 for gas turbine applications	M. Adam Khan S. Sundarrajan S. Natarajan	Surface Engineering Maney Publishing UK	2014;(9),656-661
7	Oxidation and Hot Corrosion Behavior of	M. Adam Khan,S. Sundarrajan	Materials and Manufacturing	2014;22(9), 29, 832-839

	Nickel-Based Superalloy for Gas Turbine Applications	S. Natarajan,P. Parameswaran, E. Mohandas	Processes Taylor and Francis UK	
8	Erosion Wear Characteristics of Surface Modified Grey Cast Iron by WC-Co-Cr/NiCrBSi coating using HVOF Thermal Spray Processes	J. Yogananth, S. Natarajan S. P .Kumaresh Babu	Materials Performance and Characterization ASTM international	USA 2014;3(1),3 09-326
9.	Selection and characterization of HVOF cermet coatings for volutes of high capacity pumps of opencast lignite mines	S. Natarajan ,M.Kumarasamy	Surface Engineering Maney Publishing UK	DOI: http://dx.doi.org/10.1179/1743294415Y.0000000015
10	Static shear strength and fatigue life of refill friction stir spot welded AA 6061-T6 sheets	S. Venukumar, S. G. Yalagi, S. Muthukumaran and S. V. Kailas	Science and Technology of Welding and Joining.	(2014) 19 (3), 214-223
11	Failure modes and Fatigue behavior of conventional and Refilled Friction Stir Spot welds in AA 6061-T6 sheets	S. Venukumar, S. Muthukumaran, Swaroop Yalagi, and Satish V. Kailas	International Journal of Fatigue	(2014) 61, 93-100.
12	Underwater Friction stir spot welding of AA 6061-T6 sheets	S.Venukumar, S.Praveenkumar and S.Muthukumaran	OPJIT International Journal of Innovation & Research,.	(2014) 03, 2319-4340
13	Microstructural and mechanical properties of walking friction stir spot welded AA 6061-T6 sheets	S.Venukumar, Bibin Baby, S.Muthukumaran and Satish V. Kailas	Procedia Materials Science,	(2014) 6, 656-665
14	Subshoulder formation during friction stir welding of steel using tungsten alloy tool	A Pradeep, S Muthukumaran, PR Dhanush	Science and Technology of Welding and Joining	(2014) 18 (8), 671-679.
15	Effect of R-DSFSW on Mechanical and Metallurgical Properties of Commercial Pure Aluminum	K Tejonadha Babu, P Athul, P Kranthi Kumar, S Muthukumaran	Procedia Materials Science	(2014) 5, 795-801.
16	Mechanical, Metallurgical	K Tejonadha Babu, P Kranthi	Procedia Materials Science	(2014) 6, 648-655

	Characteristics and Corrosion Properties of Friction Stir Welded AA6061-T6 Using Commercial Pure Aluminium as a Filler Plate	Kumar, S Muthukumaran		
17	Numerical Simulation of Pulsed Nd-YAG Laser Butt Welding of AISI 304L Stainless Steel Sheet and Experimental Validation	Jazeel Rahman Chukkan, M Vasudevan, S Muthukumaran, KC	Applied Mechanics and Materials	(2014) 592, 565-570.
18	Finite Element Modeling of TIG Welding of Aisi 304l Stainless Steel and Experimental Validation	V.V Narayanareddy, M Vasudevan, S Muthukumaran, KC Ganesh, N Chandrasekhar, P Vasantaraja,	Applied Mechanics and Materials	(2014) 592, 368-373
19	Microstructure and Mechanical Properties of Bobbin Tool Friction Stir Welded Commercial Pure Aluminum	K.Tejonadha Babu, P.Kranthi kumar, S.Muthukumaran	OPJ International Journal	In press
20	Effect of projection on joint properties of friction welding of tube-to-tube plate using an external tool	S Senthil Kumaran, S Muthukumaran	The International Journal of Advanced Manufacturing Technology	In press
21	Preparation of rare earth transition metal (RE: Y, TM: Co) intermetallic compounds by calciothermic reduction diffusion process	M Ilayaraja, L John Berchmans (CSIR CECRI), Sankara Raman Sankaranarayana n	Metallurgical and Materials Engineering	2014, vol. 20, n 1, pp 35 - 40
22	Experimental aspects of densification and arc radius of barreling in sintered P/M AISI 8640 steel during hot upset powder perform forging	Y G Bala, S Raman Sankaranarayana n , K S Pandey	International Journal of Metallurgical and Materials Science and Engineering (IJMMSE / TJPRC)	Feb 2015, vol. 5, n 1, pp 39 – 52
23	Equal Channel Angular Pressing of an Aluminium Magnesium Alloy at Room Temperature	Ramesh Kumar S, Ravisankar B , Sathya P, Thomas Paul V, and Vijayalakshmi M	Trans IIM	Volume 67, Issue 4 (2014), Page 477-484

24	Evaluation of Quality Diffusion Bonding in Similar Material (Cu/Cu) Using Ultrasonic 'C' Scan Testing Method	S. Suresh Kumar and B. Ravisankar	Applied Mechanics and Materials	Vols. 592-594 (2014) pp 289-293.
25	Densification Of Mechanically Alloyed Al5083 -5wt% Y2o3 Nano-Composite By Equal Channel Angular Pressing	Pravir Polly, K.Chandra Sekhar, B.Ravisankar , S.Kumaran	Applied Mechanics and Materials	Vols. 592-594 (2014) pp 963-967
26	Densification and Consolidation of Al 5083 Alloy Powder by Equal Channel Angular Pressing	Kondaiah Gudimetla, B Chaithanyakrushn, K Chandra Sekhar, B Ravisankar and S Kumaran	Applied Mechanics and Materials	Vols. 592-594 (2014) pp 112-116
27	Influence of experimental environment on the enhancement of ultra fine grain structure with optimum ductility of equal channel angular pressed copper	A.T.Vijayashakthivel, T.N.Srikanth Dath, B.Ravisankar	Applied Mechanics and Materials	Vols. 592-594 (2014) pp 410-415.
28	A Comparative Study of Commercially Pure Aluminum Processed by ECAP Using Conventional and New Die	S. Surendarnath, K. Sankaranarayananamy, and B. Ravisankar	Materials and Manufacturing Processes	Vol. 29 (2014) pp-1172-1178
29	Room Temperature Torsional Behavior of 15-Cr-15Ni Titanium Modified Austenitic Stainless Steel	Avik Kumar Mahata, Utpal Borah, Arvinth Davinci, Shaju K. Albert and B. Ravishankar	Procedia Engineering	86 (2014) 166 – 172.
30	Role of powder metallurgical processing and TiB reinforcement on mechanical response of Ti-TiB composites	M. Selvakumar, P. Chandrasekar, M. Mohanraj, B. Ravisankar , J.N. Balaraju	Materials Letters	144 (2015) 58-61.
31	Mechanical properties of titanium-titanium boride Composites through nanoindentation and	M. Selvakumar,P. Chandrasekar, B. Ravisankar , J. N. Balaraju, and M.	Powder Metallurgy and Metal Ceramics	Vol. 53, Nos. 9-10, January, 2015 557-

	ultrasonic techniques - An evaluation perspective	Mohanraj		565
32	Effect of electrical parameters on morphology and in-vitro corrosion resistance of plasma electrolytic oxidized films formed on zirconium	M. Sandhyarani, M. Ashfaq, T. Arunnelliappan, M.P. Selvan, S. Subramanian, N. Rameshbabu	Surface & Coatings Technology	March 2015
33	Enhanced visible light photocatalytic activity of porous P-block elements (C, N & F) doped TiO ₂ coatings on Cp-Ti by micro-arc oxidation	S.Sridhar, A.Viswanathan, K.Venkateswarlu, N.Rameshbabu	Journal of Porous Materials J Porous Mater	(2015) 22:545–557 April2015
34	Role of electrolyte composition on structural, morphological and in-vitro biological properties of plasma electrolytic oxidation films formed on zirconium	M. Sandhyarani, T. Prasad Rao N. Rameshbabu	Applied Surface Science	317, 198– 209Oct 2014
35	Estimation of Crystallite Size, Lattice Strain and Dislocation Density of Nanocrystalline Carbonate Substituted Hydroxyapatite by X-ray Peak Variance Analysis	K. Venkateswarlu, M. Sandhyarani, T.A. Nellaippan, N. Rameshbabu	Procedia Materials Science	5 (2014) 212 – 221 Sep 2014
36	Effect of Ag doping on antibacterial and Photocatalytic Activity of Nanocrystalline TiO ₂	M. Harikishore, M. Sandhyarani, K. Venkateswarlu, T.A. Nellaippan, N. Rameshbabu	Procedia Materials Science	6 (2014) 557 – 566 Sep 2014
37	Study of microwave assisted growth of meta- stable 1-D h-MoO ₃	A. Chithambararaj, N. Rameshbabu , A. Chandra Bose	Science of Advanced Materials	Volume 6(7), 1302- 1312 July 2014
38	Effect of coarse grain matrix content on the mechanical behavior of trimodaled AA 6061-	S. Sivasankaran, K. Sivaprasad , R. Narayanasamy, M. Saravanan,	INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING	(SCIE) ISSN: 0268-3768 (Impact

	TiO ₂ nanocomposite prepared by mechanical alloying		TECHNOLOGY, (In press).	factor 1.779) 2015
39	Effect of Cryorolling on the Mechanical Properties of AA5083 alloy and the Portevin-Le Chatelier Phenomenon	K.S.V.B.R.Krishna, K.ChandraSekhar, R.Tejas, N.Naga Krishna, K.Sivaprasad , R.Narayanasamy, K.Venkateswarlu,	MATERIALS AND DESIGN Phenomenon	67, 2015, 107-117. (SCIE) ISSN: 0261-3069 (Impact factor 3.171)
40	Microstructural observation, consolidation and mechanical behavior of AA 6061 nanocomposites reinforced by γ -Al ₂ O ₃ nanoparticles	D. Jeyasimman, K. Sivaprasad , S. Sivasankaran, R. Ponalagusamy, R. Narayanasamy, VijayakumarIyer,	ADVANCED POWDER TECHNOLOGY(In press).	(SCIE) ISSN:0921-8831 (Impact factor 1.642)
41	Evaluation of Microstructures and Mechanical Properties of Dissimilar Materials by Friction Welding	C.H. Muralimohan, S. Haribabu, Y. Hariprasada Reddy, V. Muthupandi, K. Sivaprasad	PROCEEDIA MATERIALS SCIENCE	5 (2014) 1107-1113. ISSN: 2211-8128
42	Properties of Friction Welding Titanium-stainless Steel Joints with a Nickel Interlayer	C.H. Muralimohan, V. Muthupandi, K. Sivaprasad	PROCEEDIA MATERIALS SCIENCE,	5 (2014) 1120-1129. ISSN: 2211-8128
43	Characterization of Nanocrystalline AlCoCrCuNiFeZn High Entropy Alloy Produced by Mechanical Alloying	C. SajithBabu, K.Sivaprasad , V.Muthupandi, Jerzy A. Szipunar	PROCEEDIA MATERIALS SCIENCE	5 (2014) 1020-1026. ISSN: 2211-8128
44	Microstructural and Nanoindentation Studies Across Diffusion-Bonded Interfaces in Al/Cu Metal Intermetallic Laminates	S. S. M. Kartheeka, K.V. Vamsi, B. Ravisankar, K. Sivaprasad , S. Karthikeyan	PROCEEDIA MATERIALS SCIENCE	6 (2014) 709-715. ISSN: 2211-8128
45	Thermal Analysis and Nanoindentation Studies on Nano crystalline AlCrNiFeZn High Entropy Alloy	C.SajithBabu, N.T.B.N.Koundinya, K.Sivaprasad , Jerzy A. Szipunar,	PROCEEDIA MATERIALS SCIENCE,	6 (2014) 641-647. ISSN: 2211-8128
46	Erosion Wear Characteristics Of	J.Yogananth S.Natarajan	International Journal of	VOL. 3 (2014)No.

	Surface Modified Grey Cast Iron By WC-Co-Cr / NiCrBSi Coating using HVOF Thermal spray process	S.P.Kumaresh Babu	Materials performance and characterization (ASTM)	1, pp 309-326
47	Hot Corrosion Studies on Welded dissimilar Boiler steel in Power plant environment under cyclic condition	Appala Naidu A Kumaresh Babu S.P et. al	International Journal of ChemTech Research	Vol.6(2014) No.2, pp1325-1334
48	Air oxidation and molten salt corrosion studies on bimetallic boiler steel at elevated temperatures	Appala Naidu A Kumaresh Babu S.P	The Journal of Corrosion Science and Engineering	Vol 17 (2014) No.15
49	Corrosion Analysis of AZ61 Alloy with Different Level of Ca Addition and Aging	S. Manivannan Kumaresh Babu S.P	Applied Mechanics and Materials	Vols. 592-594 (2014) pp821-825
50	Microstructure and Mechanical Properties of Cast Mg-6Al-1Zn-XRE Alloy with Additions of Yttrium and Different Ageing Temperature	S. Manivannan Kumaresh Babu S.P et. al	European Journal of Scientific Research	Vol. 122 (2014) No 4 pp. 381-391
51	Synthesis, characterization and ECAP consolidation of CNT reinforced AA4032 Nanocrystalline composites produced by High Energy Ball Milling.	M.S.Senthil Saravanan, S.P.Kumaresh Babu, K.Sivaprasad	Journal of Engineering Materials and Technology	Paper accepted on Oct 28, 2014 (MATS-14-1096)
52	Corrosion behaviour of Mg-6Al-1Zn+XRE magnesium alloy with minor addition of yttrium”	S.Manivannan, S.P.Kumaresh Babu and Srinivasan Sundarrajan	Journal of Materials Engineering and Performances	DOI: 10.1007/s11665-015-1432-2
53	Investigation and Corrosion Performance of Cast Mg-6Al-1Zn+XCa alloy under Salt Spray Test (ASTM-B117)	S.Manivannan, P.Dinesh, S.P.Kumaresh Babu and Srinivasan Sundarrajan	Journal of Magnesium and Alloys.	ISSN: 22139567, DOI: 10.1016/j.jma.2015.02.002
54	Does aluminium and niobium substitution for nickel actually improve the electrochemical performance of Mg ₂ Si	Venkateswari Ayyavu, Kumaran Sinnaeruvadi	Material Express,	Vol. 5, No. 2, 2015.
55	Densification and microstructural studies	V.S.Balaji., S.Kumaran	Powder Technology	Vol.264,pp. 536-

	of titanium–boron carbide (B4C) powder mixture during spark plasma sintering			540.2014
56	Electrochemical behavior of Mg ₆₇ Ni(33-x)Nb _x (X=0,1,2 and 4) alloy synthesized by High Energy ball milling	A.Venkateswari, C.Nithiya, S.Kumaran,	Procedia Material Science	5,2014,679-687.

7.2 Students

Nil

8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	Thesis title	University / Institute
1.	K. Venkateswarlu	Dr. N. RameshBabu	Surface modification of titanium by Micro arc oxidation and Characterization for biomedical Applications	NIT Tiruchirappalli
2.	M Sandhya Rani	Dr. N. RameshBabu	Fabrication and characterization of nanostructured ZrO ₂ and ZrO ₂ /hydroxyapatite composite coatings on Zr for biomedical applications	NIT Tiruchirappalli
3.	Dr.J. Yoganandh	Prof. S. Natarajan & Dr. S. P. Kumaresh babu	Erosion and corrosion behavior of materials under mining conditions with and without surface modification	NIT Tiruchirappalli
4.	C.Anand chairman	Dr. S. P. Kumaresh babu	Abrasive wear behavior of fiber and particulate filler reinforced polymer matrix composites.	NIT Tiruchirappalli

10. Patent if any obtained by faculty

Patent number	: 5145/CHE/2014
Date of patent filing	: October 14, 2014
Title of the Innovation	: High Longevity Coatings and Alternate material for Erosion and Corrosion Resistance in Mining Pumps

Inventors of Patent : Prof. S. Natarajan & Dr. S. P. Kumaresh babu

This patent has been filed jointly with officials of NLC, Neyveli

11. Other Important Points

1) Prof. S. Raman Sankaranarayanan

- Elected Vice Chairman of Indian Institute of Metals Tiruchirappalli Chapter
- Elected Vice Chairman of Society for Failure Analysis Tiruchirappalli Chapter
- Served as PhD viva examiner for one student of PSG College of Technology Coimbatore / Anna University (June 2014)
- Served as member of BoS, Dept. of Metallurgy, PSG College of Technology Coimbatore
- Served as an expert in academic audit in the department of metallurgy, PSG Tech Coimbatore
- Served as expert to review project funding proposals in one of the schemes of Govt. of India
- Served as an expert referee for reviewing journal papers

2) Dr. K. SivaPrasad

- Chaired a session on “Composites” in International Conference on Advances in Design and Manufacturing (ICAD&M), Department of Mechanical Engineering, National Institute of Technology Tiruchirappalli, India, December 5-7, 2014.
- Chaired a session in International Mechanical Engineering Congress (IMEC-2014) organized by Department of Mechanical Engineering, National Institute of Technology Tiruchirappalli during 13

12. Summary

S.No	Details	Total nos			
25.	International Journals	56			
26.	National journals	0			
27.	International conference publications	6			
28.	National conference publications	4			
29.	Sponsored Project	No's:	6	Amount:	168.13 lakhs
30.	No of Ph.D produced	4			
31.	No of Patents obtained	1			
32.	No of books published	0			

Department : PHYSICS

1. Notable Achievements

1.1 Faculty Members: Nil

1.2 Students

S.No	Faculty Name	Name	Details of Prizes / Awards	Organization
1	Dr.A.Chandra Bose	A. Chithambararaj	Best Poster	BARC, Mumbai, Dec 09-13, 2014
2	Dr.N.Gopalakrishnan	S.Bhuvaneshwari	III Prize For Poster Presentation	EMCA 2014, India.
		Manu Joseph	Ii Prize For Poster Presentation	NDE2014 (ISNT), India.
3	Dr.R.Nagalakshmi	Rashid T P	National Scholarship Programme of Slovak Republic University of Presov Duration: 02/09/2014 to 02/12/2014	Slovak Academy Information Agency(SAIA) Sasinkova 10 812 20 Bratislava 1 Slovak Republic

2. Conference

2.1 Organised

International: Nil

National

S.No	Coordinator	Programme	Period
1	Dr. M. Ashok Prof. D. Sastikumar	Elemental, Compound and Phase Analysis by powder X-ray Diffraction (Organized) (Self-Financed)	19-20, Sept. 2014.
2	Dr. M. Ashok Dr. R.Sankaranarayanan	Waves and Oscillation in Science & Technology. (Organized)(Self- Financed)	7-8, October 2014

	Dr. B. Karthikeyan		
3	R. Nagalakshmi	Advancements in Crystalline Materials (Self-Financed Category)	One day course 5 Nov, 2014

2.2 Papers presented by the Faculty / Students

International

S. No	Author (s)	Details
1	Dr.N.Baskaran: 1.Lakshmi Priya K. B and BaskaranNatesan 2. Indrajith V. S and Baskaran 3. SathyaSheela S, Kanagaraj C and BaskaranNatesan, "	DAE Solid State Physics Symposium, Dec. 16-20, 2014, VIT, Vellore
2	Dr. J. Hemalatha : 4. R. GovindanKutty, M. NabeelRashin, K.Anuand J. Hemalatha*	A Comparative Study on the Rheological Behaviors of Coconut Oil Based Ferrofluids
3	5. T Prabhakaran , S Divya and J.Hemalatha*	Optimization of parameters for the fabrication of parametric PVDF flexible films
4	Dr. R. Justin Joseyphus : 6. K. Prakash and R. Justin Joseyphus,	Magnetic properties of flower like FeCo particles, ICMAGMA 2014, Sept 15-17, 2014, Pondicherry University, Puducherry.
5	Dr. R. Nagalakshmi : 7. S. Nallamuthu, Marian Reiffers R. Nagalakshmi	Presented a poster in the International Conference on Strongly Correlated Electron Systems (SCES 14) held in Grenoble, France during 7-11 , July 2014
6	8. S.Nallamuthu, T.P.Rashid K.Arun, Marian Reiffers R. Nagalakshmi	Presented an oral paper in the International Conference on Magnetic Materials and Applications (ICMAGMA- 2014), held in Pondicherry University, Pondicherry , India during September 15-17, 2014

7	Dr. S. Manivannan: 9. T. Kavinkumar, D. Sastikumar and S. Manivannan	“Reduced Graphene Oxide Coated Optical Fiber for Methanol and Ethanol Vapor Detection at Room Temperature”, SPIE Photonics Asia. 9-11 October 2014, Beijing, China.
8	10. L.R. Shobin and S. Manivannan	“Room Temperature Ammonia Vapor Sensing Properties of Transparent Single Walled Carbon Nanotube Thin Films”, “SPIE Photonics Asia. 9-11 October 2014, Beijing, China.
9	11. L.R. Shobin and S. Manivannan	Role of NaCl and Temperature in Glycerol Mediated Rapid Growth of Silver Nanostructures”, “International Conference on Nanotechnology (ICN – 2014)”, July 6-7, 2014, Singapore.

National

Sl. No	Author (s)	Details
1	V. Diwakar Naik, Kalyanavalli. V, T.K. Abilasha Ramadhas and D. Sasti Kumar	Non Destructive Studies Of Basalt Fiber Reinforced Composites, NDE 2014, Pune 4-6 Dec 2014
2	Kalyanavalli. V*, T.K. Abilasha Ramadhas and D. Sasti Kumar	A Comparitive Study Of Basalt And Glass Fiber Reinforced Composites By Nde Methods, NDE 2014, Pune 4-6 Dec 2014
3	Nitin M Rajeev, Kalyanavalli. V, and D. Sasti Kumar	Non Destructive Studies To Evaluate Impact Damage In Hybrid Glass-Basalt Fiber Composites, NDE 2014, Pune 4-6 Dec 2014
4	A. Chithambararaj and A. Chandra Bose	5 th DAE-BRNS Interdisciplinary Symposium on Materials Chemistry (ISMC 2014), Anushakti Nagar, BARC, Mumbai, Dec 09-13, 2014.
5	Chithambararaj, and A Chandra Bose	59 th DAE SSPS, Dec 16 th -20 th , 2014, VIT, Vellore
6	T Selvalakshmi and A Chandra Bose	59 th DAE SSPS, Dec 16 th -20 th , 2014, VIT, Vellore
7	R. Dhanabal, A. Chithambararaj. S. Velmathi and A. Chandra Bose	59 th DAE SSPS, Dec 16 th -20 th , 2014, VIT, Vellore

8	T. Selvalakshmi and A. Chandra Bose	International Conference on Luminescence and its Applications, Feb 9 th -12 th , 2015, PES College, Bangalore.
9	P MuhammedShafi and A. Chandra Bose	59 th DAE SSPS, Dec 16 th -20 th , 2014, VIT, Vellore
10	SubashKonerla, Ashis Kumar, N.Gopalakrishnan, AmitavaMitra	Evaluation of Residual stress and High Cycle Fatigue in Low Carbon Steel through Electromagnetic Non-Destructive Techniques
11	Manu Joseph, S.Thirunavukkarasu, N.Gopalakrishnan,B.P.C.Rao, C.K.Mukhopadhyay, and T.Jayakumar	Multifrequency Approach for Accurate Estimation of Thickness of Ferromagnetic Tubes using Remote Field Eddy Current Technique
12	R. Muthuganesan, S. Balakrishnan and R. Sankaranarayanan	Paper Title: Study on Isotropic Heisenberg Interaction for the Realization of SWAP ^{±α} Gates Program: 59th DAE Solid State Symposium organized by VIT University, Vellore Tamilnadu. During Dec 16-20, 2014
13	MuneeswaranMuniyandi and GiridharanNambiVenkatesan	Optical studies on metal oxide nanoparticles. 4th International Conference on Nanoscience and Nanotechnology, San Diego, USA, August 18-20, 2014.
14	R. Rathnaprabha, Muneeswaran, Dhanalaksmi, N.V. Giridharan	Structural, electrical and magnetic properties of multiferroic Bi _{1-x} Gd _x FeO ₃ (x = 0.00 and 0.15) R. DAE Symposium, VIT, Vellore, Dec 16-20, 2014.
15	RadhalayamDhanalakshmi, M.Muneeswaran, Pradeep Reddy Vanga, M. Ashok, and N.V. Giridharan	Photocatalytic activity of BiFeO ₃ nanoparticles synthesized through Hydrothermal method DAE Symposium, VIT, Vellore, Dec 16-20, 2014.
16	T. Kavinkumar and S. Manivannan	“Highly Exfoliated Few Layers of Graphene Oxide Thin Films using Spin Coating Technique” National Conference on Advanced Functional Materials (NCAFM-2014) 30-31, January 2014, Department of Physics, Bharathiar University.
17	L.R.Shobin and S.Manivannan,	“Fabrication of Transparent Single Walled Carbon Nanotube sensor for Room Temperature Ammonia Vapor Sensing”, “National Conference on Nanophotonics (NCNP – 2014)”, March 6-7, 2014, Bharathidasan University Tiruchirappalli,

		India.
18	J.Bharathidason, L.R.Shobin, S. Manivannan	“Fabrication of Semi-Transparent Silver Nanoparticles/PVA Composite Free Standing Films”, “National Conference on Nanophotonics (NCNP – 2014)”, March 6-7, 2014, Bharathidasan University, Tiruchirappalli, India.
19	U. Nithyanantham, T. Boopalan, L.R. Shobin, S. Manivannan,	“Synthesis and Characterization of Copper Nanostructures for Optoelectronics”, “National Conference on Nanophotonics (NCNP – 2014)”, March 6-7, 2014, Bharathidasan University Tiruchirappalli, India. (awarded as the best paper)

3. Workshops / Seminars

3.1 Organized

	Coordinator	Title	Period
1	D.Sastikumar and M.Ashok	Elemental, compound and phase analysis by powder X-ray diffraction	19-20 th Sept. 2014
2	Dr. A. Chandra Bose, Dr. R. Justin Josephus and Dr. N. Gopalakrishnan	Magnetic and semiconducting Nanomaterials	Oct 31 st and Nov 1 st , 2014
3	Dr.N.Gopalakrishnan	Short term course on Magnetic and semiconducting nanomaterials (MSN-2014)	31 st October to 1 st November
4	Dr.J.Hemalatha& Dr. M.C. Santhoshkumar	Short Term Programme on Nanostructured Materials Processing & Characterization	7 & 8 November 2014
5	Dr. B. Karthikeyan	Waves and Oscillations in Science and Technology	07-08, October 2014

6	Dr. R. Justin Joseyphus	Organized and delivered lectures in the short term course on magnetic and semiconducting nanomaterials (MSM2014)	Oct 31- Nov 1, 2014, NIT Trichy.
7	Dr. S. Manivannan	Course on Carbon Nanotubes	6-7 November 2014

3.2 Attended

1	Faculty	Details
2	D.Sastikumar	National Seminar on Non-Destructive Evaluation, Pune , Dec 2014.
3	Dr.N.Gopalakrishnan	National Seminar and exhibition on Non-Destructive Evaluation: 4-6 Dec.2014, Pune, India.
4	Dr. J.Hemalatha	National Level Seminar & Exhibition on NON-DESTRUCTIVE EVALUATION , 4-6 December , Pune, India
5	Dr. B. Karthikeyan	National seminar and exhibition on Non-Destructive Evaluation (NDE)-2014, Pune, India. 4-6 December 2014.
6	Dr.N.V.Giridharan	NDE 2014,Pune, India during 4-6 December 2014.
7	Dr. R. Justin Joseyphus	Training programme on safety aspects of ionizing radiation conducted by BARC, Mumbai, Dec 1-9, 2014.
8	R. Nagalakshmi	Presented the new DST project proposal before the Programme Advisory Committee on “Condensed Matter Physics and Materials Science” on May 28, 2014 at the PSG Institute of Advanced Studies, Coimbatore- 641004
9	R. Nagalakshmi	Attended Asian Charge Density Workshop (ACDW) @ IISC, Bangalore Feb 23- 27,2015

	Students	Details
1	Bhuvaneshwari S	CSR lecture series 2014, CSR, Indore, India, 1st – 12th Sep. 2014
2	Bhuvaneshwari S	OSA annual leadership meeting & Frontiers in Optics, Tucson, Arizona, USA, 19th – 23rd Oct. 2014.
3	Bhuvaneshwari S	Emerging Materials: Characterization & Application (EMCA-2014), CSIR-CGCRI, Kolkata, WB, 4-6th Dec. 2014.

		(Third best poster presentation award)
4	Divya S	First International Conference on Emerging Materials: Characterization & Application , Kolkatta , December 4-6 2014
5	Anu K	First International Conference on Emerging Materials: Characterization & Application , Kolkatta , December 4-6 2014
6	S. Nallamuthu, T.P.Rashid K.Arun	Strongly Correlated Electron Systems (SCES), Bharathidasan University, Trichy, Jan 22, 2015
7	Mydhili.V	Attended 2 nd INUP Familiarization workshop on Nanofabrication technology conducted by IIT Bombay during November 28-30,2014.
8		Attended OPTICS' 14-International conference cum workshop on Light conducted by National Institute of Technology,Calicut during March 19-21,2014

4. Invited / Guest Lectures Delivered by the Faculty

S.No	Faculty	Topic	Programme	Place & Date
1	Dr. A. Chandra Bose	Synthesis, characterization and applications –photocatalysis for waste water treatment	Modern technology for sustainable development from waste	February 28, 2015 Mohamed Sathak Polytechnic College, Kilakarai.
2	Dr. A. Chandra Bose	Elemental, compound and phase analysis by powder X-ray diffraction	Elemental, compound and phase analysis by powder X-ray diffraction	19-20 th Sept. 2014, Department of Physics, NIT, Trichy
3	Dr. A. Chandra Bose	Characterization of materials in chemical sciences	Workshop on characterization techniques in chemical sciences	July 9- 11, 2014, Department of chemistry, NIT, Trichy
4	Dr.J.Hemalatha	X-Ray Diffraction Analysis of Materials	Magnetic and Semiconducting Nanomaterials	National Institute of Technology, Trichy-15 01.11.2014
5	Dr.J.Hemalatha	Nanomaterials -	State Level	AyyaNadarJanakiAmmal

		Science and Applications	Seminar On Current Trends Of Research In Nanoscience And Nanotechnology	College (Autonomous), Sivakasi 19.01.2015
6	Dr.J.Hemalatha	Nano Science & Technology. Recent Trends in Materials Science	National Conference on Recent Trends in Materials science (RTMS' 15)	M.Kumarasamy College of Engineering,Karur. 12.02.2015-13.02.2015
7	Dr.J.Hemalatha	Magnetic Materials	Current Trends in Physics (CTP-2015)	Madurai Kamaraj University, 20.02.2015
8	Dr.M.Ashok	Nano Biomaterials	Refresher course on "Current Trends in Physics (CTP-2015)"	School of Physics, Madurai Kamaraj University, Madurai during Feb.3-Feb. 23, 2015.
9		"Classification of Biomaterials and its applicaitons"	FDTP on Engineering Physics II (PH6251)	University College of Engineering Tindivanam. On 21.12. 2014
10	Dr. R. Sankaranarayanan	Electromagnetic Waves	UGC Refresher Course in Physics	Academic Staff College, Bharathidasan University, Tiruchirappalli (18.11.2014).
11	Dr. R. Sankaranarayanan	Physics through Oscillations	Short-term course on Waves and Oscillations in Science & Technology	Department of Physics, National Institute of Technology, Tiruchirappalli (October 7 – 8, 2014).
12	Dr. B. Karthikeyan	Optical and non-linear optical properties of nanostructures.	1 st International Conference on Optoelectronics and Photonics Materials	27-28 th February 2015.
13	Dr. R. Justin Joseyphus	FeCo alloys through polyol process	Presented paper in International conference on magnetite materials and applications, organized by magnetics society of India	Pondicherry University, Sept 15-17, 2014.

14	Dr. R. Justin Joseyphus	Mossbauer spectroscopy	Resource person in the national seminar on 'Green Practices in Chemistry',	Mar Ivanios College, Trivandrum, 10 Oct, 2014.
15	Dr. R. Justin Joseyphus	Magnetic nanoparticles	Organized and delivered lectures in the short term course on magnetic and semiconducting nanomaterials, (MSM2014)	Oct 31- Nov 1, 2014, NIT Trichy.
16	Dr. R. Justin Joseyphus	Magnetic nanoparticles	Resource person in the short term course on Nanostructured materials, processing and characterization,	NIT Trichy, Nov 7, 2015.
17	Dr. R. Justin Joseyphus	Mossbauer spectroscopy	Resource person in the UGC sponsored national level seminar 'Quantum 2014',	NMC College, Marthandam, Dec 12, 2014.
18	Dr.R.Nagalakshmi	Photonic Materials	Science Academies' Lecture Workshop on Photonic Materials	School of Electrical and Electronics Engineering SASTRA University, Thanjavur October 10,11 2014
19	Dr.R.Nagalakshmi	Crystalline Materials	Invited Lecture for Physics Association	Dept of Physics, SeethalakshmiRamaswami College, Trichy
20	Dr.S. Manivannan	Carbon Nanomaterials Research	National Conference on Advanced Materials -2015	St. Joseph's College, Tiruchirappalli, 06 February, 2015
21	Dr.S. Manivannan	Carbon Nanomaterials	National Level Seminar on Recent Trends in Materials Science 2015	Vivekanandha College of Arts and Sciences for Women, Tiruchengode, 24 January, 2015
22	Dr.S. Manivannan	Carbon Nanomaterials-Lecture I	UGC Refresher Course in Physics	UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli, 21

				November 2014
23	Dr.S. Manivannan	Carbon Nanomaterials-Lecture I	UGC Refresher Course in Physics	UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli, 21 November 2014

5. Sponsored Projects undertaken.

S.No	Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
1	R.Nagalakshmi	Growth and irradiation of Rare earth intermetallic crystals for magnetic applications	DAE Young scientist Research Award by Basic science Committee, Board of Research in Nuclear Sciences (BRNS). No: 2010/20/37P/13/BRNS dt 18/2/2011	16,40,000/- Ongoing
2	R.Nagalakshmi	Functionalized materials for electrooptics: Synthesis, single crystal growth, nonlinear and electrooptical properties	Council of Scientific And Industrial Research Human Resource Development Group No: 03(1158)/10/EMRII dated 26/4/2010	17, 23,000/- Completed
3	R.Nagalakshmi T.N.GuruRow Prof.RuiFausto Dr.Archna Sharma	Crystal growth vibrational studies and nonlinear optical properties of tartrates	Indo Portugese Joint Project by DST INT/PORTUGAL/P-12/2009 dated 27/12/2009	4,64,200/- (Exchange visits 1 visit per year)

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

Faculty Name	S.No	Equipment	Amount (Rs. In Lakhs)
Dr.D.Sastikumar	1	Thermography camera(SIF)	85
	2	Nd-YAG laser(SIF)	100
Dr. A. Chandra Bose	3	Cyclic Voltammetry	6
Dr.Hemalatha	4	Atomic Force Microscope	100,79,158
Dr.M.Ashok	5	Laser Raman Spectrometer	11.92

	6	Solar Simulator Source	7.3
	7	Spray drier	5.9
Dr.B.Karthikeyan	8	Time resolved fluorescence spectrometer (SIF)	87,19,695.00
	9	Micro Raman spectrometer (SIF)	96,62,074.00
Dr.N.V.Giridharan	10	High Energy Ball mill	12.00
Dr.S.Manivannan	11	High Resolution Multimeter	5.18
	12	Source Measurement Unit	7.15
	13	Laser Source for heating	8.53

7. Research Papers Published in National / International Journals

7.1 Faculty

International Journal

Faculty Name	S.No	Title	Author(s)	Journal	Year Vol. (No) Page
Dr.N.Gopalakrishnan	1	A Comparative Study on p-ZnO:AlAs/n-ZnO:Al and p-ZnO:AlAsN/n-ZnO:Al Bilayer Homojunction Diodes Performance	L. Balakrishnan, S.Gowrishankar, and N. Gopalakrishnan	ECS Solid State Letters	3 (2014) Q20-Q23
	2	Role of surface functionalization in ZnO:Fe nanostructures	R.N. Lokesh, L. Balakrishnan, K. Jeganathan, Samar Layek, H.C. Verma, N. Gopalakrishnan	Materials Science and Engineering B	183 (2014) 39-46
Dr. A. Chandra Bose	3	Quantum confined CdS inclusion in graphene oxide for improved electrical conductivity and facile charge transfer in hetero-junction solar cell	Rajeswari Yogamalar, R. Jayavel, A. Chandra Bose	RSC Advances	2015 (5) 1685 6-1686 9
	4	Effect of Eu^{3+} and Al^{3+} concentrations on photoluminescence of	T. Selvalakshmi, A. Chandra Bose, and S. Velmathi	Journal of Nanoscience and	2015 (8)

		Gd ₂ O ₃ :Eu ³⁺		Nanotechnology	5760
5	Band gap tuning of h-MoO ₃ nanocrystals for efficient visible light photocatalytic activity against MB dye,	A. Chithambararaj, B. Winston, N. S. Sanjini, S. Velmathi and A. Chandra Bose		Journal of Nanoscience and Nanotechnology	2015 (15) 4913
6	Investigation on defect related photoluminescence property of multicolour emitting Gd ₂ O ₃ :Dy ³⁺ phosphor	Selvalakshmi, Thangaraj; Sellaiyan, Selvakumar; Uedono, Akira; Mori, Akihiro; A. Chandra Bose		RSC Advances	2014 (4) 34257
7	Influence of Y doping concentration on the properties of nanostructures MxZn1-xO (M=Y) thin film deposited by nebulizer spray pyrolysis technique	R Mariappan, V Ponnuswamy, A Chandra Bose, R Suresh, M Ragavendar,		Journal of Physics and Chemistry of Solids	2014 (75) 1033
8	Influence of film thickness on the properties of sprayed ZnO thin films for gas sensor applications	R. Mariappan, V. Ponnuswamy, P. Suresh, N. Ashok, P. Jayamurugan, A. Chandra Bose		Superlattices and Microstructures	2014 (71) 238
9	Role of synthesis variables on controlled nucleation and growth of hexagonal molybdenum oxide nanocrystals: Investigation on thermal and optical properties,	A. Chithambararaj and A. Chandra Bose		Crystal Engineering Communications	2014 (16) 6175
10	Nanocrystalline Cerium Oxide coated fiber optic gas sensor	B. Renganathan, D. Sastikumar, A. Chandra Bose, R. Srinivasan and A. R. Ganesan		Current Applied Physics	2014 (14) 467
11	Strain induced X-ray line broadening and morphological investigation on silver nanoparticles,	T. Selvalakshmi and A Chandra Bose		Nanoscience and Nanotechnology Letters	2014 (6) 261

	12	Nanostructured $Ce_x Zn_{1-x} O$ thin films: Influence of Ce doping on the structural, optical and electrical properties	R Mariappan, V Ponnuswamy, P Suresh, R Suresh, M Ragavendar, A Chandra Bose	Journal of Alloys and Compounds	2014 (588) 170
	13	Structural, optical and electrical characterization of nebulizer-sprayed ZnO nano-rods,	R Mariappan, V Ponnuswamy, A Chandra Bose, A Chithambararaj, R. Suresh, M. Ragavendar,	Superlattices and Microstructures	2014 (65) 184
	14	Effect of hydrolysis time on grain size and properties of cerium oxide nanoparticle synthesized by hydrolysis assisted co-precipitation method	R. Srinivasan and A. Chandra Bose	Nanoscience and Nano Letters	2014 (6) 94
	15	Role of substrate temperature on the properties of Na-doped ZnO thin film nanorods and performance of ammonia gas sensors using nebulizer spray pyrolysis technique	R.Mariappan, V. Ponnuswamy, R. Suresh, P. Suresh, A. Chandra Bose, M. Ragavendar	Journal of Alloys and Compounds	2014 (582) 387
	16	Study of microwave assisted growth of metastable 1-D $h-MoO_3$, Science of	A.Chithambararaj, N.Rameshbabu, A. Chandra Bose,	Advanced Materials	2014 (6) 1302
Dr.N.Baskaran	17	Phase Transition Studies of $BiMnO_3$: Mean Field Theory Approximations	Lakshmi Priya K. Baskaran and Natesan	American Institute of Physics Conference series	(2015, in press)
	18	Structure and Dynamics of Complex Liquids: Water: Molecular Dynamics Simulation	Indrajith V. S and Baskaran	American Institute of Physics Conference series	(2015, in press)

	19	<i>Ab initio</i> Investigations of A-site Doping on the Structure and Electric Polarization of HoMnO_3	SathyaSheela S, Kanagaraj C and BaskaranNatesan	American Institute of Physics Conference series	(2015, in press)
Dr.J.Hemalatha	20	Novel Coconut Oil Based Magnetite Nanofluid as an Ecofriendly Oil Spill Remover	M. NabeelRashin, R. GovindanKutty J.Hemalatha	Industrial and Engineering Chemistry Research	2014, 53, 1572-1573
Dr.M.Ashok	21	PTCR behavior of BiFeO_3 synthesized by the solvothermal method	PR Vanga, RV Mangalaraja, NVGiridharan, M Ashok	Materials Letters	143, 230-232
	22	Effect of Cobalt Concentration on $\text{Bi}_{0.95}\text{Ba}_{0.05}\text{Fe}_{1-x}\text{Co}_x\text{O}_3$	PR Vanga, S.Leelashree, M.Ashok	Advanced Materials Research	938, 85-90, 2014
	23	Structural, Thermal and Magnetic Analysis of Co_2FeO_4 Spinel Oxide Synthesized by Co-Precipitation Process	P Reddy, Y Raja, M Ashok	Advanced Materials Research	895, 287-290, 2014
Dr. M. C. Santhosh Kumar	24	Epitaxial Growth of Vertically Aligned Highly Conducting ZnO Nanowires by Modified Aqueous Chemical Growth Process	R. Amiruddin, M. C. Santhosh Kumar	Ceramics International	2014, 40, 1128-1133
	25	Enhanced visible emission from vertically aligned ZnO nanostructures,	R. Amiruddin, M. C. Santhosh Kumar,	Journal of Luminescence	2014, 155, 149
	26	Flow boiling heat transfer enhancement on copper surface using Fe doped Al_2O_3 - TiO_2 composite coatings	C.S. Sujith Kumar, S.Suresh,K. Raji, C.R,Aneesh, M.C.SanthoshKumar,A.S.Praveen	Applied Surface Science	2014 in press

	27	Effect of Annealing Atmosphere on Structural and Optical Properties of Nd:ZnO Thin Films	T. Prasada Rao, S. Gokul Raj, M.C.Santhosh Kumar	Procedia Materials Science	2014 ,6, 1631
	28	Investigation on P-N dual acceptor doped p-type ZnO thin films and subsequent growth of pencil-like nanowires	R. Amiruddin, SebinDevasia, K. Mohammedali, M. C. Santhosh Kumar	Semicond. Sci. Technol.	2015 , 30, 0350 09
	29	Welding fumes reduction by coating of nano-TiO ₂ on electrodes,	Sreejith Mohan, S.P. Sivapirakasam, M.C. Santhosh Kumar, M. Surianarayanan	Journal of Materials Processing Technology	2015 , 219, 237
	30	Optical Properties of Samarium Doped ZnO Thin Films	T. Prasada Rao, S. Gokul Raj, M. C. Santhosh Kumar,	IEEE xplore, 2nd International Conference on Devices, Circuits and Systems (ICDCS)	2014
Dr.B.Karthikeyan	31	Enhanced ultraviolet-blue emission and Raman modes in ZnO:Cr ₂ O ₃ composite nanoparticles	ThangarajPandiyan, Mauro L. Baesso, and Balasubramanian Karthikeyan	The European Physical Journal D	2014
	32	Optical, structural, enhanced local vibrational and fluorescence properties in K-doped ZnO nanostructures	V. Bharathi , M. Sivakumar , R. Udayabhaskar , Hiromichi Takebe B. Karthikeyan	Applied Physics A Materials & Processing	2014
	33	Preparation, optical and non-linear optical power limiting properties of Cu, CuNi nanowires	R. UdayabhaskarMuhamedShafiOllakkan and B. Karthikeyan	APPLIED PHYSICS LETTERS	2014
	34	Enhanced fluorescence and optical power limiting in Ag-nanocomposite glasses	R. Udayabhaskar , B. Karthikeyan , MuhamedShafiOllakkan , R.V. Mangalaraja , M.L. Baesso	Chemical Physics Letters	2014

	35	Optical and Saturation Behavior of Thermally Surface Plasmon-Tuned Cu Nanorod Composite Glasses	R. Udayabhaskar , B. Karthikeyan , MuhamedShafiOl lakkan	Plasmonics	2014
	36	Optical and phonon properties of ZnO:CuO mixed nanocomposite	R. Udayabhaskar and B. Karthikeyan	Journal of Applied Physics	2014
	37	Spectroscopic and fiber optic ethanol sensing properties Gd doped ZnO nanoparticles	J.L. Noel, R. Udayabhaskar, B. Renganathan, S. MuthuMariappan, D. Sastikumar, B. Karthikeyan	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2014
	38	Optical and phonon properties of Sm-doped α -Bi ₂ O ₃ micro rods	Balasubramanian Karthikeyan ,R. Udayabhaskar, Ashwin Kishore	Applied Physics A Materials & Processing	2014
	39	Role of micro-strain and defects on band-gap, fluorescence in near white light emitting Sr doped ZnOnanorods	R. Udayabhaskar and B. Karthikeyan	Journal of Applied Physics	2014
	40	Sol-gel prepared Cu ₂ O microspheres: linear and nonlinear optical properties	B. Karthikeyan, R. Udayabhaskar, T. PriyaRose, b T. Pandiyarajana and Reji Philip	RSC Advances	2014
	41	Enhanced fluorescence, Raman scattering and higher order Raman modes in ZnO:Agnanorods	R.Udayabhaskar, R. V. Mangalaraja, B. Karthikeyan	Plasmonics	2015
	42	Enhanced multi-phonon Raman scattering and nonlinear optical power limiting in ZnO:Au nanostructures	R. Udayabhaskar, B. Karthikeyan, P. Sreekanth and Reji Philip	RSC Advances	2015
	43	Enhanced fluorescence and local vibrational mode in near-white light emitting ZnO:Mgnanorods system	R. Udayabhaskar, B. Karthikeyan	Journal American Ceramic Society	2015

	44	Enhanced ultraviolet fluorescence in surface modified ZnO nanostructures: Effect of PANI	T. Pandiyarajan, R. V. Mangalaraja, B. Karthikeyan	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2015
	45	UV-A light induced photodegradation of Acid Blue 113 in the presence of Sm doped ZnO nanostructures	T. Pandiyarajan, R. V. Mangalaraja, B. Karthikeyan	Applied Physics A	2015
Dr.N.V. Giridharan	46	Effect of annealing time in the low-temperature growth of BFO thin films spin coated on glass substrates	C Anthony Raj, M Muneeswaran, P Jegatheesan, NV Giridharan, V Sivakumar, G Senguttuvan	Journal of Materials Science: Materials in Electronics	24, 4148 - 4154 (2014)
	47	Structural, optical, and multiferroic properties of single phased BiFeO ₃	M Muneeswaran, P Jegatheesan, M Gopiraman, IS Kim, NV Giridharan	Applied Physics A	114, 853-859 (2014)
	48	Effect of thickness and annealing temperature on the properties of PZT films at Morphotropic Phase Boundary composition prepared by sol-gel spin-on technique	P Jegatheesan, M Muneeswaran, NV Giridharan	Advanced Materials Research	895, 17-20 (2014)
	49	Effect of Dy-substitution on the structural, vibrational, and multiferroic properties of BiFeO ₃ nanoparticles	M Muneeswaran, NV Giridharan	Journal of Applied Physics	115, 214109 (2014)
	50	Effect of samarium doping on the structural, optical and magnetic properties of sol-gel processed BiFeO ₃ thin films	C Anthonyraj, M Muneeswaran, SG Raj, NVGiridharan, V.Sivakumar, G.Senguttuvan	Journal of Materials Science: Materials in Electronics	26, 49-58 (2015)
	51	Enhanced piezoelectric constant and remnant polarisation in K-compensated sodium potassium bismuth titanate	M.VeeraGajendra Babu, SM Abdul Kader, M.Muneeswaran, NV Giridharan, D.PathinettamPad iyan,	Materials Letters	146, 81-83 (2015)

			B Sundarakannan		
	52	PTCR behavior of BiFeO ₃ synthesized by the solvothermal method	Pradeep Reddy Vanga, RV Mangalaraja, N.V. Giridharan, M. Ashok	Materials Letters	143, 230–232 (2015)
Dr.R. Justin Joseyphus	53	Magnetic properties of interacting CoPt nanoparticles prepared through polyol process,	K. Prakash and R. Justin Joseyphus,	<i>Mater. Chem. Phys.</i>	15 (2015)53.
	54	Prussian blue modified Fe ₃ O ₄ nanoparticles for Cs detoxification	T. Arun and R. Justin Joseyphus	J. Mater Sci.	49 (2014) 7014 .
	55	Influence of Annealing Parameters on the Magnetic Properties of CoPt Nanoparticles	T. Prakash and R. Justin Joseyphus	Sci. Adv. Mater.	6 (2014) 1792 .
	56	Evolution of High Coercivity in CoPt Nanoparticles Through Nitrogen Assisted Annealing,	K. Prakash and R. Justin Joseyphus,	J Supercond Nov Magn.	27 (2014) 2123 .
	57	Magnetic properties of Prussian blue modified Fe ₃ O ₄ nanocubes	T. Arun, K. Prakash, R. Kuppusamy and R. Justin Joseyphus	J. Phys. Chem. Solids	74 (2013) 1761 - 1768 .
	58	Synthesis and Magnetic Properties of Prussian blue modified Fe nanoparticles	T. Arun, K. Prakash and R. Justin Joseyphus,	J. Magn. Magn. Mater.	345 (2013) 100-105.
	59	Magnetic properties of the tetragonal RCuGa ₃ (R=Pr, ND and Gd) single crystals	R Nagalakshmi, RutaKulkarni, S.K. Dhar A.Thamizhavel, V.Krishnakumar, Marian Reiffers, Ivan Čurlík, HansHagemann,	Journal of Magnetism and Magnetic Materials	Accepted

			Dominique Lovy, S. Nallamuthu		
	60	Hydroxyethylammonium maleate (HEAM) single crystal for optical limiting applications,	Adharsana, S.Hamad Anugopal Rao Prishnakumar, Nagalakshmi	Applied Physics A: Materials Science and Processing	Accepted
	61	Investigations on the Vibrational Modes and Non-linear Optical Properties of 4-Fluoro Chalcone Crystal	S. Prabu, R.Nagalakshmi J. Balaji P. Srinivasan	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	Accepted
	62	Synthesis, crystal growth, studies on vibrational spectroscopy and nonlinear optical properties of 4-methoxy-4-chlorochalcone	S. Prabu, R.Nagalakshmi J. Balaji P. Srinivasan	Materials Research Bulletin	50 (2014) 446– 453
Dr.S. Manivannan	63	Effect of functional groups on dielectric, optical gas sensing properties of graphene oxide and reduced graphene oxide at room temperature	T. Kavinkumar, D. Sastikumar and S. Manivannan	RSC Advances	2015 , 5, 1081 6-25.
	64	One Pot Rapid Synthesis of Silver Nanowires Using NaCl Assisted Glycerol Mediated Polyol Process	L.R.Shobin, and S. Manivannan	Electronic Materials Letters	2014 , 10, 6, 1019 - 1023 .

	65	Silver nanowires coated fiber optic sensors for ammonia sensing application	L.R.Shobin, and S. Manivannan	Sensors and Actuators A : Physical	2014 , 214 74-80.
	66	Pure and Iso-butyl Methyl Ketone Treated Multi-walled Carbon Nanotubes Coated Fiber Optic Ethanol and Methanol Vapor Sensor	L.R.Shobin, B.Renganathan, D.Sastikumar, Kyu Chang Park, S. Manivannan	IEEE Sensors Journal,	2014 , 14, 4 1238 - 1243 .

National Journal: Nil

7.2 Students

International Journal: Nil

National Journal: Nil

8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1	Prabhakaran T	Dr.J.Hemalatha	NIT Trichy
2	NabeelRashin M	Dr.J.Hemalatha	NIT Trichy
3	R. Swapana	Dr. M.C. Santhosh Kumar	NIT Trichy
4	Dr. K. Prakash	Dr.R. Justin Joseyphus	NIT Trichy
5	N.Sudharsana	Dr.R.Nagalakshmi	NIT Trichy

9. Details of Book any authored by faculty: Nil

10. Patent if any obtained by faculty**11. Other Important Points**

Dr. R. Justin Joseyphus visited KEK Tsukuba, Japan under the project Order disorder studies in chemically synthesized FeCo alloys sanctioned by DST during May 2014 for synchrotron experiments.

34.	National journals	0			
35.	International conference publications	11			
36.	National conference publications	19			
37.	Sponsored Project	No's:	3	Amount:	Rs. 38,27,200/
38.	No of Ph.D produced	2			
39.	No of Patents obtained	nil			
40.	No of books published	nil			

Department : Production Engineering**1. Notable Achievements: Nil****1.1. Faculty Members: Nil****1.2 Students**

S.No	Name	Details of Prizes / Awards	Organization
1	V.Deepak (114113092)and B.Manikanta (114113020)	First place in SANGAM , a project exhibition in PRAGYAN -15 (annual tech fest of Nit Trichy)	NIT Trichy

2. Conference / Seminars / Symposium / Special Lectures**2.1. Organised:**

S.No	Coordinator	Programme	Period
1.	Dr S Kumanan	International Conference on Advances in Production and Industrial Engineering (INCAPIE'15)	20-21 Feb, 2015

2.2 Papers presented by the Faculty / Students**International**

	Author (s)	Details
1.	Panneerselvam K, Jafrey Daniel James D	An Experimental Investigation on Polymeric Nanocomposite Material, 5 th International and 26 th All India Manufacturing Technology, Design and Research Conference AIMTDR 2014
2.	S. Baskaran, V. Anandkrishnan, Muthukannan Duraiselvam, N. Keerthivasan	A study on dry sliding friction behavior of TiC reinforced AA7075 in-situ composites by Taguchi technique", 2nd IRF International Conference, June 21, 2014, Singapore
3.	Ramesh Raju, Muthukannan Duraiselvam, Arun G. K, Vijay Petley, Shweta Verma, Rajendran R	Mechanical and metallurgical characterization of laser metal deposited aero-engine blade materials", 28th International Conference on Surface Modification Technologies, SMT 28, 16 - 18 June 2014, Tampere University of Technology, Tampere, Finland.
4.	Duraiselvam M, Ramesh, Sai Balagi T. S, Ranjyoti Dutta, Sai Prashanth T. S,	Optimization of Process Parameters for Laser Surface Cladding using Geometric Programming", International Mechanical Engineering Congress 2014, National Institute of Technology: Tiruchirappalli, 13 -

	Vamshi Krishna	15 June 2014, Tamilnadu, India.
5.	Ramesh Raju, Muthukannan Duraiselvam, Arun G. K	Numerical Finite Element Investigation on Laser Cladding of Aerospace Components”, International Conference on Reliability and Safety Engineering, Anna University – BIT Campus, 16 - 18 February 2014, Tamilnadu, India.
6.	V. Dillibabu, Muthukannan Duraiselvam, Rahul V. S	Finite Element Simulation and Optimization of Dissimilar Welding for Gas Turbine Applications”, International Conference on Reliability and Safety Engineering, Anna University – BIT Campus, 16 - 18 February 2014, Tamilnadu, India.
7.	Kavilal E.G. S.Prasanna Venkatesan, Harsh Kumar K. Dadhaniya	Supply Chain Complexity: Challenges and Future Research Directions, 5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) December 12th–14th, 2014, IIT Guwahati, Assam, India
8.	Kavilal E.G. & S. Prasanna Venkatesan	An ISM and MICMAC for interdependence analysis of supply chain complexity drivers, International Conference On Advances In Production And Industrial Engineering INCAPIE 2015, NIT-Trichy Feb 20-21, 2015
9.	Jegan Jose, S. S.Prasanna Venkatesan, S. Kumanan	Optimize Field Service Management through Analytics International Conference On Advances In Production And Industrial Engineering INCAPIE 2015, NIT-Trichy Feb 20-21, 2015
10.	Manjunatheshwara, K.J., S. Vinodh and K.E.K. Vimal	Paper title: 'Application of remanufacturing principles to an automotive engine valve component' Conference details: 5 th International and 26 th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) held at IIT, Guwahati, Assam during December 12-14, 2014.
11.	Vimal K.E.K. and S. Vinodh	Paper title: 'Application of S-LCA methodology for assessment of automobile organization' Conference details: 5 th International and 26 th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) held at IIT, Guwahati, Assam during December 12-14, 2014.
12.	Chethan Kumar, A.G. and S. Vinodh	Paper title: 'Quality Function Deployment for enabling Lean Product Development' Conference details: Society of Operations Management Conference held at IIT Roorkee during December 12-14, 2014.
13.	Ben Ruben, Vinodh, S. and Asokan, P.	Paper title: 'Multi-grade fuzzy Assessment of Environmental Sustainability' Conference details: International Conference on Advances in Production and Industrial Engineering at NIT, Tiruchirappalli during February 20-21, 2015.

14.	S.Kumanan, N.Manikandan, C.Sathiyarayanan	Investigations of process parameters of Electrochemical machining of titanium (Ti6Al4V) alloy using Grey Relational Analysis, Proceedings of International Colloquium on Materials, Manufacturing and Metrology (ICMMM-14), 8-9 August, 2014, IIT Madras.
15.	Leo Kumar, S.P., J. Jerald and S. Kumanan	Automatic Feature Extraction and CNC Code Generation in a CAPP System for Micromachining, Proceedings of International Conference on Advances in Materials and Manufacturing Engineering (ICAMME-14), 13-15 March 2014, NITK, Surathkal.
16.	N.Manikandan, S.Kumanan, C.Sathiyarayanan	Prediction of Metal Removal Rate in Electrochemical Machining using Multiple Regression Analysis, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
17.	Leo Kumar, S.P., J. Jerald and S. Kumanan	Mathematical Modeling of Micro End Milling Process and Establishing Parameters to Develop A CAPP System, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
18.	Anish Nair, S. Kumanan	Newer Materials for Supercritical Power Plant Components-A Manufacturability study, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
19.	R. Silambarasan, S. Kumanan	Experimental Investigation on Welding and Heat Treatment of modified 9Cr-1Mo-V Steel for Supercritical Boilers, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
20.	Manish Patil, S. Kumanan	Facility Lay out Optimization using Linear and Non-Linear Mixed Integer Programming, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
21.	Shantosh Shivhare, G. Jegan Jose, S Kumanan	Field Service Scheduling using Mixed Integer Programming, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
22.	Pranav Sankpal, A Andrew, S Kumanan	Maintenance strategies Selection using Fuzzy FMEA and Integer Programming, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
23.	G. Jegan Jose, S Kumanan, S Prasanna Venkatesan	Optimize Field Service Management through Analytics, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.
24.	S. J. Vaghela, S Kumanan	Prediction of Temperature Distribution in Butt welded Joint using Finite Element Analysis, Proceedings of International Conference on Advances in Production and Industrial Engineering (INCAPIE_2015), NIT Trichy.

National

S.No	Author (s)	Details
1	G Jose, S Kumanan	Selection of technician in field service management using a mathematical model, Twenty Ninth National Convention of Production Engineers and National seminar on Green Manufacturing Strategies Aug 1,2 2014.
2	R. Silambarasan, S. Kumanan	Influence of post weld heat treatment on mechanical properties of modified 9Cr-1Mo-V steel, Twenty Ninth National Convention of Production Engineers and National seminar on Green Manufacturing Strategies Aug 1,2 2014
3	S. J. Vaghela, S Kumanan	Finite Element Analysis of submerged arc welding, Twenty Ninth National

	Convention of Production Engineers and National seminar on Green Manufacturing Strategies Aug 1,2 2014.
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3.0. Summer School / Winter School / Workshops

3.1 Organized

Coordinator	Title	Period
Dr. M.Duraiselvam & Dr. V. Senthilkumar	Laser microprocessing for biomedical applications	1 Day 03.04.2014

3.2 Workshops / Seminars Attended

Students	Details
B.Manikanta (114113020)	Participated in WARDE AQUA competition in THATVA-14(annual tech fest of Nit calicut)

Dr. M.Duraiselvam	Additive Manufacturing & 3D Printing, 6th - 7th Feb 2015, Chennai.
Dr.S.Vinodh	29 th National Convention of Production Engineers organized by Institution of Engineers (India), Tamil Nadu State Centre, Chennai during August 1-2, 2014
Dr.S.Vinodh	5 th International and 26 th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014) held at IIT, Guwahati, Assam during December 12-14, 2014
Dr.S.Vinodh	International Conference on Additive Manufacturing, 3D Printing and 3D Scanning Technologies, Chennai during February 6-7, 2015.

4. Invited / Guest Lectures Delivered by the Faculty

Faculty	Topic	Programme	Place & Date
M. Duraiselvam	Laser surface engineering for Tribological Solutions	Invited Talk	National Engineering College, Kovilpatti. & 11.02.2015
M. Duraiselvam	Laser Surface Engineering	Guest Lectures	Annamalai University, Annamalai Nagar, Chidhambaram.& 27.12.2014
M. Duraiselvam	Advances in Composites and	Guest Lectures	SreeVidyanikethan Engineering College,

	Nano Materials – Processing and Applications		Tirupati.& 05.12.2014
M. Duraiselvam	Laser Surface Engineering	Invited Talk	PeriyarManiammai University, Thanjavur. & 12.11.2014
M. Duraiselvam	Laser Materials Processing	Invited Talk	KSK College of Engineering Technology, Kumbakonam. & 05.09.2014
S. PrasannaVenkatesan	Multi objective optimization using PSO	Optimization and Its Applications	NITT November 10-11, 2014

5. Sponsored Projects undertaken.

Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
Dr.S.Vinodh and Dr.P.Asokan	Exploration of lean tools/techniques for ensuring sustainability in automotive organizations	Science and Engineering Research Board, New Delhi	15.42 Lakhs
M. Duraiselvam&V. Anandakrishnan	Investigation on the properties of direct metal laser fabricated material and its brazing compatibility with nickel based casing	Gas Turbine Research Establishment (GTRE), Bangalore	9.90

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)

S. No.	Equipment	Amount (Rs. In Lakhs)
1.	Twin-screw extruder	19.95
2.	Computerised Tensometer	5.82722
3	Mid range PC [8nos], DLP projector [1no.] and network printer[1no.]	5.64
4	Roller and Roller wear tester	26.7
5	Corrosion wear monitor	19.9
6	Lubricated wear tester	12.9
7	Laser micromachining workstation	68.7

7.1 Faculty

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1	Benchmarking agility	Vinodh,	Benchmarking:	2015 22 (1)

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
	assessment approaches: A case study	S. Aravindraj, S	An International Journal	2-17
2	<u>Lean concept selection using modified fuzzy TOPSIS: a case study</u>	S Vinodh, A Thiagarajan, G Mulanjur	International Journal of Services and Operations Management	2014 18(3) 342-357
3	Development of integrated ECQFD, LCA and sustainable analysis model: A case study in an automotive component manufacturing	Vinodh, S., Jayakrishna, K.	Journal of Engineering, Design and Technology	2014 12 (1) 102-127
4	Application of Fuzzy VIKOR for selection of rapid prototyping technologies in an agile environment	Vinodh, S., Nagaraj, S., Girubha, J.	Rapid Prototyping Journal	2014 20 (6) 523-532

7.1 Faculty

International Journal

S. No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Joining of Nylon 6 plate by friction stir welding process using threaded pin profile	Lenin, K., K. Panneerselvam	Materials and Design (Elsevier)	53,(2014) 302–307
2.	Process parameters optimizations for friction welding of polypropylene materials using Taguchi's approach	K Lenin, H Abdul Shabeer, K Suresh Kumar and K Panneerselvam	Journal of Scientific & Industrial Research	73, (2014) 369-374
3.	Optimization of CNC Turning Parameters with Carbide Tool for Surface, Roughness Analysis Using Taguchi Analysis	Shunmugesh K., Panneerselvam K., Pramod M. and Amal George	Research Journal of Engineering Sciences	3(6),(2014) 1-7
4.	A nova Based Optimization of Machining	Shunmugesh. K, Panneerselvam. K, Jospaul Thomas	International Journal of Emerging	2(3),(2014) 53-60

	Parameters in Drilling of Glass Fiber Reinforced Polymer (GFRP) Composites		Engineering Research and Technology	
5.	Optimization of Turning Parameters with Carbide Tool for Surface Roughness Analysis	Shunmugesh K., Panneerselvam K., Pramod M. and Amal George	International Journal of Emerging Engineering Research and Technology	2(2),(2014), 149-154
6.	Optimising Drilling Parameters Of GFRP By Using Grey Relational Analysis	Shunmugesh K, Panneerselvam. K, Jospaul Thomas	International Journal of Research in Engineering and Technology	03(06), (2014), 302-305.
7.	Optimization Of Turning Parameters With Carbide Tool For Surface Roughness Analysis Using Response Surface Methodology	Shunmugesh.K, Panneerselvam K, Amal George	International Journal Of Research In Aeronautical And Mechanical Engineering Optimization Of Turning Parameters	2(6),(2014) 17-27.
8.	Development of carbide intermetallic layer by electric discharge alloying on AISI-D2 tool steel and its wear resistance	IlangovanArun, P. Vaishnavi, MuthukannanDuraiselvam, V. Senthilkumar, and V. Anandakrishnan	International Journal of Materials Research	105 (2014) 544-551. SCI - ISSN: 1862-5282
9.	Synthesis of electric discharge alloyed nickel-tungsten coating on tool steel and its tribological studies	IllangovanArun, MuthukannanDuraiselvam, V. Senthilkumar, R. Narayanasamy, V. Anandakrishnan	Materials and Design	63 (2014) 257-262. SCI - ISSN: 0261-3069
10.	Laser surface nitride Ti-6Al-4V for light weight automobile disk brake rotor application	MuthukannanDuraiselvama, A. Valarmathi, S. M. Shariff, G. Padmanabham	Wear	309 (2014) 269-274. SCI - ISSN: 0043-1648
11.	Investigations on dry sliding wear behavior of in situ	S. Baskaran, V. Anandakrishnan, MuthukannanDuraiselvam	Materials and Design	60 (2014) 184-192. SCI - ISSN:

	casted AA7075–TiC metal matrix composites by using Taguchi technique			0261-3069
12	Taguchi Grey Relational Analysis of Dry Sliding Wear Behaviour of Annealed AA7075-TiC metal matrix composites	S. Baskaran, V. Anandakrishnan, MuthukannanDuraiselvam, S. Raghuraman, V. M. IllayarajaMuthaiyaa	Applied Mechanics and Materials	541-542 (2014) 258–262.
13	Effect of Heat Treatment on Wear Behaviour of Hot Extruded AA7075-4% TiC in-situ metal matrix composite	S. Baskaran, B. M. MuthamizhSelvan, V. Anandakrishnan, R. Venkatraman, MuthukannanDuraiselvam	Applied Mechanics and Materials	541-542 (2014) 263–267
14	Statistical Analysis of Dry Sliding Wear of Graphite Reinforced Aluminium MMCs	S. Rajesh, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	Procedia Materials Science	6 (2014) 1110-1120. SCI - ISSN: 2211-8128
15	Multi-response optimization of tribological characteristics of aluminium MMCs using PCA	Rajesh Siriyala, A. Gopala Krishna, P. Rama Murthy Raju, M. Duraiselvam	International Journal of Multidiscipline Modeling in Material and Structures	10 (2014) 276-287
16	Finite Element Simulation and Optimization of Dissimilar Welding for Gas Turbine Applications	V. Dillibabu, MuthukannanDuraiselvam, Rahul V. S	International Journal of Life Cycle Reliability and Safety Engineering	3-3 (2014) 13-23. ISSN: 2250-0820
17	Numerical Finite Element Investigation on Laser Cladding of Aerospace Components	Ramesh Raju, MuthukannanDuraiselvam, Arun G. K, Vijay Petley, Shweta Verma, Rajendran R	International Journal of Life Cycle Reliability and Safety Engineering	3-4 (2014) 13-23. ISSN: 2250-0820
18	Feature-based modelling and process parameters selection in a CAPP system for prismatic micro parts	Leo Kumar,S.P., J. Jerald and S. Kumanan	International Journal of Computer Integrated Manufacturing	Inprint and Published online September 2014
19	Process parameters	Leo Kumar,S.P., J. Jerald and S.	Neural Computing	2014 Vol.25

	optimization for micro end-milling operation for CAPP applications	Kumanan	and Applications	Issue 7-8, 1941-1950
20	An intelligent process planning system for micro turn-mill parts	Leo Kumar,S.P., J. Jerald and S. Kumanan	International Journal of Production Research	2014, Vol 52 No.20:6052-6075
21	A Review on Current Research Aspects in Tool Based Micromachining Processes, ,	Leo Kumar,S.P., J. Jerald and S. Kumanan	Materials and Manufacturing Processes	2014, Vol 29 No.11-12 : 1291-1337.
22	Neuro Evolutionary model for weld residual stress prediction	John Edwin Raja Dhas, Somasundaram Kumanan	Applied Soft Computing	2014 Volume 14 Part C, 461-468.
23	Performance assessment of heat exchanger using intelligent decision making tools	C. Ahilan, J. Edwin Raja Dhas, Kumanan Somasundaram, N. Sivakumaran	Applied Soft Computing	2015 Vol:26, 474-482

8. Ph.D Awarded

S. No.	Name of the Research Scholar	Guide / Supervisor	University / Institute
1	S.Aravind Raj	Dr.S.Vinodh	NITT
2	K.Jayakrishna	Dr.S.Vinodh	NITT

12. Summary

S.No	Details	Total nos			
25.	International Journals	13			
26.	National journals	-			
27.	International conference publications	5			
28.	National conference publications	-			
29.	Sponsored Project	No's:	2	Total Amount:	25.37L
30.	No of Ph.D produced	3			
31.	No of Patents obtained	-			
32.	No of books published	-			

Department of Energy & Environment

1. Notable Achievements

1.1. Faculty Members: Nil

1.2. Students

S.No.	Name	Details of Prizes/Awards	Organization
1.	Lakshmi Pisharody	Paper presentation – First Prize	Department of Chemistry, PSGR Krishnammal college for women, Peelamedu, Coimbatore, Tamil Nadu.

2. Conferences/Seminars/Symposium/Special Lectures

2.1. Organized

S.No.	Coordinator	Programme	Period
1.	Head, Faculty and Students	Energeia 2015	April 16, 2015

2.2. Papers presented by the Faculty/Students

S.No	Author(s)	Details
1	Sankaran K and Premalatha M	Oral presentation of a paper entitled “Enhancing biogas yield through phycoremediation of distillery wastewater “ in an International conference on Advances in Chemical Engineering and Technology held between 16-18 October 2014 at Department of Chemical Engineering, TKM College of Engineering, Kollam, Kerala.
2	Suriya Narayanan G and Premalatha M	Oral presentation of a paper entitled “Effect of inoculum concentration of <i>Oscillatoria sp.</i> in the treatment of distillery wastewater” presented in an International conference on Advances in Chemical Engineering and Technology held between 16-18 October 2014 at Department of Chemical Engineering, TKM College of Engineering, Kollam, Kerala

3	Sankaran K and Premalatha M	Oral presentation of a paper entitled “Enhancement of distillery wastewater phycoremediation with peroxidase and MnSO ₄ as catalysts” in an International conference on Green Technology for Environmental Pollution Prevention and Control held between 27-29 th September 2014 at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu.
4	Suriya Narayanan G and Premalatha M	Oral presentation of a paper entitled “Comparative study of distillery wastewater treatment by <i>Oscillatoria sp.</i> in free and immobilized form” presented in an International conference on Green Technology for Environmental Pollution Prevention and Control held between 27-29 th September 2014 at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu.
5	Lakshmi Pisharody and Premalatha M	Oral presentation of a paper entitled “Bacterial assisted treatment of anaerobically digested distillery wastewater” presented in an International conference on Green Technology for Environmental Pollution Prevention and Control held between 27-29 th September 2014 at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli, Tamil Nadu.
6	Bharadwaj, Nithiya EM and Premalatha M	Oral presentation entitled “Effect of diameter of tubular photobioreactor on biomass and lipid productivity using <i>Oscillatoria sp.</i> under ambient conditions” presented in a national conference on bioprocessing India 2014 at ICT, Mumbai on December 17, 2014.

2.3. Attended by the Faculty/Students

Faculty/Students	Details
Dr. Premalatha	ISO audit training during January 2015 at Trichy

3. Summer School/Winter School/Workshops

3.1. Organized

S.No.	Coordinator	Title	Period
1.	Head. Faculty and Students	Spectroscopic analysis of solid and liquid samples	10 th October 2014
2.	Head. Faculty and Students	Necessity of calibration for Industries	9 th October 2014

3.2 Attended

S.No	Faculty/Students	Details
1	Dr.M. Premalatha	ISO audit training during January 2015 at Trichy Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014.
2	Vasumathi KK	Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014. Participated a workshop on Bioprocess techniques and applications organized by Dept. of Biotechnology, IIT Madras, Chennai between June 14-19, 2014.
3	Sankaran K	Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014. Participated in a three days workshop on Characterization techniques in chemical sciences, held between July 9-11, 2014 at Department of Chemistry, NIT, Trichy.
4	Naveen C	Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014.
5	MandeAmolBalu	Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014.
6	Ramakant Pandey	Participated in a one day workshop on ISO documentation, record making and control held at CEESAT, NIT, Trichy during August 2014.
7	Nithiya EM	Participated a workshop on Bioprocess techniques and applications organized by Dept. of Biotechnology, IIT Madras, Chennai between June 14-19, 2014.

8	Dayana Priaydharshini	Participated a workshop on Bioprocess techniques and applications organized by Dept. of Biotechnology, IIT Madras, Chennai between June 14-19, 2014.
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4. Invited/Guest Lectures Delivered by the Faculty

S.No	Faculty	Topic	Programme	Place & Date
1	Dr.M.Premalatha	Smart use of energy audits	Faculty Development Programme (FDP) on Entrepreneurship development	15th May 2014, NIT, Trichy
2	Dr.M.Premalatha	Waste water treatment for Energy generation through micro algae	One day workshop on “Hybrid Waste Water Treatment Technologies”	12 th April 2014, NIT, Trichy

5. Sponsored projects undertaken

S.No	Co-ordinator	Name of the project	Sponsor	Amount (Rs. In Lakhs)
1	Dr.M.Premalatha	Experimental study of mciroalgal removal of CO2 from flue gas –	BHEL,Trichy	15,84,276/-
2	Dr.M.Premalatha& Florian Delrue	Indo-France collaboration project “DEPHY” – Distillery Effluent PHycoremediation	CEFIPRA	90 Lakhs(Submitted)
3	Dr.M.Premalatha	Cost effective and energy efficient mass cultivation of algae for enhanced lipid production	DBT	130 Lakhs (Submitted)

6. Major Equipment /Software purchased (more than 5 Lakhs) : Nil

7. Research papers published in National/International Journals

7.1.Faculty

S.No.	Title	Author(s)	Journal	Year, Vol.(No.) & Page
1.	Thermo gravimetric and kinetic studies on dried solid waste of post-methanated	C.Naveen and Premalatha M	Bioresource Technology	2014; 174:126-133.

	distillery effluent under oxygen and nitrogen atmosphere.			
2.	DEPHY project: Distillery wastewater treatment through anaerobic digestion and phycoremediation – A green industrial approach.	K. Sankaran, M.Premalatha, M.Vijayasekaran, VT. Somasundaram.	Renewable and Sustainable Energy Reviews	2014; 37: 634-643.
3.				

7.2.Students

S.No.	Title	Author(s)	Journal	Year, Vol.(No.) & Page
1.	Thermo gravimetric and kinetic studies on dried solid waste of post-methanated distillery effluent under oxygen and nitrogen atmosphere.	C.Naveen and Premalatha M	Bioresource Technology	2014; 174:126-133.
2.	DEPHY project: Distillery wastewater treatment through anaerobic digestion and phycoremediation – A green industrial approach.	K. Sankaran, M.Premalatha, M.Vijayasekaran, VT. Somasundaram.	Renewable and Sustainable Energy Reviews	2014; 37: 634-643.

8. Ph.D Awarded

S.No.	Name of the Research Scholar	Guide/Supervisor	University/Institute
1.	Vasumathi KK	Dr.M.Premalatha	National Institute of Technology, Trichy

9. Details of book any authored by faculty

Invited book chapter submission:

Vasumathi KK, Premalatha M and Subramanian P. Significance of harvesting on the cultivation of microalgae for the book entitled “Marine Bioenergy – Trends & Development”. Taylor & Francis (Accepted)

Nithiya EM, Vasumathi KK, Premalatha M. Enhancing economics of spirulina cultivation in large scale for the book entitled “Marine Bioenergy – Trends & Development”. Taylor & Francis (Accepted)

Sankaran K, Naveen C, Premalatha M, Vasumathi KK, Vijayasekaran M and Somasundaram VT.

CDM potential through phycoremediation of industrial effluents for the book entitled “Marine Bioenergy – Trends & Development”. Taylor & Francis (Accepted)

10. Patent if any obtained by faculty

Patent filed for a novel photobioreactor design. Author(s): Vasumathi KK, Premalatha M and Subramanian P

Centre of Excellence in Corrosion and Surface Engineering (CECASE)

1. Notable Achievements : Prof. S. Natarajan received Golden Jubilee Distinguished Alumni Award for Serving Personnel at NIT, Trichiruppalli on July 19, 2014.

2. Conference Organized : Nil

2.2 Papers Presented in Conferences:

International :

	Author (s)	Details
1	E. Edward Anand S. Natarajan	Effect of Carbon Nano Tube addition on the Corrosion behavior of pulse electrodeposited Nano Crystalline Co – W coatings. Presented on International Conference on Electro Chemical Science and Technology, ICONEST 2014, IISc Bangalore, August 9 – 11, 2014
2	M. Adam Khan S. Sundarrajan S. Natarajan	Assessment on Plasma coatings towards Hot Corrosion behavior of Inconel 617 through factorial design for gas turbine applications Presented on International Conference on Electrochemical Science and Technology, ICONEST 2014, IISc Bangalore, August 9 – 11, 2014

National :

	Author (s)	Details
1	M. Adam Khan S. Sundarrajan S. Natarajan	Evaluation of thermal barrier coatings on Inconel 617 for gas turbine applications Presented on 17 th National Congress on Corrosion Control at Karaikudi – CECRI, Karaikudi organized by National Corrosion Council India, Karaikudi, August 21 – 23, 2014

3. Workshops Organized

Coordinator	Title	Period
1. Prof. S.Natarajan, Chairman CECASE - Convener 2. Dr. M.Ing. Duraiselvam - Coordinator 3. Dr. S.P.Kumaresh Babu - Coordinator	“Workshop on Engineering Tribology” (2014) conducted for the benefit of executives of RANE Group of Companies from Mysore, Puducherry, Chennai & other units. 28 Participants got benefitted.	October 30, Nov 1, 2014

4. Invited / Guest Lectures Delivered by the Faculty : Nil

5. Sponsored Projects undertaken. : Nil

6. Major Equipment Purchased (more than Rs. 5.00 lakh.)

S. No.	Equipment	Amount (Rs. In Lakhs)
1	Multichannel Potentiostat	37.60
2	Vacuum and high temperature meter	26.25
3	Metallography kit	14.20
4	Pulse rectifier(0-40V)	15.62
5	High temperature impedance meter	27.85
6	Laser materials processing station	300.00

7. Research Papers Published in International Journals

S.No.	Title	Author(s)	Journal	Year Vol. (No) Page
1.	Selection and characterisation of HVOF jet coatings for volutes of capacity pumps of east lignite mines	M. Kumarasamy S. Natarajan	Surface Engineering Maney Publishing	DOI: /dx.doi.org/10 /1743294415 00000015
2.	Strengthening mechanisms in Multiwalled Carbon Nanotubes Reinforced Pulse Electrodeposited Coatings	E. Edward Anand S. Natarajan	Materials and Manufacturing Processes Taylor & Francis, UK.	DOI: 10.1080/10426914.2014.1004697
3.	Effect of Carbon Nanotubes on Corrosion and Mechanical Properties of Pulse Electrodeposited Co-W Composite Coatings	E. Edward Anand S. Natarajan	Journal of Materials Engineering Performance ASM International, USA.	January Volume 24, 1, pp 128-
4.	Degradation mechanism of high temperature erosion in laser modified IN718 alloy.	K.G.Thirugnanasambant S. Natarajan	Surface Engineering Maney Publishing	Volume: 31, 1, Jan 2015, 1 - 28
5.	Hot corrosion behaviour of Inconel 617 in mixed salt environment at 900 and 1000°C for gas turbine	M. Adam Khan S. Sundarrajan S. Natarajan	High Temperature Materials and Processes DE GRUYTER MANY	DOI: 10.1515/htmp-2014-0011 June 2014

	ications			
6.	Preparation and characterisation of nano alline cobalt–phosphorus rings reinforced with n nanotubes	E. E. Anand, S. Natarajan	Surface Engineering Maney Publishing,	2014;30(10) 721
7.	Influence of plasma rings on Inconel 617 for gas e applications	M. Adam Khan S. Sundarrajan S. Natarajan	Surface Engineering Maney Publishing,	2014;30(9), 661
8.	Oxidation and Hot sion Behavior of Nickel- l Superalloy for Gas ne Applications	M. Adam Khan S. Sundarrajan S. Natarajan P. Parameswaran E. Mohandas	Materials and Manufacturing Processes Taylor and is, UK.	2014;22(9), 82-839
9.	Erosion Wear acteistics of Surface fied Grey Cast Iron by Co-Cr/NiCrBSi coating HVOF Thermal Spray sses	J. Yogananth S. Natarajan S. P .Kumaresh Babu	Materials rmance and acterization ASTM ational USA.	2014;3(1),3 6

8. Ph.D. Awarded : Nil

9. Details of Book if any authored by faculty. : Nil

10. Patent if any obtained by faculty : Nil

11. Other Important Points :

Fifteen Executives have been offered admission for M.S. (By Research) and Ph.D. (Part Time – External Registration) Programmes under CECase **during the current academic year (2014-15)** drawn from Central workshops and Diesel Loco shed, Southern Railway, Ponmalai (Golden Rock), Tiruchirappalli; Neyveli Lignite Corporation Ltd, Neyveli, High Energy Batteries, Mathur, Tiruchirappalli and Gas Turbine Research Establishments, DRDO, Bangalore .

Out of a present total strength of **twenty seven** (since admission in 2013), **twelve** have completed their course work and focusing on their research leading to M.S. and Ph.D. degrees.

Constant efforts by CECase are in progress **to achieve international Collaboration with R&D Centers** situated in **US, UK, Australia, Spain, Belgium and Denmark**, working on the theme of Corrosion and Surface Engineering.

12. Summary

S.No	Details	Total nos
33.	International Journals	9
34.	National journals	Nil
35.	International conference ications	Nil
36.	National conference	Nil

	ications	
37.	Sponsored Project	Project proposal submitted to CMPDI , Govt. of India, worth of Rs. 3.0 Crores is under active consideration . Results are awaited
38.	No of Ph.D produced	Nil
39.	No of Patents obtained	Nil
40.	No of books published	Nil

CENTRAL LIBRARY

Conference / Seminars / Symposium / Special Lectures conducted:

S.No.	CO-ORDINATOR	PROGRAMME	PERIOD
1.	Dr. G. THAMARASELVI, Librarian (S.G.)	Conducted User Orientation Program on "Access to E-Resources for Research purposes" for all the Research Scholars of NITT	03.04.2014
2.	Dr. G. THAMARASELVI Librarian (S.G.)	Conducted An User Orientation and Training Program on " How to access and use Turnitin- Antiplagiarism – Software for promoting Research & Development "	24.07.2014
3.	Dr. J. SARANGAN, Chairman Dr. G. THAMARASELVI Librarian (S.G.), & Dr. G. THAMIZHAVEL	Organized and conducted 2 days workshop under TEQIP-II ON "Best Practices for Effective Usage of Online E-Resources for promoting Research and development"	26-27 th September 2014

Papers presented by the Faculty:

Authors	Details
Dr. G. THAMARASELVI Librarian (S.G.)	Presented a Lecture on Access to e-resources available at NITT on 26 th Sep. 2014 at the TEQIP_II Workshop
Dr. G. THAMARASELVI Librarian (S.G.)	Presented a paper on Community engagement in developing Public Libraries: Issues Challenges and suggestions in the Two days Workshop held at Central Library, Thanjavur during 12, Dec. 2014
Dr. G. THAMARASELVI Librarian (S.G.)	Presented a lecture on Access to Scholarly E-resources: Issues and Solutions in the Two Days Workshop held at Holy Cross college, Trichy on 8 th Jan 2015.
Dr. G. THAMARASELVI Librarian (S.G.)	Access to scholarly information through e-resources for promoting Research and Development: Issues And solutions in the International Conference on WNL 2015 held at NIT, Silchar during 21-23 Jan 2015

Invited / Guest Lectures Delivered by the Faculty:

Faculty	Topic	Programme	Place & Date
Dr. G. THAMARAISELVI, Librarian (S.G.)	Community engagement in developing Public Libraries: Issues Challenges and suggestions	Two days Workshop on Community Engagement in Public Libraries	Central Library Thanjavur
Dr. G. THAMARAISELVI, Librarian (S.G.)	Access to Scholarly E- resources: Issues and Solutions	Two Days workshop on Access to Information and Electronic resources	Holy Cross College, Trichy

STUDENTS PLACEMENT

Department: **Training and Placement**

During the year under report (2014-15), the students placement record continues to be maintained at higher percentages despite global sluggishness. The overall percentage of placements as on 10.04.2015 for under graduate programme is 86.6% and Post Graduate Programme is 64.6%. The placement process is **still in progress**. Details are given below:

Campus Placements : Under Graduates

Sl. No.	UG Branch	Total Placed	As Percentage of Registered Students
01.	Civil	55	85.9
02.	C.S.E.	79	91.9
03.	E.E.E.	67	82.7
04.	E.C.E.	72	83.7
05.	Mech.	77	95.1
06.	MME	35	81.4
07.	Prod.	66	86.8
08.	I.C.E.	62	91.2
09.	Chem.	35	71.4
10.	Arch.	09	100.0

Campus Placements : Post Graduates

Sl. No.	PG Branch	Total Placed	As Percentage of Registered Students	
01.	M.B.A.	55	82.1	
02.	M.C.A.	67	85.9	
03.	M.Tech. Comp. Science & Engineering	22	91.7	
04.	M.Tech. Thermal Power Engineering	12	60.0	
05.	M.Tech. Industrial Safety Engineering	9	47.4	
06.	M.Tech. Manufacturing Technology	6	33.3	
07.	M.Tech. Power Systems	11	57.9	
08.	M.Tech. Power Electronics	14	77.8	
09.	M.Tech. Material Science	3	25.0	
10.	M.Tech. Transportation Engg. & Management	8	50.0	
11.	M.Tech. Welding Engineering	14	70.0	
12.	M.Tech. Communication Systems	19	82.6	
13.	M.Tech. VLSI Systems	12	70.6	
14.	M.Tech. Industrial Engineering	10	45.5	
15.	M.Tech. Industrial Metallurgy	4	40.0	
16.	M.Tech. Structural Engineering	19	86.4	
17.	M.Tech. Environmental Engineering	5	41.7	
18.	M.Tech. Plant Design (Chemical Engineering)	3	16.7	
19.	M.Tech. Non-Destructive Testing.	11	44.0	
20.	M.Tech. Energy Engineering	7	36.8	
21.	M.Tech. Process Control & Instrumentation	9	56.3	
No. of Companies		No. of Students Placed	Percentage	Double offer

Visited			(UG & PG)
195	UG : 557 PG : 320	UG : 86.6 PG : 64.6	UG : 12 PG : 02

With the placement process still in progress, the Institute is expected to end the year with near normal placements, despite unfavorable global factors.

Significant Institute level contribution during the year 2014 - 15

1. Coordinated and functioned as the Secretariat for the **Distinguished Alumnus Award** 2014. Hon'ble President of India and Hon'ble Governor of Tamil Nadu were Chief Guests for the DAA function which was part of the **Golden Jubilee celebrations**.
2. As part of Incubation activity and alumni interaction, played a key role in collaborating and sourcing Rs.35 lakhs as **grant** for CEDI from M/s.Sonata Software, an **alumnus** founded company.
3. Faculty Advisor, "Incredible NIT, Trichy" a creative visual guide to the rich, vibrant flora and fauna of the Campus. The **book** was **released** by the Hon'ble **Governor** of Tamil Nadu.
4. During the year, **coached** more than 150 **BHEL Executives** on various aspects of personality development including a specially designed programme titled **PRIME - Program for Introspection, Motivation and Effectiveness**.

Department : Computer Support Group**1. Notable Achievements****2. Conference****2.1 Organised**

Nil

2.2 Papers presented by the Faculty / Students**International**

Author (s)	Details
Mr.A.Samson	<p>1.International Conference on <i>Advanced Information Computation (ICAIC 2015)</i> on 4th and 5th March, 2015 at Selvam College of Technology, Namakkal. Paper title: Student Placement Big Data Mining with SDN: A Review of various placement aspects for student community of educational systems.</p> <p>2.International Conference on Electrical, <i>Electronics and Computer Engineering (ICEECE'15)</i> On 11th and 12th March 2015 at Vivekanandha College of Engineering for Women, Thiruchengode, Tamilnadu Paper Title: SDN integrated Open Transport Switch and high performance storage</p>

3. Workshops / Seminars**3.1 Organized**

Coordinator	Title	Period
Mr.K.Srinivasan	TEQIP workshop on windows 7 OS & office 2013 for Main Office Staffs	Schedule I-19th May 2014 to 27th May 2014 Schedule II-2nd June 2014-10th June 2014
CSG Team	TEQIP workshop on “Network Emerging Trends-Wi-Fi and Software Defined Networking”, November 1st 2014	November 1st 2014
Dr.S.R.Balasundaram and Dr.G.Kannabiran	DST-NIMAT Sponsored EDP under CEDI, NIT Trichy	Four Weeks 30/05/2014 to 26/06/2014

3.2 Attended

Faculty/Staff	Details
Mr.A.Samson	” <i>Workshop on Big Data Mine and Search</i> ” on 3rd to 5th December, 2014 at Department of Computer Science and Engineering, CEG Campus, Chennai.

6. Major Equipment / Software Purchased (more than Rs. 5.00 lakh.)**Software:**

S. No.	Equipment	Amount (Rs. In Lakhs)
1.	PTC Campus Agreement with three years Active Support / AMC for PTC Pro/ENGINEER Wildfire and PTC CREO software collection (Date of Purchase November 27, 2014).	Rs.6,50,000 + tax
2.	Microsoft Open Value Subscription Education Solutions (formerly Microsoft Campus Agreement) (Date of Purchase November 5, 2014)	Rs.10,02,000 Net

Hardware:

S. No.	Equipment	Amount (Rs. In Lakhs)
1.	54 Nos. - High-End Computers	Rs. 32,67,000
2.	10 Nos. - Entry Level Servers	Rs. 27,21,850
3.	5 Nos. - Mid-Range Servers	Rs. 17,97,981
4.	1 No. - High-end Server	Rs. 10,11,628
5.	42 Nos. - Entry Level Computers	Rs. 15,78,234

11. Other Important Points

	Implementation of <i>Wi-Fi facilities</i> for NITT Hostels (26 locations) with Wi-Fi access enabled from May 2014.
	Institute <i>Information System Portal</i> (info.nitt.edu) was developed to enable facilities to faculty, staff and students.
	Rs.1 Lakh Equipment grant received from IIT Bombay under <i>Aakash Projects</i> to set up Aakash Lab with server and Wi-Fi facilities on 21/10/2014.

12. Summary

S.No	Details	Total nos			
1.	International Journals				
2.	National journals				
3.	International conference publications	2			
4.	National conference publications				
5.	Sponsored Project	No's:		Amount:	
6.	No of Ph.D produced				
7.	No of Patents obtained				
8.	No of books published				

National Cadet Corps (Air wing)
Activities during April 2014- March 2015

“A” flight has started regular parades from August 8, 2014 with total strength 50. Thirty five parades each of duration 2 hours were conducted. The two hours of parade consists of 40 minutes of foot & weapon drill followed by 80 minutes of theory classes on the subjects like General Service Knowledge, Aero-modeling, Air Frame, Aero-engine, Principles of Flight, Health and Hygiene, First aid etc.

NCC Cadets performed the National Salute, delivered speeches and sang patriotic songs on Independence Day (Aug 15, 2014) as well as on the Republic Day (Jan 26, 2015).

Forty six of NITT NCC cadets have attended Combined Annual Training Camp (CATC) 2014-15 during 22nd December 2014 to 31st December 2014 at Cheetinadu Public School, Karaikudi organized by 3 (TN) AIR SQN (TECH) NCC, Trichy. In CATC, NITT cadets performed excellently and won many awards in CATC 2014-15. ***NCC cadet Aravind have attended NCC SSB Screening: Personality Development Course (2/2014) at Officers Training Academy(OTA), Kamptee, Nagpur from 15th Dec 2014 to 24 Dec 2014.***

'A' Flight have organized Interaction drive by the Indian Air Force on 5th Sep'2014 in NITT campus. In this interaction drive around 200 NITT students participated and had interaction with Indian Air Force officials. Twenty five students selected based on various competitions for adventure activity (parasailing) conducted at Air Force Station, Tanjore.

A-Flight, 3(TN) Air Sqn (Tech) NCC of NIT-Trichy have organized a blood donation camp in NITT along with Mahatma Gandhi Government Hospital attached to K.A.P. Viswanatham Govt. Medical Collge, Trichy on 18th Oct'2014. The camp witnessed an overwhelming turnout. One hundred and twelve volunteers from students and faculty of the college donated blood in this camp.

NCC cadets have initiated campaign on "NO TO PLASTIC BAG" and distributed paper bags to the shops near the 3(TN) Air Sqn (Tech) NCC, Crawford nagar, Trichy as an awareness campaign on 25th Oct'2014.

NCC cadets have participated in National Unity Day celebrations organized by NITT on 31st Oct 2014 and also joined in 'Run for Unity'.

'A' Flight, NCC organized three days event Lakshya: a defense and civil services symposium during March 13th to 15th 2015.

Twenty three cadets appeared 'B' certificate examination on 22 & 23rd Feb', 2015 and one cadet appeared for "C" Certificate examination on 28th Feb' 2015, conducted by NCC directorate.





TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE II (TEQIP-II)

Preamble

The Indian system of engineering education has become vast and so far around 3000 engineering institutions have been established throughout the country. The exponential growth in Technical Education has however not translated into any significant growth in the number of quality graduates due to restricted availability of qualified faculty and better teaching-learning and training facilities. There is currently a huge gap between quality and quantity in Technical Education. The World Bank took keen interest in systemic transformation of country's technical education system to make it globally competitive and showed willingness to assist the Government of India to launch a Technical Education Improvement Programme (TEQIP) as a long term programme of 10-12 years and in three phases.

The Ministry of Human Resource Development, Government of India through NPIU have competitively selected 127 institutions including 18 Centrally funded institutions, 68 State funded institutions, 22 private unaided institutions and 19 Polytechnics spread across 13 States of India to participate in the first phase of TEQIP during 2003-09. After the completion of TEQIP Phase-I, a study was carried out for evaluating the impact of the Programme and learn lessons for TEQIP Phase-II.

TEQIP PHASE - II

As per TEQIP design, each phase is required to be designed on the basis of lessons learnt from the implementation of an earlier phase. As mentioned above, TEQIP-I started a reform process in 127 Institutions. The reform process needs to be sustained and scaled-up for embedding gains in the system and taking the transformation to a higher level. To continue the development activities initiated through TEQIP-I, a sequel Project is planned as TEQIP-II.

Objectives:

1. Strengthening Institutions to produce high quality engineers for better employability,
2. Scaling-up PG education and demand-driven Research & Development and innovation,
3. Establishing Centers of Excellence for focused applicable research,
4. Training of faculty for effective Teaching, and
5. Enhancing Institutional and System Management effectiveness.

The following are office bearers involved in the TEQIP-II.

TEQIP PHASE-II

Sl. No.	Name	Role
1	Dr.S.Sundarrajan	Director
2	Dr.G.Swaminathan	TEQIP- II Advisor
3	Dr.T.K.Radhakrishanan	TEQIP-II Coordinator
4	Dr.N.Sivakumaran	Additional Coordinator
5	Dr.V.Senthilkumar	Nodal Officer - Procurement
6	Dr.Sishaj P.Simon	Nodal Officer - Academic

7	Dr.K.N.Sheeba	Nodal Officer - Equity Plan
8	Dr.K.R.Balasubramanian	Nodal Officer - Finance
9	Dr.R.Anand	Nodal Officer - MIS

Status of TEQIP – II

Procurement:

- ❖ Equipments worth INR 5.63 Crore were purchased
- ❖ PO released for equipments and learning resources worth Rs 0.30 Crore
- ❖ Total Amount (Expenditure+Committed+Pipeline) for procurement alone : 6.00 Crore

Purchase of ICT enabled classroom equipments (Virtual Class Rooms) for 10 TEQIP-II sponsored PG departments –Rs. 1.34 Crore

OUTCOME

- Students and faculty started using these equipment in laboratory classes Research scholars are highly benefitted and the results are published in reputed journals

List of Equipments Procured Since Inception worth above Rs.5 Lakhs

Sl. No.	Name of the Equipment	Cost of the Equipment in INR	Dept
1	Cube 5	5,00,000	Civil
2	Portable HAZ-DUST Environmental Particulate Air Monitor	5,51,250	Civil
3	Digital Eddy Current with Accessories	6,62,663	NDT
4	Electrochemical Machine	8,01,191	Production
5	Melting Furnace	8,76,857	MME
6	Ericsson Cup Tester	6,85,125	Mech
7	Slow Speed Diamond Cutter	6,65,106	MME
8	HPLC System	2,407,350	Chemical
9	Squeeze Casting Unit	6,99,510	MME
10	Complete protection scheme of a 3-Phase Generator using electromagnetic/Static Relays	6,21,920	EEE
11	Trans Synergic Welding Machine	6,24,750	Production
12	Vaccum Furnace	5,72,500	MME
13	Multi Purpose Invertor Power source	9,96,450	MME
14	Scratch Tester	7,16,770	Production
15	DIC Microscope with Image Processing	9,98,440	MME
16	FTIR Spectrophotometer	9,74,794	Chemical
17	Varestrain and Implant Testing Unit	4,00,750	MME
18	Accessories for Perkin - Elmer make DSC and TGA	5,68,503	Chemical

19	5 Ton Capacity Electrically operated Dynamic Actuator	7,78,600	Civil
20	Tactile Force Measurement System	5,17,500	Mech
21	Total Organic carbon analyzer- High Sensitivity by using Combustion technique with auto sampler	14,42,700	Civil
22	Vibration Analysis tool Kit	10,80,000	Production
23	2 channel digital storage oscilloscope	5,00,000	EEE
24	Triaxial Cell including Pore pressure apparatus	6,91,875	Civil
25	Mixed Signal Oscilloscope 350 MHz – 2 GHz, Channels: 4 analog & 16 digital	9,69,150	ECE
26	Servo Controlled Hot Deformation Testing Equipment	15,73,320	Production
27	Thermal Conductivity Meter of Liquids and Gases	9,49,500	Mech
28	Welding Expert Software and System	9,98,750	Mech
29	Computers, Printers and Scanners (NCB)	2477370	CSE
30	High Frequency System Simulation Software (NCB)	1449000	ECE
31	Shell and Tube Heat Exchanger	586446	Chemical
32	Centrifuge	853501	Chemical
33	Complete protection scheme of a 3-Phase Generator using electromagnetic/Static Relays	621920	EEE
34	High Voltage Direct Current Transmission Line Simulator with Bi-polar connection	515,250	EEE
35	Ultrasonic Phased Array system with necessary Accessories	1783100	NDT
36	Books package - 1	734330	Central Library
37	Books package - 3	721171	Central Library
38	Books package - 2	570,055	Central Library
39	Virtual Conference System (NCB)	13168145	Centralized facility

Academic and other activities:

S.No	Particulars		Nos
1	No of training undergone by faculty		142
2	No of training undergone by Non Teaching staff		280
3	No of workshops conducted by faculty		77
4	No of International Training	Faculty 20	27
		Research scholars 7	
6	No of TEQIP Conclave		2
7	Faculty seed money Expenditure Rs.57.5 Lakhs		130
9	Contingency & Assistantship to research scholars Expenditure Rs.2.29Crores		189

10	Guest Lectures (ICE – 4, CHL – 2 , EEE -1)		7
11	MOU signed under TEQIP		3
12	III Cell	No of PG students benefitted through Industrial visit (Expenditure Rs. 5 Lakhs)	167
		No of Faculty benefitted through industrial Visit	3
		No of industrial workshop conducted	2
13	TEQIP Research scholars (2 batches) Expenditure Rs. 2.02Crores		33
14	No of M.Tech faculty who are PhD enrolled benefitted through TEQIP contingency		7
15	Capacity development (Management) programmes Expenditure (Rs. 12 Lakhs)		5
16	Academic Reforms Accreditation Expenditure (Rs. 19.5 Lakhs)		7 UG Programmes
	BoS & Academic Audit/ Curricula revision Expenditure (Rs. 15 Lakhs)		All UG & M.Tech Programmes

EQUITY PLAN – Expenditure – Rs. 10 Lakhs

- ❖ Around 50 girl students are trained in martial arts and yoga for self defense and motivation
- ❖ 110 Students of B.Tech. 1st year who had undergone schooling in respective state languages are trained for effective communication in English
- ❖ 371 M.Tech. final year students are subjected to finishing school to develop self confidence, communication and personality development in focus towards placement
- ❖ Counseling and Guidance Cell is set up through MoA (Memorandum of Agreement) with M/s Sowmanasya Hospitals and Institute of Psychiatry, Tiruchirappalli to provide mentoring services for NITT community under TEQIP-II
- ❖ Bridge course conducted (2012-14) for B.Tech students in Mathematics and computer programming.

OUTCOME

- Confidence among girl students has increased
- Health benefits
- Increased confidence in communication
- Self confidence to face placement
- Student started visiting counseling and guidance cell
- Pass percentage in Mathematics has increased the overall transition rate

Financial Status as on 31.03.2015

Total Fund Allocation	: 12.50 Cr
Grant Received	: 12.50 Cr
Total Expenditure	: 11.50 Cr

NSS Activities for the year 2014-15

- Anti-Smoking Anti-Liquor Anti-Drugs Awareness at Orion (Computer Science Unit)
- Cleanliness Activity in Civil Dept - SAC Stretch (Civil Unit)
- Plantation at Vasantham Canteen premises (ICE Unit)
- Cleanliness Activity in Diamond - LHC -Hostel Office -Coral stretch , Garnet-Amber and the area around Garnet (Mechanical and Metallurgy Unit)
- Plantation activity in Chemical Department (Chemical Unit)
- Beautification of Shopping Complex (Architecture Unit)
- Deweeding Park near REC Middle School (ECE Unit)



Free Eye Camp

INDUSTRY – INSTITUTE INTERACTION CELL

Details of Guest Lecture

S.No	Date	Department	Guest faculty	Lecture topic /area
1	04.04.2014	Physics	Dr.G.K.ShivaKumar, Professor, Department of Physics, NITK Surathkal	Compound semiconductor thin films and their application to hetero junctions.
2	04.04.2014	Mechanical Engineering	Renith Richardson, Lead engineer, Combusion & Kinetics Lab, GE Global Research	ME606- Computational Fluid Dynamics
3	04.04.2014	Women Cell, NITT	Mrs.Bhuvanewari, Lecturer, State Institute of Hotel Management and Catering Technology, Thuvakudi	Cooking Methods(with and without fuel) and tips for wholesome diets
4	04.04.2014	Women Cell, NITT	Mr.Suresh Kumar Lecturer , State Institute of Hotel Management and catering technology,	Cooking Methods(with and without fuel) and tips for wholesome diets
5	04.04.2014	Women Cell, NITT	Mr.V.Sundaramurthy, Lecturer, State Institute of Hotel Management and Catering Technology, Thuvakudi.	Cooking Methods(with and without fuel) and tips for wholesome diets
6	27.03.2014 & 28.03.2014	Computer Applications	Ms.Shiladityakar, Developer cum Technical Trainer, Griffin Education Pvt Ltd, 236,PR PLAZE, Velachery,Chennai-73	Lectures on Android Apps development
7	27.03.2014 & 28.03.2014	Computer Applications	R.Sundaravigneshvaran, Developer cum Trainee, Griffin Education Pvt Ltd, 236,PR PLAZE, Velachery,Chennai-73	Lectures on Android Apps development
8	27.03.2014 & 28.03.2014	Computer Applications	Ms.K.M.Komathy Abhishek Hazra, Griffin Education Pvt Ltd, 236,PR PLAZE, Velachery,Chennai-73	Lectures on Android Apps development
9	03.04.2014	Computer Applications	Dr.ASD.Pillai, Former, Dean (sciences), SJC, Trichy-2	Effective Communication in English

10	15.03.2014 & 13.06.2014	Civil (Transportation and Engineering and Management)	Dr.J.Vasudevan, Associate Director, Consulting Engineer, Chennai	CE602 - Road transport Management Economics.
11	24.03.2014	ICE	Mr.Arumugam Muthu, Managing Director, Rainbow control systems (P) ltd.,No.1. Second floor, 4th cross, sundar Nagar, KK Nagar, Trichy -21	Instrumentation and Control in Petrochemical Industries
12	12.04.2014 & 13.04.2014	Mechanical Engineering	Dr.A.Salih, Associate Professor, IIST, Thiruvananthapuram	ME606 - Computational fluid Dynamics.
13	26.03.2014	Physics	Shri.S.Thirunavukkarasu, Scientist Officer -E, EMSI Section ,NDE Division, Indira Gandhi Centre for Atomic Research, Kalpakkam - 603102	Quality '14
14	17.04.2014	ICE	Mr.K.Krishna Rao, DGM, Ultra Tech Cement Ltd.,, Reddipalayam Cement works, Ariyalur	Process flow of cement industry and Instruments used in cement Industry
15	30.04.2014	EEE	K.VinothKumar, Associate Scientist, ABB Global Industries & Services Ltd Chennai	EE604 & EE678 High voltage DC Transmission
16	25.04.2014	Architecture	Er.S.Rajendran, Practicing Civil Engineer, Thanjavur	workshop to develop construction yard and to impart practical skill
17	25.04.2014	Architecture	Er.S.Rajendran, Practicing Civil Engineer, Thanjavur	Construction workshop
18	31.01.2014	MME	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	Welding application Technology
19	03.03.2014	MME	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT616 - Welding application Technology
20	18.04.2014	MME	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT616 - Welding application Technology

21	11.05.2014	MME	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT616 - Welding application Technology
22	12.05.2014	M.S & PH.D	Mr.Balathiru, M.D, Accenture Ltd, U.S.A	-
23	29.01.2014 05.02.2014 05.03.2014 19.03.2014 & 20.03.2014	Architecture	AR.M.Dhanasekeran, Practicing Architect, Thanjavur	AR414 - Architectural Design -VII
24	10.09.2014	Computer Applications	J.Nelson Raja, Delivery Manager, NTT DATA Pvt.ltd, Chennai	SAP - HANA
25	12.09.2014	Chemistry	Dr.Pulla Rao, Professor in chemistry, IIT , Bombay	HORIZON 2014 Biomimetics
26	13.09.2014	Chemistry	Dr.Mohan Das, Associate Professor, Department of chemistry,Central University of Tamilnadu, Thiruvarur.	HORIZON 2014Molecular Modeling
27	12.09.2014	Chemistry	Mrs.Gita Chengappa, Incubation Manager, TREC-STEP,NITT Campus, Trichy	HORIZON 2014 Entrepreneurship
28	10.09.2014	Civil (Transportation and Engineering and Management)	Dr.M.S.Amarnath, Professor, Bangalore University, Bangalore.	CE613 - Pavement Materials
29	04.09.2014	EEE	K.Rajbabu, Dy. Engineer, BHEL,Trichy.	EE304 Operating Systems
30	29.09.2014	Welding Engineering	Dr.M.Vasudevan, Scientist G, IGCAR Kalpakkam	MT 603 Welding Processes
31	29.09.2014	Welding Engineering	Dr.V.Balasubramanian, Professor, Annamalai University	MT 603 Welding Processes
32	11.08.2014	Welding Engineering	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT 605 Design of Weldments

33	12.08.2014	Welding Engineering	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT 605 Design of Weldments
34	13.08.2014	Welding Engineering	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT 605 Design of Weldments
35	18.08.2014	Welding Engineering	Dr.S.Suresh, Former GM,WRI, BHEL,Trichy	MT 605 Design of Weldments
36	22/12/2014 to 24/12/2014	Computer Applications	Avinash Prabhakar, Allahabad University, B-8, Sopan, Ahmadabad	MB823/MB879 FUZZY NEURAL NETWORKS DATA MINING TECHNIQUES
37	29/11/2014	Civil Engineering	Dr. J. Muralikrishnan, Associate professor Dept. of Civil Engineering IIT, Madras	CE613- PAREMEAT MATERIALS
38	31/01/2015 to 01/02/2015	Civil Engineering	Dr. J.Vasudevan, Associate director, jacobs- ces chennai	CE602- ROAD TRANSPORT MANAGEMENT & ECONOMICS
39	06.02.2015	Metallurgical & Materials Engineering	Dr. A.K.Jha, Professor, IIT BHU, VARANASI	Special lecture
40	07.02.2015	Chemical Engineering	Diby Paul, Associate professor, konkuk university, Seoul, south Korea	CL302- CHEMICAL PROCESS EQUIPMENT DESIGN
41	13/2/2015 to 14/2/2015	Civil Engineering	Dr. J.Vasudevan, Associate director, jacobs- CES Chennai	CE602- ROAD TRANSPORT MANAGEMENT & ECONOMICS
42	24.02.2015	Chemistry	Dr. Maheswaran Shanmugam, Asst Prof. IIT Mumbai	Influence of Geometry and quenching quantum Tunneling of magnetization in Lanthanide based single molecule magnets.
43	26/2/2015	Mechanical Engineering	Dr.M. Suriyanarayanan, Principal Scientist, CLRI, Chennai	Special lecture on safety
44	5.3.2015	Metallurgical & Materials Engineering	Mr.S.Krishnamoorthy, Ex-DGM, Rourkela Steel plant SAIL	MT606, MT616

45	7.11.2014	Mechanical Engineering	M.Tharunkumar, HSE Engineer-Off Shore Drilling, National Drilling Company (Ndl), Abudhabi, UAE	ME653- SAFETY MANGEMENT
46	15/10/2014 - 16/10/2014	All depts	K. Sabarinathan, Professor, Sabari & Sauthor Institution for IAS Chennai	HM401 INDUSTRIAL ECONOMICS
47	21.11.2014	Chemistry	Dr. David Semetil, CNRS Research, Inorganic chemistry and Mol. Catalysis Lab, Univ. of Strasbourg, France	Macro Ligands in Catalysis
48	22/11/2014	Management Studies	S. Ghouse Mohideen, Financial Analyst, Amazon, India	MB724- MACRO ECONOMICS
49	3.12.2014	Chemistry	Dr.K.C. Kumara Swamy, Professor& J.C.. Bose National Fellow, University Of Hyderabad, Hyderabad	A BRIEF JOURNEY FROM ALLENE/ALKYNE CHEMISTRY TO INDOLE CHMISTRY
50	15-10-2014	Architecture	A. Shanmugam, Practicing Architect, B-13, Second Cross West Entn. Thillai Nagar, Trichy-18	AR311 ARCHITECTURAL DESIGN-IV
51	08/09/2014 to23/10/20 14	Architecture	Naveen G Practicing Architect,G-25, Railway Quarters,Golden Rock,Tiruchirappalli-620004	AR211 ARCHITECTURAL DESIGN
52	13/08/2014 18/08/2014 25/08/2014 10/09/2014	Architecture	Ar. T.J. Eswaramurthy, Practicing Architect, 13A/Kavalkara Street, Thennur, Trichy- 18	AR311 ARCHITECTURAL DESIGN-IV
53	5.11.2014	Architecture	Ar. Gopal P.S. Practicing Architect C3, Pgs Ngk Apartment, 2854, Mary'S Corner, Thanjavur- 613007	COMPUTER APPLICATIONS IN ARCHITECTURE- II
54	16/04/2014	Production Engineering	N.Jagadeesan, General Manager(Rtd), Bhel, Trichy	PR671- FINANCIAL MANAGEMENT

55	21/04/2014	Architecture	Mahesh B. Director, Mc Dberl, Bangalore	AR212 CLIMATICALLY RESPONSIVE ARCHITECTURE
56	19/04/2014 to 20/04/2014	Civil Engineering	Dr.J.Vasudevan, Asso. Director, JACOBS- Consulting Engg Services, Chennai	CE602- ROAD TRANSPORT MANAGEMENT & ECONOMICS
57	23/04/2014 to 26/04/2014	Mechanical Engineering	V.Natrajan, BHEL, Thiruvalluvar Street, Srirangam	FIRE ENGINEERING AND EXPLOSION CONTROL
58	21/04/2014 to 26/04/2014	Mechanical Engineering	A. Kalyanasundaram, BHEL, 4/296, 8Th Street, Sakthi Nagar, Kattur, Trichy- 620019	SAFETY IN MATERIAL HANDLING
59	27/04/2014	Mechanical Engineering	Hepat, Sr. Manager, CPCL (Chennai Petroleum Corporation Limiter), Chennai- 620018	FIRE ENGINEERING AND EXPLOSION CONTROL
60	28/04/2014	Physics	Dr. Anandmayee Tej, Associate Professor, Dept. Of Earth & Space Sciences	Special lecture for M.Sc (Phy) students
61	24.3.2015	ICE	Mr. A. Gowthaman, Maintenance Engineer, CPCL, Chennai	Industrial Instrumentation
62	20.3.2015 and 22.03.2015	Civil	Dr.J.Vasudevan, Asso. Director, JACOBS- Consulting Engg Services, Chennai	Road Transport management and Economics
63	18.03.205	MME	A. Venkatraman, Former Prof., PEC, Pondicherry	Special lecture on met. Topics
64	22.1.2015	Chemistry	Dr. A. Murugadoss, Experimental Res., Officer, Univ. of Birmingham, UK	Advanced nanostructured materials with controlled atomic distribution: A new model system for catalysis.
65	15-01-2015 To 17-04-2015	Chemical Engineering / DEE	Dr.V.Gopalakrishnan Former ED, BHEL, Trichy Adj. Faculty, IIT Madras	Design of heat exchangers, pressure vessels and piping

INDUSTRIAL CONSULTANCY AND SPONSORED RESEARCH

Sl.No	Principal Investigator	Dept	Project Title	Sanctioned Fund	Funding Agency
1	Dr.N. Gopalakrishnan	PHY	Doping Applications	1992000	CSIR
2	Dr.L. Cindrella	CHY	Radiation Capped Stagnation Temperature improved, wide spectrum responsive solar selective coatings for solar thermal systems	1074800	CSIR
3	Dr.S.P. Sivapirakasam	MEC	Analysis of welding Fumes for the Cosumables used in the Fabrication of Nuclear Components	1721110	IGCAR
4	Dr.S. Vinodh	PRO	Exploring of lean tools/techniques enabling sustainability in automative organization	1542000	SERB (DST)
5	Dr. J. Hemalatha	PHY	Magnetoelectric polymer nano composite structures for magnetic field sensing in non destructive testing	1404000	SERB (DST)
6	Dr.J. Sarat Chandra Babu	CHL	Experimental and Numerical Investigation of Gas - solid Reaction in a Tubular reactor	3593000	BARC
7	Dr.B. Venkataramani	ECE	Visvesvaraya PhD Scheme for Electronics and IT	2672700	DEITY
8	Dr. V.Anandakrishnan & Dr. M. Duraiselvam	PRO	Investigation on the properties of direct metal laser fabricated material and its brazing compatibility with nickel based casing	990000	GTRE CARS
9	Dr.R. Karvembu	CHY	Nano silica immobilized acylthiourea complexes for catalytic applications	2120000	BRNS
10	Dr.K.Balamurugan	PHY	Innovation in Science Pursuit for Inspired Research	1900000	DST INSPIRE
11	Dr.Kamatchi Sankaranarayanan	CEESA T	Role of Interfacial Rheology in Myosin-Actin Interactions	3500000	DST INSPIRE
12	Dr.S.Domnic	CA	Detection of pectoral muscle and mass in	325600	NASI

			mammogram image for early diagnosis of breast cancer to increase the life span of women		
13	Dr.K.Sudareswaran	EEE	Design and optimization of feedback controller for boost type DC-Dc converters using artificial immune system	695000	CPRI
14	Dr.G.Muruganatham	MBA	Effect of social cause Advertisements in Tiruchirappalli district of tamil nadu	300000	ICSSR

STATUS OF IMPLEMENTATION MEMORANDUM OF UNDERSTANDING (MoU)

S.No	Partner Agency	Scope of Activities	Timeline (Date of Effect)	Current Status	Active upto
1.	Institut Mines-Telecom	To establish a program of academic and scientific exchange and collaboration in areas of interest and benefit to participating institutions.	19.3.2014	Active	18.3.2019
2.	Advanced Research centre for Powder Metallurgy and New Materials (ARCI)	Industrial visits, in-plant training/students projects. Faculty training and exchange programmes utilizing the infrastructure facilities with two organizations, patents and publications.	26.12.2013	Active	26.12.2018
3.	IT-ITeS Sector Skills Council NASSCOM (SSC NASSCOM)	Pilot project for the conduct of EPP and FSIPD program	26.02.2014	Active	26.02.2017
4.	Indian Institute of Crop Processing Technology, Thanjavur.	To facilitate a collaborative program of research, training, curriculum, institutional development, information dissemination, and exchange of faculty, students, staff.	07.10.2014	Active	07.10.2019
5.	National Institute of Uttarakhand, Srinagar	To Promote Academic and Research cooperation and the Development of these two institutions as Centres of	4.10.2014	Active	04.10.2019

	(PauriGarhwal)	Excellence of Highers and Technical Education and Scientific Research.			
6.	Ordnance Factory Tiruchirappalli	To establish a working relationship and to cooperate for development of various sub systems of small and medium caliber weapon systems.	Oct 2014	Active	Oct 2017
7.	US Alumni Association, CA 95070	To be focused on getting students to work on projects of their choice that will aim to solve some engineering problems involving use of connected devices and analyzing data that is transferred using the internet	09.10.2014	Active	-----
8.	Indian Institute of Technology Madras, Chennai.	Academic and research collaboration in the areas of mutual interest.	2014	Active	2019
9.	National Institute of Technology, Warangal.	The scope of MOU covers collaborative R&D, academic interaction leading to reforms in curriculum, student exchange associated with transfer of credits, faculty exchange, sharing of e- journal resources, accessibility to sophisticated instruments, sharing of knowledge of best practices.	4.09.2014	Active	4.09.2019
10	National Transportation Planning and Research Centre, Thiruvananthapuram (NATPAC)	To effectively share the facilities and expertise for improving the capabilities for advanced education and research in transportation engineering, planning, economics, Road Safety.	16.10.2014	Active	16.10.2017
11	Indira Gandhi Centre for Atomic Research Kalpakkam.	Analysis of Welding Fumes for the Consumables used in the Fabrication of Nuclear Components.	09.01.2014	Active	09.01.2017

Architecture
Chemical
Civil
Computer Science and Engineering
Electrical and Electronics
Electronics and Communication
Instrumentation and Control
Mechanical

Metallurgical and Materials
Production
Chemistry
Computer Applications
Energy and Environment
Humanities
Management Studies
Mathematics
Physics

