# NIT TRICHY DIGEST JULY 2016













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# **ORIENTATION**

# Orientation programme for first year BTech students (27th July to 14th August-2016)

The National Institute of Technology Tiruchirappalli was the first Centrally Funded Institution in India to initiate a month long Orientation Programme for I year B.Tech. and B.Arch. students in 2012. This tradition is being followed till date and this year the programme was organised during 27<sup>th</sup> July – 14<sup>th</sup> August. All the fresh faces shined with eagerness as they couldn't wait for their 'college life' at NIT-Trichy to start. And so it did for the fresher batch of 2016 with an inauguration ceremony on the 27<sup>th</sup> of July in the morning hours. The Director, Dr. G. Kannabiran and the registrar, all the deans of the institution, all Heads of Departments and the student council members were present along with the 1<sup>st</sup> years and their parents at the Barn Hall. The inauguration was followed by the afternoon





session on 'Interaction with parents' were the Dean Academic and the Dean Students' Welfare, the coordinators of the programme, along with their associate deans and wardens, cleared all doubts the parents posed.

The first year students were getting their queries answered at the LHC by the 2<sup>nd</sup> years and received their 'orientation kit'. The day closed with the ever-amazing cultural performances by our own Music and Dance





Troupes. The mesmerizing tunes of MT and jaw-dropping moves of the DT had the audience definitely enthralled.

Since students arrive at NITT from different parts of the nation and would have cleared different board exams, an attempt has been made to normalize their knowledge on certain courses viz., Mathematics, 'C' language and English, through bridge courses. As a preliminary effort, Diagnostic tests were conducted to facilitate the faculty members who handle these courses, with a view of bridging the gap between what is taught in the schools and the course content taught over in the first year of B.Tech. Programme. After conducting the diagnostic tests, the bridge courses were conducted for six hours per course per day in the entire Orientation Programme. The students were given practice according to their levels of performance. In order to groom the students to be regular and active throughout the day, yoga and karate classes were conducted for students in the morning from 6.30 a.m. onwards for an hour. This would give an exposure to our own traditional martial arts and also to start every day afresh. Also in the evenings students were encouraged to play their favourite sport.

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### **ORIENTATION**







- Started off with a session with the alumni
- Interaction with parents
- Mathematics, 'C' language and English bridge courses
- Diagnostic tests
- Sports
- Awareness on III effects of drug abuse and addiction
- Secret of Success
- Awareness on sexual harassment
- Various facilities in NITT
- Flexible Curriculum
- Medical check-up
- Introduction of many active clubs

- Tamizh Mandram
- Cultural Programme
- Safety and Crime awareness
- German Language Introduction
- Karate Demonstration
- Yoga & Meditation
- General Health and Food Habits
- Movie screening
- Motivational Lectures
- Awareness on Insurance Policies
- NCC Briefing
- Start-ups by youth of India Guest Lecture
- Spoken Tamil Class
- Disaster Management

# **CONVOCATION**

# 30 AUGUST, 2016

# **Convocation 2016**

The 12th Convocation of National Institute of Technology, Tiruchirappalli was held on 30th July 2016 Prof. Uday B. Desai, Director, Indian Institute of Technology Hyderabad was the chief guest for the convocation. A total of 1648 which includes 850 B.Tech. 51 B.Arch., 450 M.Tech. 72 M.Sc, 86 MCA, 57 MBA, 28 MS (by research) and 82 Ph.D. Out of 1648, 1174 grandaunts received their degrees inperson and 474 inabsentia. A total of 38 medal were given in the convocation which includes 13 B.Tech., 1 B.Arch., 20 M.Tech. 3 M.Sc and 1 in MCA and MBA. Guru praanesh R and Guru Raghav R, of Electrical and Electronics Engineering were awarded the president Medal for having secure highest CGPA in Bachelor of Technology during 2012-2016.

# DIRECTOR'S REPORT by Dr.G.Kannabiran Director i/c (Key aspects...)

NITT also won the prestigious CII- AICTE **best industry linked institute** by competing with other IITs, NITs and IIITs. The Institute also received national level awards from FICCI for **social responsibility** and from ASSOCHAM for best Institute to **use ICT tools** in education. The institute also received **High-Impact Entrepreneurship Campus Award** jointly awarded by the Ministry of Skills Development and Entrepreneurship. As a matter of fact, among the top reputed technical institutes of the country, NITT has reached the pinnacle in academic reforms and research. The **Academic Conclave** conducted this year has set the Institute on a road to major academic transformation. The Senate of the Institute has approved the deliberations of the Conclave and has endorsed the introduction of flexible curriculum, minor specializations, flipped classrooms based on course plans and new evaluation models.

The Institute this year also undertook a major peer review process by bringing in experts from IITs, leading industries and able educationalists. The critical comments of the reviewers were quite helpful in striving further to reach global standards. The flexible curriculum designed and implemented by NIT Trichy has been recognized as a model curriculum by NIT Council. We are happy to inform you that the model curriculum proposed by us is likely to be followed by other NITs. I congratulate Dr. Arul Daniel, Dean Academic and the Core Committee on Academic Reforms for bringing laurels to the institution.

Further, NBA accreditation for all post graduate programmes has been sought to ensure that our excellence stands on par with the Institutes worldwide. In the first instance, M.Tech. Programmes in Communication Systems, Materials Science and Engineering, Transportation Engineering and Management, Chemical Engineering and Power Systems, programmes are accredited for 5 years.

On this occasion we proudly recognize the significant contributions by **Dr. Srinivasan Sundarrajan**, our former Director for his vision and leadership for achieving these recognitions to our institute. We equally recognize the cooperation and support extended by faculty members and students' in taking this Institute forward.

I would like to place on record the most valuable services of our Former Director **Dr. Srinivasan Sundarrajan** to this institute, particularly in areas such as academic transformation, alumni connect, industry-institute interaction and promoting innovation and entrepreneurship. He had set a very high standard in student engagement, which I am sure will be followed by his successors. On behalf of NITT family, I pray God almighty for a healthy retired life and wish him all the very best for his chosen endeavors. My sincere thanks to the Ministry of Human Resources and Development (MHRD), Government of India for its support and encouragement for this Institute. I would like to acknowledge and thank former Chairperson, **Ms. Kumud M Srinivasan**, Board of Governors for her contributions to this institute. I thank the members of the Board of Governors for extending their support for the growth of the institution.

# CONVOCATION







## Convocation Address by

# Prof. U B Desai, Director- IIT Hyderabad (Key themes....)

Here I believe, innovations will be the key – it will also be the key to fulfill the design and make in India Mission of our Prime Minister. We are living in the age of innovations, technological innovations, business process innovations, and life style innovations. No one will be left untouched by these innovations. Let me elaborate a bit, when I say innovations I don't mean juggad, I mean genuine innovations, technological innovations. It is you who will create a Google or an Apple Inc. of India. What does it take to be innovative – not a whole lot –here are a few ingredients: A curious and questioning mind, Fertile Imagination, Day dreaming, Spirit of Why Not?, Outlandish ideas, Perseverance, Withstanding failures – for every successful innovation there are perhaps more than 10 failures, a bit of luck: need to be at the right place, at the right time, asking the right questions.

To be an innovator you need to be alert. Just look around and you will see a plethora of problems that need to be solved. In fact, for the innovator, there can be no better place than India — there are so many challenges to be tackled — innovations in power generation, power storage, power distribution, innovation in water harnessing, water storage, innovations in affordable desalination to overcome drinking water shortage, innovations in vaccine for diseases that are prevalent in countries like ours — for example a malarial vaccine, innovations in multimodal transportation to reduce the carbon footprint. Behind innovation lies education. Time has come for some major changes in education. MOOCS and Flip teaching can go only so far. Why do I say some fundamental changes are required? 20 years ago, life in India was very different, cell phones did not exist, computers were being introduced in banking, railways, etc. Most professors walked on campus or rode a bicycle.

Now look at the present: India has a billion cell phones, more than half of them smart phones – electronic gadgets are commonplace – today's youth has grown up with technology – in fact, they breathe technology, information

# CONVOCATION

is on their fingertips – literally. Automation is on the increase – and much more is on its way --just wait for the next revolution with Internet of Things and Digital Fabrication. The change in society has been phenomenal. Today the culture is that if you can succeed without hard work then you are smart.

Let me assure you that such success, if at all, is highly short lived. For long lasting success hard work is a must. As JRD Tata said: Nothing worthwhile is ever achieved without deep thought and hard work. Hard work and discipline is the simplest mantra for success. You don't have to be terribly smart, but if you work hard in a disciplined manner you can beat the smartest of people around the world. If you look around, all the people you admire and are role models for you, will be hard working people; for them to put in an 18 hour day is normal. Never say, I am tired – Indian cannot afford her youth to be feeling tired. You have to build this nation and make sure it occupies its rightful place in the global arena.



(GURU PRANESH & GURU RAGHAV- President Gold Medalists)

# Workshop on Internet Protocol Standards 29<sup>th</sup> July, 2016 Organized by Department of Computer Applications Coordinators: Mrs. B. Janet and Dr. S. Suresh





The Department of Computer Applications, National Institute of Technology-Tiruchirappalli and C-DAC Bangalore along with Indian Internet Research and Engineering Forum-IIREF conducted a workshop on "Internet Protocol Standards" on 29.07.2016 (Friday) in the A2 Hall. The Objective of the program

was to bring in the awareness towards the contribution to IEFT Standards, where in the Internet protocols are drafted and later accepted as standards by the community. Dr. B. S. BindhuMadhava, Associate Director, C-DAC Bangalore and Dr. R. Balaji, senior technical Officer, C-DAC Bangalore were the resource persons. This program threw light on the IEFT process followed for development and acceptance of Internet Protocols. There is very few people working in this standards in India. The participants were motivated to join the IETF working groups and take active part in Internet security protocol analysis and suggest changes in them. There was also an elaborate discussion on the TLS and Crypto standards which are presently in discussion in C- DAC. The participants included faculty and students from neighboring engineering colleges and research scholars from NIT, Trichy.

# Workshop on Statistical Physics and Material Science 21 – 23 July, 2016 (sponsored by TEQIP - II) Organized by Department of Physics Coordinators: Dr.R.Sankaranarayanan and Dr.R.Nagalakshmi



The workshop on Statistical Physics and Materials Science (SPMS-2016) has been held for three days successfully at the Department of Physics, NITT during 21-23, July, 2016 sponsored by TEQIP II. The content of the workshop displayed in brochure has kindled the participant's interests and the response was overwhelming. The nature of the constituents and the design characteristics have to be taken together and related through the laws of thermodynamics and kinetics which govern a material's structure and thus its properties. Thus the choice and blend of the topics viz., Statistical Physics and Materials Science is imperative and scarcest one among the workshops organized all over. There were several brilliant sessions by eminent brains such as Prof. K.P.N. Murthy (UH, Hyderabad), Dr. S. Sivakumar (IGCAR, Kalpakkam), Dr. S.V.M. Sathyanarayana (PU, Pondicherry), Prof. K.

Jayakumar (GRU, Gandhigram) in this field have triggered the audience attention and interaction. The workshop also spanned a range of exciting topics in Statistical Physics and Thermodynamics such as Bose Einstein Condensation, Phase transitions, Partition functions, Magnetism of bulk materials. Physics of nano structures. The schedule of the workshop was taxing to the limit and the sessions went in time. Hope the workshop will sure be a milestone to the students and research community in contributing novel ideas for emerging and smart technology.

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# Workshop on Platforms for Big Data Analystics - 15& 16th July 2016, Organized by Department of Computer Applications Coordinators: Dr.S.Domnic & Dr.Micheal Arock



The workshop was sucessfully conducted on 15&16 th July 2016 at A13 Hall, NIT, Trichy. We have received 52 registrations and the faculties, research scholars, PG students and final year UG students from Tamilnadu, Karnataka and Andhra have participated. The reseource persons from technical institutes, managemet institute and industy have been invited and they have delivered lectures on various topics such as Big-Data Challenge, Big-data analytics algorithms challenges, Platforms for Big Data Analytics, Web analytics, Text Analytics, CUDA and Hadoop frame work, Demonstration on Hadoop. Feedback of the workshop is excellent.

Workshop on Process Instrumentation and Control jointly on July 4, 2016 to July 9, 2016 organized by Department of Instrumentation and Control Engineering (ICE) and Chemical Engineering Coordinators: Dr.N.Sivakumaran, Dr.T.K.Radhakrishnan and Dr.K.Srinivasan



Process Instrumentation and Control workshop were organized by ICE dept, NITT under TEQIP—II sponsorship. Mr.P.S.Guruchandran, GM (CCDP), R&D and CR, BHEL, Trichy presided as chief guest for the inaugural function. Welcome address was delivered by coordinator Dr.T.K.Radhakrishnan followed by Dr.N.Sivakumaran who briefed about the importance of the workshop towards exposing the faculty members on state of art technologies catering the interdisciplinary requirements in process industries.

The function was graced with the presence of Dr.G.Kannabiran, Director In-charge, NITT and he delivered the presidential address.

The chief guest Mr.P.S.Guruchandran/GM/R&D,CR delivered an inaugural address on interesting fact of its multidimensionality is its strong mathematical foundation on one hand and its ultimate objective of implementing controllers in real world systems on the other hand.

BHEL has been providing total solutions to the operation, control & optimisation of the utility & industrial power plants for more than five decades. Dr.K.Srinivasan delivered vote of thanks.Mr. K. Ponnuswamy, GM (CS), SPB Ltd. Erode delivered lecture on the topic of "measurement and automation industrial practice in paper Industries. Dr. S. Dharmalingam, General Manager (Retd.), BHEL delivered a lecture about power plant instrumentation.

# **WORKSHOPS**

The hands-on training on DCS was conducted by Mr. Vinoth Balasubramanian and Mr. Mohandass S., from Yokogawa Ltd. Chennai/Banaglore. Dr. Kirubakaran, Lead engineer, Lennox India Technical Centre, delivered talk on Glucose regulation in type I diabetics using advanced controllers.

The other renowned speakers form academic side are Dr. M. Chidambaram, IIT Madras, Dr. Arun K. Tangirala, IIT Madras, Dr. T. K. Radhakrishnan, NITT, Dr.N.Sivakumaran, NITT, Dr.K. Srinivasan, NITT and Dr. Josephine Selvarani Ruth, NITT delivered lectures on various research topics.

The talk on cryogenic instrumentation and subsequent hands on training sessions were handled by Mr. Abhay Singh Gour, IISC Banglore. Also as a part of the workshop some research presentations were arranged by the research scholars. All the participants have visited Combine Cycle Demonstration Project (CCDP), BHEL- Trichy.

# An insight into the solar and bio energy applications (Under TEQIP-II) Coordinators: Dr.K.N.Sheeba, Dr.P.Sivashanmugam



Dr. Natarajan, Professor, Energy centre, Anna University, Chennai

This workshop was intended to impart the scientific and research oriented knowledge on utilization of solar and bio energy resources.

This course covered the applications of solar energy and Bio-energy and the status of R&D in this field in India in detail. Around 40 participants from various institutions across Tamilnadu participated in the course.

The feedback from the participants was overwhelming and it indicated the necessity of such kind of programmes for the academic community. Dr. Natarajan, Professor, Energy centre, Anna University, Chennai and Dr.Rajesh Banu, Associate Professor from Anna University, Tirunelveli were the resource persons. This workshop will have an impact among the researchers and student community in the area of solar energy and Bio – energy sources and its applications

# **SHORT TERM PROGRAM**

# TEQIP II Sponsored Short Term Programme on RECENT TRENDS IN TRANSPORTATION ENGINEERING (STP – RTTE)

Coordinators: Dr. Samson Mathew, Dr. Sunitha V and Dr. Nisha Radhakrishnan

This short term Programmme was conducted for six days during July 11 – 16, 2016, with the main aim to provide a platform for the faculty specialized in Transportation Engineering to update their knowledge with the recent developments and improve their skills in becoming more self-aware and confident in their roles. The short programme received 43 applications from outside, from which 40 external candidates were shortlisted. The participants were from Karnataka, TN, Kerala and Andhra Pradesh. The Department Ph.D. Scholars (10), M.Tech TEM and MS students (25) were also allowed to attend the programme. The programme also saw the participation of a faculty from ICE department and his student. The programme was inaugurated by Dr. Kuncheria P. Isaac, Vice Chancellor, APJ Abdul Kalam Technological University - Kerala.

Day 1: Dr. Kuncheria P. Issac delivered the inaugural address on Transportation Development – Challenges and



Role of Academia, followed by Er. M. P. Naidu, Project Director, Hyderabad Metro, who spoke on Planning of Green Airports and concept of metro planning.

**Day 2**: Dr. M.V.L.R Anjaneyulu, Professor of Civil Engineering, NIT Calicut delivered lectures on Geometric Design, Design of Junctions and Links.

**Day 3:** Dr. Murali Krishnan, Professor of Civil Engineering, IIT Madras delivered his lectures related to Pavement Engineering. This was followed by Er. Rathnakara Reddy, Infra Support Engineering

Consultants Pvt. Ltd, Bangalore who spoke about Planning of facilities for SEZ and Pedestrian/ Bicycle facilities. Mr. Sankar, L&T (NITT Alumnus) gave a practical session on CUBE software.

**Day 4**: Er. P. Ravi Kumar, Joint Director, C-DAC was invited to give lectures on Area Traffic Control, ITS and Smart Cities followed by pavement related lectures by Dr. AU Ravi Shankar, Professor of Civil Engineering, NIT Suratkal.

**Day 5**: Dr. U. K. Guru Vittal, Chief Scientist and Head, Geotechnical Engg. Division, CSIR New Delhi delivered lectures on Ground Improvement Techniques and Use of Alternative material for Road construction. Dr. Caleb Ronald gave a practical training on VISSIM software.

The last day was enlighted by Dr. A. Veeraragavan, Professor of Civil Engineering, IIT Madras through his topics Pavement construction and Pavement Management System, followed by Er. Abdul Rahim, Consultant, Vizhinjam Port, who spoke on Planning and Design of Large Ports. Dr. A. Veeraragavan was the Chief Guest for the Valedictory function. He delivered the valedictory address and distributed the certificates to the participants.

The programme also included lectures by Civil Engineering Department faculties, Dr. Moses S. Santhakumar, Dr. K. Muthukkumaran and the Coordinators Dr. Samson Mathew, Dr. Sunitha V and Dr. Nisha Radhakrishnan.

# SHORT TERM PROGRAM

# <u>TEQIP—II Sponsored short term course on Processing of Smart Materials</u> Coordinators: Dr. D. Lenin singaravelu, Dr.V.Senthilkumar and Dr.K.Panneerselvam





A TEQIP II sponsored short term course on processing of smart materials was conducted during 11<sup>th</sup> to 16<sup>th</sup> July, 2016. It was organised by Dr. D. Lenin singaravelu, Dr.V.Senthilkumar and Dr.K.Panneerselvam, Assistant Professors, from the Department of Production Engineering, NITT.

The development of smart materials has applied in many fields such as aerospace, electronics, robotics—and medical due to their unique properties. The primary objective of this course is to explore the novel researches in processing of smart materials by providing a common platform to interact with the experts in this field. This short term course covered following contents regarding processing of smart materials such as Introduction to Functional Materials, Types, Applications and Case Studies, Recent trends in Smart Materials and its Processing, Development of Smart Materials, Smart Polymeric Composites, Smart Materials Characterizations, Processing Functional Materials - Case

Studies, Laser Processing of Smart materials, Machining of Smart Materials, Shape Memory Alloys, Modelling of Smart Materials.

The resource persons from various institutions like IIT's, NIT's and Industries had delivered lectures on various topics of smart materials. Dr.S.Aravindan, Associate Professor of IIT Delhi, presented challenges and solution in micro machining of Smart Materials. Dr.K.Devakumaran, WRI BHEL Trichy covered the topic of welding of functional materials, Dr.T.Theivasanthi, Kalasalingam University taught the Smart Polymeric Materials & Nanotechnology. Shri.K.Harikrishnan, DAE, Tuticorin covered metallurgical and processing aspects Ni-Ti Shape Memory Alloys with real time applications of smart materials with visual videos.

Dr. S. Soundarapandian, IIT-M, handled the laser processing of smart materials with applications in bio-medical field. Dr. Sushanta Kumar, IITM taught the Characterization Techniques for Shape Memory Alloys and also he conducted hands on training for XRD analysis specifically for smart materials.

Dr. A. Arockiarajan, IITM shared his knowledge on model and analysis of smart material structures. Nearly 50 participants, mostly research scholars and faculty members, working in the area had attended, interacted and got benefitted from the 6 day short course. At the end of the course the participants were given participant certificate.

# **SPECIAL LECTURE**

<u>Special Lecture:</u> Dr.C.Subramaniam, Assistant Professor, Department of Chemistry, Indian Institute of Technology Bombay, delivered a special lecture on "Humidity-Driven Wearable Energy Storage Devices" on 15.07.2016.Weavable Electronics textiles that store capacitive energy are a next frontier in personalized electronics.

However, the lack of industrially weavable and knittable conductive yarns in conjunction with capacitance, limits the wide-scale application of such textiles. The reduced-graphene-oxide-modified conductive yarns covered with a hierarchical structure of Nano sheets and apolyprrole thin film may be used to fabricate weavable, knittable and weavable yarn supercapacitors.the lecture was well attended by the faculty members, research scholars and students of NIT-T.

# **FACULTY EMPOWERMENT PROGRAMME**

# Co-coordinators: Dr .M. Umapathy, Dr. G. Uma and Dr. D. Ezhilarasi



**Date and Venue:** Faculty Empowerment Programme took place from 25<sup>th</sup> to 28<sup>th</sup> of July at CSG Annexure NIT Trichy, organized by the Department of Instrumentation and Control Engineering in collaboration with Texas Instruments, Bangalore and STEPS Knowledge Services Pvt. Ltd, Coimbatore.

**Training Team:** Mrs. Kavitha N and Mr. Ramesh Directors Steps Knowledge Services Pvt. Ltd. Coimbatore, an authorized training partner for Texas Instruments University Programme (Sponsors) with a team of 10 engineers.

Summary of the workshop: The workshop started with an ice breaking session, intent of the workshop and key outcomes. Then Mrs. Kavitha gave emphasis on System Design on Electronics in contrast to the component level design, Integration of Analog & Sensing, Embedded Systems, Simulation of Power, Wireless Connectivity, Actuation and Annunciation based applications. Overview of the Information Repository on TI Website and its utility as Teaching Materials and Research Areas were accessed during the session by the Faculty with their login. Hands-On sessions were done on Energy Efficient Controller on TI MSP430 with its peripherals and low power modes.

The participants were also introduced to TINA TI simulation software. Few experiments like VCO and Universal Filter were realized by the participants using TI ASLK Pro Analog hardware boards. The participants were also given extensive Hands-on regarding design of Power Supply using WEBENCH and taking forward the Electrical and Thermal Simulation. An over view of the IOT and TI offerings was given. Hands on experience of working with IoT enabled kits using Wi-Fi were done and how the sensors in the board could be used as edge nodes. After extensive hands on training the fourth day was wrapped up with how TI Technology could impact for effective Pedagogy. The Takeaways with the participation Certificate were the MSP430 kit and CC3200 IoT kit for the faculty to continue their practice and mentor students. In the final session feedback was sought from the participants which could be summarized as appreciation for the course flow and content with enjoyment of the intensive hands-on for four days with very special regards to the warmth of hosting to the Instrumentation and Control Engineering department of NIT Trichy.

# Programme under Global Initiative of Academic Networks (GIAN)

# GIAN Course on "Fundamentals and Advanced Concepts of Lean Manufacturing and Six Sigma" Organized by Department of Production Engineering, July 25-30, 2016

Coordinator: Dr.S.Vinodh



**Foreign Faculty**: Prof. Jiju Antony, Professor of Quality Management, School of Management and Languages, Heriot-Watt University, Edinburgh, United Kingdom

Venue: CSG Conference Hall, NIT Tiruchirappalli

Duration: July 25 to 30, 2016 (Six days)

# **Objectives**

- i. Exposing participants to the fundamentals of Lean Six
   Sigma
- ii. Training the participants on tools, techniques and methodologies of Lean Six Sigma
- iii. Providing case studies, syndicate exercises in groups and hands on experience on Lean Six Sigma
- iv. Enhancing competence of participants to apply Lean Six Sigma to real world problems

**Participants**: 35 participants including Faculty, Ph.D. research scholars, Post Graduate, Under Graduate students from various institutes and industry executives attended the course

**Modules**: Lean, Six Sigma and Lean Six Sigma modules were covered in the course. Lectures, Case Study, Quizzes, Tutorials, Presentations, Discussion on Research avenues were deliberated during the course. Principles, Tools/Techniques, Roadmap, Framework of Lean manufacturing, Six Sigma and Lean Six Sigma were discussed during the workshop. Besides, practical perspectives of these concepts are also being discussed. Insights on curriculum, project ideas and research scope on all these topics were discussed.

# Cargill India's Fourth Global Scholarship Program



For the fourth consecutive year, Cargill, in partnership with Institute of International Education (IIE), is continuing the **Global Scholars Program** to build a foundation for future leaders, getting new talent ready to take on exciting opportunities and challenges. The Cargill Global Scholars Program worth US\$5000 is a distinctive scholarship opportunity not only provides financial support, but offers leadership development opportunities through seminars, networking events, and a one-on-one mentoring program. These enrichment activities have been designed to help foster and enhance leadership potential and critical thinking skills in the students, and equip them with the tools necessary for becoming future global leaders and decisions makers. The program being run in six countries will support 65 talented and high-performing undergraduate students this year. The selected individuals will be chosen based on their demonstrated high level of academic performance and leadership potential.

In India, 10 scholarships are being awarded for the academic year 2016-2017 to students in three leading science and technology institutions- Indian Institute of Technology, Delhi; Indian Institute of Technology, Mumbai; and National Institute of Technology, Trichy. The total number of participating colleges being five. "Cargill recognizes the need for talent development to make effective leaders of the future across all sectors. We are committed to improving the communities in which we operate, and supporting higher education is part of this commitment. We are excited to see the journey of these 10 new students as they get ready to take on new opportunities in their academic career," said B.K. Anand, Director, Cargill India and Head- Grain and Oilseeds.

Improving on our own records, our students bagged 5 out of 10 awards meant for meritorious Indian students from top UGC Institutes (Keerthana Ganesan and Shruti Subramaniyam from the Computer Science and Engineering department, Snigdha Nagarajan and Daksh Khanter from the Production Engineering department, and Arthi V from the Metallurgical and Materials Engineering department). Students who are selected as Cargill Global Scholars will receive scholarship funds of up to **US\$2,500** per year for up to two years and will be invited to take part in a series of leadership and enrichment activities designed to enhance their critical thinking skills and equip them with the tools necessary for becoming leaders and decision makers in their chosen fields.

Students will gain valuable opportunities to observe and learn from business and community leaders in their own countries. "The CGS Program has given me an opportunity to achieve my academic and professional goals and learn more about the role of companies like Cargill in alleviating environmental degradation and utilizing sustainable practices in business. In particular, the program's mentorship element gave me an opportunity to discover myself better and helped me to take on leadership positions in life." Paridhi Rustogi (student, who received scholarship in 2015) finally, as the Global Scholars complete their leadership and enrichment activities under this program and graduate from their universities, they will join the international alumni network of Cargill Global Scholars, where enrichment and networking opportunities will continue.

# **RECycle**







RECycle is a pilot project initiated by the students of NIT-Trichy. As the official bicycle sharing programme of NIT Trichy, this project aims at refurbishing bicycles donated by the graduating students and distributing them back to the student community on a subscription basis for a period of 4 hours to 4 years. Launched on July 22, 2016, RECycle is an entrepreneurial venture run by the students and supported by the alumni (The students of 2014, 2015 and 2016 batches donated their cycles). In less than a month, with the subscription of over 100 cycles, RECycle is successfully paving the way for a better campus.

# Advantages:

With the bicycles branded by the RECycle logo to distinguish it from others, an added incentive offered to the students is free maintenance for the period of their subscription with a few conditions. Also, a replacement cycle is provided to the students during the period of maintenance of their RECycle. Another added advantage is that students now have the opportunity to practice real time entrepreneurship within the campus. As RECycle makes use of cycles left in the campus, the amount of waste generated is reduced to a large extent.

### **Future Plans:**

Our future plans include setting up RECycle stations at various locations across the campus where bicycles can be subscribed/hired/rented out from by students/staff/visitors. RECycle stands as a potential solution to solve transportation problems faced by alumni during re-unions, by visitors during conferences and other events at NIT-Trichy and as a temporary solution for students whose cycles have maintenance issues. The revenue generated in terms of subscriptions will be completely used for welfare programmes for the student community.

# Feedback:

With parents and students alike appreciating the programme, most of them claimed that RECycle is a much required initiative. There have been hardly any complaints regarding the same and in fact, the demand for RECycles has been growing by the day.

# **RECycle**



facebook.com/recycle.nitt



### LOCATION



OFFER LIMITED TO FIRST 100 BICYCLES ONLY!

CONIACI +91 9487050683

MAIN OFFICE ADDRESS
EMERGENCY HELP CENTRE, A6 HALL,
ADMINISTRATIVE BLOCK, NIT TRICHY - 15

AN INITIATIVE BY

SUPPORTED BY





making lives easier

An initiative by NITTians 2011

### A STUDENT RUN - ALUMNI SUPPORTED ENTREPRENEURIAL VENTURE



- The official bicycle share programme of NIT Trichy -

RECycle is a pilot project of NIT Trichy initiated by the students through which the bicycles that are donated by the graduating students are refurbished and distributed back into the student community.

The bicycle thus converted into a RECycle is available for subscription for a period of 4 hours to 4 years.

# WHY GO FOR A RECycle?



Upon subscription for a period of four years, a student can avail the maintenance services (not involving material) at complete free of cost for a period of two years from the date of subscription.



EXCHANGE

At any time, a student can temporarily exchange her/his 'under repair' RECycle with a 'working' one at RECycle centre, instantly during the first one year of subscription period. Later, the facility can be availed with additional charges.

Be the part of our initiative in reusing and reducing the waste. Through this initiative, we aim to establish a sustainable bicycle sharing initiative in the campus. RECycle pledges to make maintenance services of all the bicycles in the campus free of cost by 2020.

- Reduce. Reuse. RECycle. -



\*\* RECycles are classified based on the bicycle model, original date of manufacture and the refurbishing expenditure.

\* CD (Caution Deposit) is the refundable amount with which RECycle holds the subscriber responsible for the bicycle.

\* Caution Deposit varies based upon the model of the

- There is NOthing like waste. Everything is a Resource. -

EXCLUSIVE B. Tech =

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# **VISIT OF ASPIRANTS (school students)**

As per the request of Shri. K. Nanthakumar, IAS District Collector of Perambalur District, students of Government Higher Secondary School in Perambalur visited the campus of NIT-Trichy on 14 July 2016. Dr. G Kannabiran, Director Incharge and Mr A. Palanivel, Registrar welcomed the students and teachers. Dr. Arul Daniel, Dean (Academic) and his team of Associate Deans made a detailed presentation to the students about the JEE Main and Advanced examinations. They elaborated in depth about the admission procedure/schedules, exam preparation, and the internal course plan in NIT Trichy. Following this interaction, Students' Council, led by Bhavik Jagani briefed them about the infrastructure and key activities in the college.

After a short break, the school students were given a mini-tour of the campus whereupon they were taken around several important venues/labs. The Students' Council had arranged for the presence of a few mentors to show the students around the campus and to clear their doubts with regards to higher education whilst touring the campus.

Amongst others, they were taken to the Machines lab and Power electronics lab in the EEE department, the Hydraulics lab and the Environmental Engineering lab in the Civil department. In addition to that, they were shown around the Lecture Hall Complex and also visited the state-of-the-art library.

After the visits, a detailed Q&A session was conducted on preparation for JEE exams. The students were seen off at the gates of the campus in possession of institute calendars- a parting gift from the institute.

The hostel administration provided lunch and refreshments from the mess. Furthermore, it would be gratifying to have similar opportunities to aid such talented students in the future as well.



NIT-T Director addressing the school students



Group photo with NIT-T Students' Council's President and Vice president



NIT-T Students' Council Vice president distributing calendars as a parting away gift

# Student Volunteers:

Student Volunteers:

- 1. Akhila Avala IV B.Tech
- Nirmal Kumar S. III B. Tech 2.
- 3. Ashutosh Shukla II B. Arch
- Shirin Hussain II B.Arch 4.
- 5. Srinivas Sarath II B.Arch Shivam Sharma II B. Tech
- 6. Renderia Mit II B.Tech
- 7.
- 8. Bharani Thara II B. Tech

Send your feedback to: directorsec@nitt.edu / 0431 2503002