Greetings.

The undergraduate curriculum need frequent revision to be in tune with the changing needs of the world at large. The institute has adapted a revised curriculum structure for the incoming batch of undergraduates with less number of credits. Students will have a chance to do longer internships and study abroad with options for Minors and Honors. We do hope that this move will empower our students to achieve better employability, own startups and wider avenues for higher studies.

We are proud to be the Organizing Institute for CSAB-2019 (Central Seat Allocation Board-2019) this year. Looking forward to yet another fruitful academic year 2019-20.

Dr. Mini Shaji Thomas.
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National Institute of Technology, Tiruchirappalli, one of the nodal centres selected by the Ministry of Human Resource Development (MHRD), hosted the Grand Finale of Smart India Hackathon (SIH 2019) Software Edition on March 2nd and 3rd, 2019. There were 31 vibrant teams and 25 enthusiastic mentors who brainstormed and cracked 8 problem statements provided by the esteemed organizations like Cognizant Technology Solutions (CTS) and Chennai District Small Scale Industries Association (CDISSIA) for 36 continuous hours. This was the third edition of the Hackathon initiated by MHRD to unveil the unique expertise of the young minds of India. This year’s edition had more than 1300 teams (eight members per team) racing against the clock, in 48 different centres in India.

This event supported by the Prime Minister’s Office, was the world’s biggest Open Innovation Model, Software competition and is a part of a nationwide initiative of the MHRD to involve the brain trust of the nation, the technology-savvy students, to come up with innovative and feasible solutions to industry-related problems.

The Grand finale was inaugurated by the chief guest Mr. S. P. Jayanthan, Regional Director, TEMENOS India Pvt. Ltd., Chennai, a 1982 BE ECE Alumnus. Mr. Jayanthan was entitled to be in his alma mater and shared his reminiscent stay at the then REC, Trichy. He added that he could see the scintillating minds working for the brilliant set of solutions to progress our country to the next level. Dean (SW), Dr. Samson Mathew in his welcome address, appreciated the teams, who travelled across the states and wished them a very comfortable stay. He also thanked the sponsors of the event: CTS, Datafoundry, SBI, ICICI, Unibic cookies and Pepsi.

Dr. Mini Shaji Thomas, the Director of NIT Tiruchirappalli, congratulated the vibrant team of the campus, who worked for hours together and made this venture possible. She wished that the teams should work to solve the perennial problems of the industry and society. She also assured that the institute will render all help to make this happen and further, she expressed that she would love to see the students becoming entrepreneurs to serve the society at large.

The stage was shared by Dr. Bhasker, Mr. Raman Narasimhan, Vice President, CTS and Mr. Abhijeet Khandagale, MHRD Representative. The event was also inaugurated through video conferencing from JRC University, Jaipur. Dr. Anand Deshpande, Chairman and MD, Persistent Systems exhibited his gratitude to the referees, who evaluated more than 34,000 teams contributed around 50,000 ideas. He added that this would be a life changing event for students, who aspire to innovate. He hoped to see best solutions from the teams to reach industry. He added that the students should have the opportunity to work on challenges faced within the private sector organizations and create world-class solutions for some of the top companies in the world. AICTE Chairman Prof. Anil Sahasrabudhe congratulated the teams who made it to the finals.

He encouraged the students to create Digital India through innovative solutions and besides, he mentioned that he could see the future entrepreneurs and CEOs among the teams.

The Higher Education Secretary, R Subramaniam, who spoke on the occasion remembered that it started as a small effort and had become a national movement over 3 years. Many countries are showing interest to work with India on Hackathon. Indo-Singapore Hackathon happened in 2018 was one such event. He added that Smart India Hackathon 2019 is all about synergy, synergy within student community, synergy between students and society, synergy between academia and industry, synergy between private and government institutions. He also mentioned that the cognitive skills matters the most and asked the students to think out of the box.

Shri. Prakash Javadekar, honourable HRD minister addressed the nodal centres and the student teams. He encouraged the young minds to come up with solutions that can make our country flourish so that India can become a world leader in digital solutions. He remembered that around 40,000 students participated in the first edition of Hackathon conducted by MHRD in 2017. He further added that this is New India and this is the world’s largest hackathon and only innovations would take the country forward. The success in Hackathon would evolve a real system working on real-life problems using the real talent-pool in education. He asked the students to show case their power in science, innovation and technology.

The event progressed for 36 long hours and finally the valedictory ceremony was conducted at 8.30 PM on 3rd March 2019 in the presence of chief guest Shri. Raman Narasimhan, Vice President, Cognizant, Dr. Mini Shaji Thomas, Director, NIT Tiruchirappalli and Dr. Samson Mathew, Dean Student Welfare, NIT Tiruchirappalli.

Dr. Samson Mathew thanked all the coordinators for making this event successful. He also thanked all the judges who were present during the event. Further, he extended his gratitude to Computer Support Group for their technical support and incredible Internet connectivity during the whole event.

Shri Raman Narasimhan, in his valedictory address, congratulated all the participants. He shared a glimpse of his reminiscences when they were formulating such problem statements. He emphasized on the insightful scale of the assigned problem statements and the impact in finding a credible solution that would contribute to the development of the nation. He further appreciated the dedication and efforts of all the team members. He was amazed by the zest of the students, even during the late hours at night and this was an unforgettable experience for his crew from Cognizant.

Prof. Mini Shaji Thomas, Director of NIT-T, in her presidential address shared her thoughts on the event. She was thankful to all the members involved in the event for making all the necessary arrangements even on short notice. She expressed her appreciation for the growing connection between industry and the institutes, so as to bridge the prevalent gap and to do away with development related issues in the country. She also thanked the Ministry of Human Resource Development, India for taking initiatives to ensure this venture accomplished in NIT-T.

The prizes and accolades were distributed to the winning team members. The solutions were judged based on various criteria including ambition, complexity, technicality and user ease.
1. Team “FitGuru” from Delhi Technological University, New Delhi with problem statement titled ‘Longevity’
2. Team “GhoulCoders” from Government College of Engineering, Aurangabad with problem statement titled ‘Waste Management’
3. Team “Technologues” from Indira Gandhi Delhi Technical University for Women, New Delhi with problem statement titled Live School for World-class free educatio
4. Team “Hacking Bad” from Bhartiya Vidyapeeth Sardar Patel Institute of Technology, Maharashtra with problem statement titled ‘Solid Waste/Waste management cost’
5. Team “Scorpios X” from Sri ManakulaVinayagar Engineering College, Tamilnadu with problem statement titled ‘Avoid Cash Crop Loss’
6. Team “Apeiron” from Laleshmi Narain College of Technology, Madhya Pradesh with problem statement titled ‘Mobile App – Software Development for GST’
7. Team “Coders__United” from ThadomalShahani Engineering College, Maharashtra with problem statement titled ‘Software platform for managing payment transactions of Employee’. All the participants comprising 114 boys and 68 girls were ebullient and energetic during the course of the event.

The dignitaries were honoured with an Institute Memento as a sign of gratitude and for making this event attain its glory.

Institute day

The Institute Day Celebrations for NIT Tiruchirappalli was held on 16th April 2019, Students’ Council President Mr. Shivam Sharma welcomed the gathering.

The Dean(Academic) of NIT Tiruchirappalli gave a brief report on the various activities undertaken by the institute in the current academic year in his address to the gathering. He mentioned the number of students who graduated this year and the various achievements by the faculty members and students of various departments of the institute, Festember the cultural fest of NITT, Pragyan, the Techno management fest of NITT and NITTfest the intra college cultural fest. He made a special mention to the sports contingent of NITT who won the inter-NIT championship held in NIT Tiruchirappalli this year.

Dr. Mini Shaji Thomas, Director congratulated the faculty, alumni, staff and students of NIT Trichy for their phenomenal accomplishments in 2018-19. She also took this as an opportunity to mention few of the milestones accomplished during her tenure. She was extremely happy to share that NIT Tiruchirappalli has secured an astounding 10th position with regard to Engineering, thereby outranking various NITs and IITs with the aid of research volume, industry-academia collaborations, perception and unbeatable talent of the campus. She also focused on the most important historic achievement via the inauguration of the 150 Crore Centre of Dynamic Excellence in Manufacturing in partnership with Siemens Industry Software by the Union Minister for Human Resource Development, Prakash Javadekar and the unveiling of the Institute’s five-year Strategic Plan (2019-2024). She also made a note on revising the Vision and Mission statements of the institute and also recounted on the design of a brand new emblem. She also spoke about the increase in number of several industrial collaborations with Tata Steel Ltd., Tata Motors, BHEL, Tech Mahindra, CII, TNDISTSSIA, Airports Authority of India. The establishment of a fully functional Office of Alumni-Institute Interaction Cell including appointing new Dean (Alumni Relations) with an aim to expand the global footprint and to reshape as a cosmopolitan institution of the 21st century was also mentioned. She also acknowledged the tremendous services rendered by the ‘Public Relations and Media Cell of NIT Trichy’ team which issues regular news releases thereby remaining as the point of contact for journalists and new media. She then congratulated the students for bringing laurels to the institute and mentioned about securing second prize at Singapore-India Hackathon 2018. She also made a note about MHRD’s Ummat Bharat Abhiyan, a programme that aims to improve the quality of life in rural areas. She mentioned that in 2018, NIT Tiruchirappalli became the only NIT among the thirty-one NITs in the country to be awarded a position in the Swachh Campus Rankings and also bagged the Green Award conferred by TNPCB. She also congratulated the award winners on the Institute Day and was confident that with research-led teaching, inspiring faculties, highly skilled staff, and well-developed students, the students, faculties and the administration as an entity will be in a position to successfully complete the priorities identified in the strategic plan. She finally concluded by urging everyone to work diligently as a team to make this institution reach newer heights. Following the Director’s address Dr. Arumugam, Former Principal of REC and Dr. M. Chidambaram, Former Director of NIT Trichy were felicitated by the Chief Guest and Director. The Chief Guest of the occasion, Prof. Deepak B Phatak, Subrao Nilekani Chair Professor, Kanwalekhi School of Information Technology, Department of Computer Science and Engineering, Indian Institute of Technology Bombay congratulated the students being honored for their achievements. He then emphasized on the fact that a large number of people do not avail such opportunities that an institute like NIT has to offer. Further, he stated that though our country has been making rapid progress to alleviate the twin problems of ignorance and poverty, we as a nation still have to be developed. He then shed light on some of the developmental issues faced by our nation such as low Gross Enrolment Ratio in higher education, having per-capita income levels amongst the lowest in the world and the differences amongst us in terms of religion and language. However, he asserted that our country survived as a great democracy for seven decades overcoming these issues. He stressed on the role of academic institutions in contributing to the society. He emphasized the need to cultivate social skills in addition to joining the rat race of academic excellence. He cited Dr. Abdul Kalam as a person who had excelled in appreciating talent in young and old and that is an important trait of a leader. He exhorted the audience to
institute

develop such leadership skills and make it their ambition to improve themselves on a daily basis. He urged the students to become leaders in their chosen field and contribute significantly towards nation building. He also encouraged the faculty members to lead national initiatives in their chosen field. He concluded by saying that one need not compromise his personal life to contribute towards society, and

that on the contrary people performing well on their personal and family front are in a much better situation to contribute more significantly to the nation.
The students who have excelled in academics and the faculty members who have contributed to significant research publications and citations were then honoured with awards.

Inauguration of Fire Vehicle & service to the campus community

The emergency fire vehicle equipped with fire extinguishers for all types of fire, water containers, fire blankets, lock & door breakers, types of equipment to handle disaster situations was dedicated to the campus community on 16th April 2019.

The mission is to control the disaster at the initial stage itself & to hold on, until the situation is handled by experts, safeguard the lives and property of the institute. The emergency vehicle will also act as an ambulance at the time of crisis. Prof Mini Shaji Thomas, Director, NIT Tiruchirappalli inaugurated the Institute Fire Vehicle & dedicated its service to the NITT campus community.
The service of fire & emergency vehicle will be available to the campus community including labs, departments, residential houses & hostels, to deal with any kind of emergency situation ex: Fire, Electrical/Gas fire, Wild reptiles &amp; situation which needs immediate assistance. Mr A Palanivel, Registrar, Prof. RB Anand, Chairman, safety & security committee and Mr G Murugan, Security Officer, NIT, Tiruchirappalli were present.

Inauguration of Video Electroencephalography (V EEG) facility

Prof Mini Shaji Thomas, Director, NIT Tiruchirappalli inaugurated the Video Electroencephalography (V EEG) facility on 6th April 2019 at a cost of Rs 19 Lakhs at NIT-T Hospital in the presence of Dr.K.Radhakrishnan, Senior Neurologist, Dept of Neurosciences, Avitis Institute of Medical Sciences, Palakkad, Kerala and Former Director, SCTIMST, Trivandrum, Dr. C. Rathore, Professor, Dept of Neurology,SBKS Medical Institute,SumandepVidyapeeth,Vadodara, Dr Priyanka and Dr Moorthy, Medical officer, Dr. N.Aanantharaman,Chairman,Hospital Committee and MrsSridevi, Assistant professor,Dept of Instrumentation and Control Engg.NITT.

This V EEG system is capable of recording the brain signal at a sampling rate of 8 KHz. It has optical fibre connectivity for low noise and isolation.

The system has a Built-in impedance check and self-calibration. Faculty members, support staff, research scholars and students attended the function.

The 32 channel V EEG system records the electrical activity of brain. These electrical activities are widely used to study the functional state of brain and to diagnose neurological disorders such as stroke and epilepsy. This facility is established to carry out the fundamental and applied research on cognitive signals.

International Women’s Day Celebrations

The ladies club of NIT Tiruchirappalli celebrated International Women’s Day in tandem with the theme “Better the balance. Better the world.” It was a fun-filled afternoon where the faculty and staff gathered together for games and performances with enthusiastic participation for all the events. This was followed by the formal women’s day celebration presided over by Prof. Mini Shaji Thomas, Director, National Institute of Technology, Tiruchirappalli. The chief guest for the event was Dr. S Prathipa MBBS MD, Retd Professor & Head, Department of Obstetrics and Gynaecology in Thanjavur Medical College Hospital, Thanjavur. Dr. Lavanya, President, Ladies Club of NITT welcomed the gathering and presented an herb bouquet to the chief guest.
The presidential address was delivered by Prof. Mini Shaji Thomas. She stressed the fact that women are at par with men in every aspect. She urged the women to find the strength within them to stand up for what they believe in and to be masters of their own fate. She also urged the women to pay attention to their health because only then would they be able to take up the needs of those around them. She inspired the women gathered with her encouraging speech.

In the chief guest’s address, Dr. S Prathipa shared her experiences
of being a woman in the medical field. She too reiterated the statement made by the Director about how their own health should be a priority for women. She also expressed her availability to conduct free medical checkup for women in the campus.

The evening ended with the chief guest presenting the winners of the various events conducted during the course of the afternoon with prizes. Dr. Manjula presented the vote of thanks. The Department of Management Studies of NIT Tiruchirappalli too celebrated Women’s Day on 8th March 2019 focusing on the theme of “Enriching Equality for Women and Emphasizing Progress for All”. The theme was in tandem with the theme of International Women’s Day which is “Better the balance. Better the world”. As the Department completes 40 years of its existence, this Women’s day is unique as it is the first time the Department is led by a woman. Under the guidance of Dr. P. Sridevi, HOD of DoMS, the students and faculty had an engaging day with activities and inspiring lectures.

Dr. Sridevi in her speech quoted about the McKinsey global study, “If the women participation in the Indian workforce moves up by 20 percent, it can add 4 lakh crores per year to our GDP”. The HOD encouraged the female students to work harder, break glass ceilings and work towards an inclusive working society in the country bursting full of opportunities.

National Seminar on Women in Science and Technology

The six-day national seminar on “Women in Science & Technology: Breaking the Glass Ceiling,” organized by the Women’s cell and TEQIP start-up cell of the National Institute of Technology Tiruchirappalli began on March 18, 2019. The seminar was sponsored by the National Commission for Women and aimed to provide a platform for deliberations to identify ways to improve women’s participation in science, mathematics, and technical education.

Dr. Lillykutty Jacob, a professor at NIT Calicut formally inaugurated the seminar. In her inaugural address, Dr. Jacob noted that the underrepresentation of women in science and technology is a global phenomenon. Decrying the lack of women’s perspectives in the domains of science and technology, she argued that there is a widespread perception that women are incapable of contributing to serious research. Such erroneous and gender-biased notions, according to Dr. Jacob, not only reinforce a stereotypical image of women but also restrict their chances in the field of science and technology. She also spoke at length on the importance of women’s presence in policy making and the need to address women’s issues at both macro and micro levels. Dr. Crystal Dibworth who was the guest of honour observed that women have the burden of amplifying their voice and perspectives in a patriarchal system. According to her positive change could be achieved only through women’s presence in positions of power so that they could make strategic decisions. The institute’s director Dr. Mini Shaji Thomas presided over the function. In her presidential address, the director stressed the need for women in science and technology to identify barriers and difficulties in order to overcome them. She also encouraged the participants to learn from stories of empowerment. Other speakers of the seminar were Dr. Reichi Tamwar, former director of Women’s Studies Research Centre, Kurukshetra University on gender sensitivity, Dr. Shobha Sundaresan, Head of the Department of Management Studies, Maharani Lakshmi Ammanni College for Women on work-life balance, Dr. S. Uma, Director of ICAR-National Research Centre for Banana, Trichy on “Women in Agriculture”, Ms. Srimathi Shivashankar, Vice-President, HCL Technologies & an alumnus of NIT Trichy on enabling women rather than empowering. Dr. M. Premalatha, Professor, Dept. of Energy and Environment on one’s unique abilities, Ms. G. Sangeetha, Asst. Professor of the Dept. of Architecture, on “Excel in You”, Dr. Annette, Professor at MAM Engineering College on “Stereotypes at Work”, Dr. K. Rukmini, Director and Head of the Centre for Excellence in Nano-bio Translational Research on “Translational Research: Mind to Market Lessons for the Researchers”, Dr. Mimi Shaji Thomas, the Director of NIT Tiruchirapalli on “Wake up, Grab the Opportunities” and Ms. Sashi Sairaman, CEO, MTAB Technology Centre Chennai, on women’s challenges in the corporate world.

The participants also visited the Siemens Centre of Excellence in Manufacturing, NIT Tiruchirapalli. The experience at the 12 Laboratories for Design and Validation, Advanced Manufacturing, Test and Optimization, Automation, Electrical and Energy savings, Process Instrumentation, Mechatronics, CNC Machines, CNC Controller, Robotics, Rapid Prototyping and Internet of Things which provide opportunity for promising innovations served as a source of inspiration to the participants.

The participants and coordinators visited the National Research Centre for Banana (NRCB) in Tiruchirappalli. At NRCB, the delegates were introduced to the basic and strategic research approaches by which the center aims to increase the production and productivity of banana and plantains. They also got the opportunity to visit laboratories for tissue-culture, biotechnology, soil science, nutrient management, physiology, biochemistry, entomology, nematology, fungal, bacterial, viral pathology, and post-harvest technology research.
Orientation workshop on technology-enabled assistive devices for blind and low vision students

A three day short term training program titled Orientation & awareness program on modern assistive devices for blind & low vision students of special schools & special units was conducted in NIT Tiruchirappalli from 1st March to 3rd March 2019 in association with NIEPVD (National Institute for Empowerment of Persons with Visual Disabilities) under Ministry of Social Justice and empowerment.

52 participants from various parts of Tamil Nadu took part in this residential training program. The participants comprised mostly of students (who were studying courses like B.A., B.Ed., M.A., etc.) and a few teachers, a librarian and a railway staff.

The workshop educated the visually challenged on the basic knowledge of laptops, smartphones, various associated shortcut keys, basic android accessibility settings, talkback feature and text to speech (TTS) feature. Also, information on how to use apps like ‘Eye D Pro’, ‘Be my eyes’, that was developed to help the visually impaired (VI) to connect with sighted volunteers for visual assistance, was given.

The participants were then made aware of the existing legal provisions on access to information & assistive devices under RPD Act, the various assistive features available for the VI in banking services & UPI, ease of usage of e-commerce services such as hiring transport facilities (Ola, Uber, Rapido, etc.), online shopping apps (Flipkart, Amazon, etc.) and food delivery apps (Swiggy, Uber Eats, Zomato, etc.).

Some light was thrown upon the availability of online digital libraries such as bookshare, vassipporn, sugamiyapushthakaalaya, etc.

The three-day training program consisted of 13 sessions. All the trainers were visually challenged and are members of Jagajothi Voluntary Reader’s Circle for the Visually Impaired, Audio and Braille section, District central library, Tiruchirappalli.

A large number of student volunteers of Pupil for Pupil Committee (PPC) which is the social outreach arm of the postgraduate students of NITT formed the backbone of organizing the 3-day program along with Mr. J. Abdul Jaffer, co-ordinator of Jagajothi Reader’s Circle. The activities from NIEPVD were coordinated by Mr. G. Tagore, Research Officer, NIEPVD, Regional Centre, Chennai.

About 25 volunteer from Pupil for Pupil Committee, NIT Trichy lead by Mr Arvind, helped in accommodation, transport and dining for the 52 visually impaired participants.

Dr. K.N. Sheeba, faculty advisor of the recently initiated social council at NITT said that the objective is to integrate and enhance the impact of the social outreach of the Institute. Prof. Bakthavatsalam, who leads the NITT volunteers said that this is the 4th year in a row that NITT has organized training program for students with special needs – while the earlier three editions were on computer training, this one focused on assistive devices including various common apps and special apps. The tremendous training and inner growth for the student volunteers is really an unexpected by-product of such kind of workshops said Prof. Bakthavatsalam.

Mr. Tagore, Research Officer, NIEPVD, said, Trichy has become a role model in extending assistance to students with special needs and lauded the NITT students for creating more than 1000 audiobooks which are in the repository of Trichy district library and emulating this other district libraries are also dedicating a separate section for visually impaired persons.

Addressing the participants, Prof. Mini Shaji Thomas, Director, NIT-T said that the explosion of digital assistive aids have truly opened the third eye and it matters in terms of competency and confidence levels and that visually impaired are as good as any sighted person. She also insisted that students from Institutes of higher learning should work on projects which are directly beneficial to society.

Workshop on Faculty Startups and Entrepreneurship

A workshop was organized on 24th April 2019 to enable faculty startups in NIT Tiruchirappalli Campus. The workshop attracted faculty speakers from IIT Mumbai and IIT Madras who are currently having Startups.

Director, Dr. Mini Shaji Thomas said given the national thrust on start-ups and supportive Entrepreneurship eco-system, it is right time for faculty to venture into Start-ups. It is time to think of new vistas of growth and professional development for faculty of institutions of national importance. Through a systematic approach, one could harvest more IPs from the scholarly research before submission to journals. It is also time to focus on commercialization of such IPs. A Faculty-startup policy is being formulated and necessary support systems as part of the institutional transformation. Mr. Shankar Narayan, Serial Entrepreneur from Silicon Valley, USA was the Chief Guest of the programme. He highlighted that India is fully ready for startups and entrepreneurship. He wanted faculty to be passionate to move up from research to startups. A faculty with a Startup will be role model for his students also to pursue entrepreneurship. The success of Silicon Valley is always linked to Stanford University and UC Berkeley. In India, such universities and institutions to the level of success of Silicon Valley are needed.

Prof. Girish Kumar, Professor of Electrical Engineering, IIT Mumbai, who founded (Wilcom Technologies), highlighted the importance of IPR, equity and how the faculty can monetize their innovations. A good business plan and initial funds are part of good starting point for a successful venture.

Dr. Ragunathan, Professor of IIT Madras who runs a startup (Gyan Data), highlighted the importance of eco-systems and institutional support for faculty startups. He emphasized the need of technical excellence and project execution excellence for successful startups.

Dr. G. Kannabiran, Director of CEDI who was the coordinator said the first of its kind workshop has been organized as part of long –term plan of CEDI to scale up quality and quantity of startups in NIT Trichy. Dr. N. Sivalakumar, Co-ordinator of the workshop thanked the speakers for their valuable sessions.

The workshop was sponsored by TEQIP III and CEDI – Sonata Entrepreneurship Fund.
Annual Day Celebrations of Nursery School

NIT Nursery School, NIT campus, Tiruchirappalli celebrated its annual day with unprecedented fanfare on March 13, 2019 at the Barn Hall, NITT.

Prof. Raman Sankaranarayanan, Dean (ID & AR) had been invited as the chief guest. Prof. Murugesan, Chairman, School Advisory Committee of NITT inaugurated the programme.

About 67 students presented mesmerizing cultural events such as dances, plays, Thirukural recitations, singing etc., Mrs. Radha Jayasankar, the Head Mistress presented the annual report of the school. She made the audience aware of the school’s achievements in academics and co-curricular activities.

Prizes were given away to the toppers, 100% attendees and other students who had brought laurels in various competitions and contests. Addressing on the occasion, Prof. Raman Sankaranarayanan lauded and praised the school for raising the educational standard in the campus.

At the end Dr. Sathish Kumar, Assistant Registrar thanked the Director and Registrar of the NIT- Tiruchirappalli for the continuous support. He also thanked the chief guest, dignitaries, School Committee members, the Dean (SW) and former Chairpersons of School Committee, students, and parents; he also thanked the Head Mistress, teaching staffs of school Mrs. Stephey Graf, Mrs. Ramaselvi, Mrs. John glory Mary and Miss. Ponni Geethanjali for successful coordination of the function.

GIAN course

Department of Chemical Engineering, NIT, Tiruchirappalli organised five days program on ‘Chemical/Phytochemical mediated disruption of bacterial Acyl Homoserine lactone mediated, quorum sensing communication systems’ under Global Initiative of Academic Networks (GIAN) in Higher Education, Govt. of India aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country’s existing academic resources, accelerate the pace of quality reform, and elevate India’s scientific and technological capacity to global excellence. It was held during 27th to 31st March 2019.

The objective of the course was to expose the participants to the threats involved in the use and fate of various microbial agents that are used in different industries including medical and water treatment, understanding Quorum sensing and Quorum Quenching, methods in developing natural QS1 molecules including phytochemicals, developing effective carriers including nanostructures as delivery agents, brainstorm modules of fusion aspects of Nano-technology, Biotechnology and Chemical technology in developing these innovative technologies for various industries, laboratory based hands on training, brainstorm certain aspects of Quorum sensing and its applications for computing and robotics.

Professor Diby Paul, Truett McConnell University, USA spoke on Climate change as a significant factor impacting biological life.

The pathogenic organisms are becoming better at infecting their host in warmer conditions. Another concern over global warming is ecosystem stability. He also said climate change also happens with change in precipitation pattern, sea level rise, ocean acidification and super storms and climate change mitigation to curb increase in concentration of greenhouse gases in the atmosphere is required. Further, he created avenue for possible collaborative research, increase participation and presence of students. Further, he shared his experience on innovation in membranes and quorum sensing design to reduce the toxic and environmental impact of wastewater.

Dr. G.Arthanareeswaran, Professor and Program Coordinator, Department of Chemical Engg, NIT Trichy demonstrated quorum sensing compound incorporation in membrane for anti-biofouling. Dr. K.M. Meera Sherrif Begum, HOD, Department of chemical Engg, NIT Trichy honoured the Professor Diby Paul during the programme.

Workshop on basics and advances in Electroencephalography

A workshop on Basics and Advances in Electroencephalography was organized by the Department of Instrumentation and Control Engineering, NIT-Tiruchirappalli on 6th and 7th April 2019.

Ms. V. Sridevi, Assistant Professor, Instrumentation and Control Engineering welcomed the gathering. Dr. K. Radhakrishnan, Senior Neurologist from Avitis Institute of Medical Sciences, Kerala gave an introduction to EEG Workshop session where he explained about the physiological basis of EEG waves and the electrode montage.

K. Radhakrishnan spoke about the normal and abnormal EEG waveforms when a person is awake and in sleep. He went on to explain about how the waveforms changes during hyperventilation, the thetha activity in the corresponding region, to how it changes to drowsy burst when the patient becomes drowsy and the rise of vertical V waves when one is into sleep and the change of vertical V waves into sleep spindle and k complex in deep sleep. This was explained in accordance to the EEG waveforms. He then mentioned about the abnormal EEG and how a EEG waveform can be misinterpreted and the reasons for abnormal spikes or pitsfalls in EEG waveforms with reasons.

Video-EEG Monitoring and Invasive EEG recording was also elaborated in detail by Dr. K. Radhakrishnan where the procedure to detect different types of seizures and artefacts of Temporal, Frontal, Parietal, Occipital Lobe Epilepsy was explained. Sessions on how to
localise epileptic focus and functional areas to make resection easy in Invasive EE recording lecture were informative. He also discussed about the use and misuse of EEG, their problems and pitfalls. Dr. C. Rathore, Professor, Department of Neurology, SBKS Medical Institute, Suramdeep Vidyapeeth, Vadodara addressed the participants about the EEG Artefacts, muscle, eye-blink, gloss kinetic, cardiac, salt bridge and pulsation artefact and all the nuances about the technical aspects involved in an EEG recording. He elaborated on the principles of polarity which was about the referential and longitudinal montage where the former deals with amplitude and the latter deals with the reversal of polarity which helps in the diagnosis of Epilepsy. This was then followed by a talk on QEEG, EEG-FMRI and ESI through which he emphasized the importance of Electrical Source Imaging. Dr. C. Rathore also mentioned on the utility of EEG in suspected seizure disorders and non epileptic disorders.

Mr. Sumit Sharma and Dr. Arun Sasidharan, Chief Technical Officer, Aconet, Bangalore introduced the participants on high and low frequency oscillations where different types of algorithms using Laplace and fast-fourier transform was discussed making it a very productive session for the engineers involved in the workshop.

Ms. V. Sridevi addressed on Seizure prediction paradigms which provided an insight on how the seizure can be predicted before it's onset.

A visit to the EEG lab and the demonstration of the EEG recording benefitted all participants. The workshop concluded with a panel discussion between all speakers and the participants—a complete interaction session to clarify doubts and discuss issues conducive to EEG.

The workshop had a participation of 60-70 members inclusive of Doctors from Government and Private Hospitals, Engineers, Research Scholars and students.

Empowering Teachers in 21st Century Skills Education under AICTE Margdarshan Scheme

The five-day Faculty Development Programme (FDP) on “Empowering Teachers in 21st Century Skills Education” commenced with the inauguration programme on 3rd April 2019. Dr. S. Mekadu, the programme coordinator invited the participants in her welcome address and expounded the objectives of the programme. Dr. N. Sivaliarman, the Margdarshan Coordinator of National Institute of Technology, Tiruchirappalli briefed about the Margdarshan Scheme in his Keynote address. Prof. Mini Shaji Thomas, the Director of National Institute of Technology, Tiruchirappalli, in her presidential address, praised the initiative of FDP coordinators and asked the participants to make use of the opportunity. Dr. R. Joseph Ponniah, Head, Department of Humanities and Social Sciences, NIT-T in his felicitation address, elaborated on the necessity of communication skills and thinking Skills in acquiring a language. The FDP highlighted the components of 21st Century Skills education, which encapsulated the social, personal, intellectual and emotional skills. It prepared the participants for the meaningful and successful living in today's globalized context. These 'Seed Skills' have become the necessary pre-requisites in the holistic development of learners, as it exposes them to a range of knowledge, skills and values of life. The eminent academicians and resource persons contributed their valuable insights and experiences on the seminal themes of 21st Century skills education say Assertiveness and Emotional Resilience, Achievement Motivation, Outcome-based Higher Education, Leadership skills, Digital Learning — Perspectives and Prospects, Interpersonal Skills, Problem Solving, Soft Skills and Personality Development. The course prepared the teachers to be competent in facing the challenges of the dynamic learning environment, by providing an insight to soft skills for success and life skills for survival at workplace. The programme honed the abilities of the participants through interactive sessions and in turn fostered them to impart the skills to their students. The Valediction of the Five-Day Faculty Development Programme was held on 3rd May 2019.

National Conference on Research Trends in Computer Applications

The Department of Computer Applications of the institute organized a National Conference on Research Trends in Computer Applications on 26th and 27th April 2019. It was organized in felicitation of the excellent services rendered by Dr. A. V. Reddy, former Professor of the Department on his superannuation. This National conference gave a platform to preview the future of research in the field of Computer Applications. More than 20 papers, on topics ranging from Deep Learning, Artificial Intelligence, Data Science, Internet of Things, Block Chain Technology and Cyber Security have been selected for presentation. The organizing chairs of the two-day conference were Dr. S. Nickolas, Dr. Mrs. B. Janet and Dr. U. Srinivasulu Reddy.

During the inauguration, the Guest of Honour, Dr. A. V. Reddy, former Professor, Department of Computer Applications said that his journey with NIT Trichy began in the year 1985 with more than 33 years of service. In this long journey, he served the institute in different capacities as HOD, chief warden of NITT, Dean of students welfare, Chairman of estate welfare committee. The Head of the Department, Dr. S. R. Balasundaram, in his presidential address spoke about the importance of Research. Tutorials on the topics Cyber Security and Deep Learning were arranged to give the participants a glimpse into the latest trends in Computer Applications. The Cybersecurity tutorial gave an overview of the threats and explained the role that honeypot plays in providing proactive and preventive cyber threat intelligence generation. A demonstration was given on cuckoo sandbox, an open source automated malware analysis system and VirusTotal, to check files and URL for the virus.

The Deep Learning tutorial focused on the application of deep learning algorithms on datasets to arrive at intelligent solutions. A demonstration on the model of a self-driving car enlightened the audience on the practical applications. Deep Learning helps to solve challenging, unthinkable and previously unsolvable problems of our everyday life. Best paper awards were given for the papers that were presented at the conference.
Adopting innovative solutions in Solar Energy Technologies

The 2-week workshop on “Recent Advances in Solar Energy Technologies in Sustainable Development” was organized by Department of Mechanical Engineering NIT Trichy, during 29th April to 11th May 2019. The workshop aimed at adopting innovative solar solutions which would help our country to reduce its carbon footprints. The workshop focused on imparting scientific and research knowledge on the state of art techniques for designing and analysing the performance of sustainable solar energy systems.

Inaugurating the function Dr S. Srinivasa Murthy, Visiting Professor, ICER, IISc. Bangalore pointed out the importance of renewable energy sources in India and the relevance of solar thermal and PV systems. He also mentioned the concerns related to the disposal of toxic material waste from the PV system. He wanted the workshop to address various innovative solutions which could resolve all the issues regarding solar energy technologies.

Dr. K. R. Balasubramanian, Coordinator of the workshop and Associate professor, spoke about the current scenarios of India’s growing energy demands and depleting energy resources. Dr. S. P. Sivapriyakar, Coordinator & HoD pointed out the incorporation of renewable energy solutions in the transport industry and the associated reduction in the pollution levels.

Experts from CPTDI, Anna University, MNRE, PSG Tech, BHEL and Industries delivered lectures in the workshop. The experts delivered lecture on solar resource assessment and site feasibility; solar PVT systems, smart grid, concentrating solar power systems, fuel cell powered vehicles, Pervoskite PV cells, organic PV, solar desalination and solar hybrid systems. Hands on training sessions were arranged on SoITrace, Solar PV Installation, TRNSYS, MATLAB and CFD.

A site visit was arranged to Nachilipatti Village in Pachamalai Hills, Thuraiyur Taluk to witness the solar parabolic trough collector system which delivers boiled water for the community. Prof. Iniyan of Anna University, the PI of the DST (NIRDMS) funded project explained about the working principle of various solar systems.

Inauguration of CAPSTONE - The new Training & Placement premises

CAPSTONE the new Training & Placement building was inaugurated by Shri Montex Singh Ahluwalia, Former Deputy Chairman, Planning Commission of India in the presence of Prof. Mini Shaji Thomas, Director, NIT-T on 15th March 2019.

Indian Institute of Information Technology, Tiruchirappalli

taken over by Dr. N V S N Sarma

Indian Institute of Information Technology, Tiruchirappalli is presently running within the Campus of National Institute of Technology, Tiruchirappalli. Dr. N V S N Sarma took charge as the Director IIIT Tiruchirappalli. Dr. Mini Shaji Thomas was the mentor Director of IIIT Srirangam, Tiruchirappalli, for more than 2 years, since she joined as Director of NIT Trichy.
Teams from NIT Tiruchirappalli emerge as winners of SIH 2019

Teams Virtual Fit and Spiders won the finals of Smart India Hackathon - Software Edition 2019, held at Haryana and Dehradun respectively.

Teams Virtual Fit was selected under the Student Innovation category – Smart textiles. The members were Kirubaraj Manimathavan (VI sem ECE), Tejus Vamsi K (VI sem ECE), Venkatesh T K (IV sem ECE), Adwaith D (IV sem CSE), Subash Aravindan (IV sem CHEMICAL), Barath Kumar (IV sem ECE). They competed with 3 other Student Innovation problem statements in the same centre. With proper planning that the team did, they bagged the first place in the competition. The project was about linking the disorganized tailors who were having a challenge in meeting the basic requirements of their daily life, using a software portal where they can receive orders without having to meet their customers in person. At the same time, their value proposition to the customers was the provision of fully customizable clothing options that would perfectly fit the customers. These measurements of the human body would be done using images uploaded by the customers themselves through a machine learning algorithm.

This product would add value to the complete clothing supply chain both at the supply end and the demand end. They would be able to decrease the production time for every piece of apparel by almost 30% and still be able to provide the customers with perfectly fitting customized clothes. The most noticeable feature is that this product can be used by even the large scale apparel manufacturer brands right from Pothys to Zara or H&M.

They are now looking forward to take this product forward as a startup, and are actively looking for investments and mentorship. Apart from the support to develop the final prototype, SIH also provided them with a rich multicultural experience. They got to meet participants from almost all the states of India who were highly passionate and talented in their fields of interest.

The team Spiders consisted of 6 members hailing from the Web Development team of Spider, the R&D Club of NIT Tiruchirappalli headed by Sudharsana IJJ of 4th year CSE with members Rohith Balaji of 4th year CSE, N Praveen Chandar of and year CSE, Naveena Pandiarajan of 2nd year CSE, Kishore V of 3rd year CSE and Kamalesh Palanisamy of and year ICE. The venue for their hackathon was the Graphics Era University located in Dehradun. The team was shortlisted for one of the problem statements given by Gas Authority of India Ltd. (GAIL), a Public Sector Unit in which they were asked to come up with an Artificial Intelligence based solution for server log maintenance. In the 36 hour long hackathon, the team built a web application that uses Machine learning and block chain techniques to monitor the server logs and tag the errors based on priority.

The prize money worth 1 lakh was awarded along with a shield.

NITTfest’19

NITTfest, the 27th edition of the inter-departmental cultural fest of NIT Tiruchirappalli, kicked off on 8th March 2019. The Chairperson of NITTfest’19, Jayprakash R gave the welcome address. Dr. Mini Shahi Thomas mentioned that participation of students from various departments is accomplished through pedantic learning alone but it should be complimented by a healthy dose of co-curricular and extracurricular activities too. The foremost example of this philosophy is ‘NITTfest’ – an annual extravaganza of fine arts! The faculty advisor, Dr. N. Samsudeen spoke about the growth of NITTfest over the years. This cultural extravaganza was inaugurated in the presence of the highly talented Film actress, comedian and director Mrs. Lakshmy Ramakrishnan, who graced the event as chief guest and added more colour to the annual cultural phenomenon. She shared her experiences which were truly inspiring. The dean of students’ welfare, Dr. Samson Mathew congratulated and gave his best wishes to the NITTfest’19 team. The inauguration culminated with the vote of thanks by the overall coordinator of NITTfest’19, Amushka Singh.

Day 1 had the famous standup comedian, Aravind SA present his special ‘I was not ready da’. It also had Mr. Rahbinder Kannan’s performance as the opening act of the night. The flagship event of NITTfest, Manoranjan was extraordinary. Each and every performance by the departments was a true feast for the eyes.

NITTfest’19 started with a bang, the first event being Villapaatu was a grand success on March 9, 2019. Villapaatu was an authentic event
which highlighted the Tamil culture. The departments narrated meaningful folklores through music and grace that pierced through the hearts and took back to our roots. Graced by the presence of Mr. Manikandan and Mrs. Subhadevi Manikandan, this event lived up to all its expectations and raised the standards higher. The next event that gathered a huge excited crowd was Dramatics, which took place in the EEE auditorium. The eight departments that performed took the audience on a magical journey of varying emotions through their wonderful stories. The renowned judges, Mr. Aravind R Vyas and Mr. Pranav Dwaraknath, who has been a part of various shows and plays and has mentored upcoming actors to their legacies, had a difficult time narrowing down their top three among eight as all the departments performed with utmost perfection. The event Act-a-thon, was on the informal stage. This event was all about the spontaneous acting in accordance with the given prompt. The departments drove the audience crazy with their energetic performance in QAWWALI. The judges for the evening sure did spice up the evening a little more and made the experience even more worthwhile.

The classical solo event mesmerized the audience in a unique way and was judged by a panel of faculties from the very renowned Roy music school. Next up was the solo instrumental classical and followed by solo vocal western which took the audiences to a new different level of melody and was again judged by the panel of faculties from Roy School of music. The solo vocal eastern was judged by Mr. Ganesh Venkatramani and Mrs. Gauri Lakshmi and the event ended successfully with a really good note. NukkadNaatak, basically a street play in Hindi that took place near the informal stage in front of barn hall had immense encouragement from the crowd and ended on a good note as well. A lot of exciting informal events took place on the informal stage too by the marketing team, like Hogathon and lucky draw by red taxi. Battle of Bands witnessed the highest number of departments. The battle of bands was judged by none other than Mr. Ganesh Venkatramani and Mrs. Gauri Lakshmi. The audience were driven crazy by the departments. The judges spiced up the event with their esteemed presence.

After three days of fierce competition among various departments, it was time for the ultimate champion to be crowned. As the fruition of their tireless efforts and sheer determination, ECE department won the coveted RECAL Trophy in yet another wonderful edition of NITTFEST. The Department of Architecture and the EEE secured the second and third places respectively in this competition.

The event koothambalam was a street play where participants are allowed to use Tamil instruments and songs which relate to folk culture and the presence of the judge Mr. Vignesh made the event even more exciting. The night also witnessed one of the prestigious events of NITTFEST’19, Choreonight. With colossal performances delivered with invincible energy by each and every department, Choreonite turned out to be a zesty treat for the eyes. The judges of the event, Verb Studio, handed over the first place to the graceful dance performance of ECE department. Choreonite turned out to be a mirifical night of NITTFEST’19.
The inauguration ceremony of the 35th edition of Pragyan, NIT Trichy was held on 14th March, 2019. The chief guest for the evening was Padma Shri M.Y.S. Prasad, former director of the Satish Dhawan space centre. The guest of honour for the evening was Mr. Kesavan G, Head of supply chain management, Power, Transmission and Distribution at Larsen and Toubro. Right after the inauguration ceremony, there was an illusion show by Arjun Guru, who kept the audience spellbound with an intricate combination of magic and psychology. Day 1 had started off with a bang, with students showcasing their skills and learning more than ever before through a host of events, guest lectures and workshops. The morning of Day 1 featured a guest lecture by renowned economist, Shri Montek Singh Ahluwalia. The workshops conducted included the ones for the ‘Six Sigma Yellow Belt’ by KPMG, ‘Application of Machine Learning’ by Microsoft, ‘Application Development’ by JetBrains and ‘Satellite Image Processing’ by ISRO. Events conducted include, ‘Mortar Master’ from the Concrete cluster and the Pragyan Premier League player auction. Another event which gave the participants a rush of adrenaline, and their cricketing strategy was tested was the famed Pragyan Premier League. Another guest lecture was given by Dr. Didar Singh. Attended by over a hundred enthusiastic students, his topic of discussion was very poignant considering the present time period. He presented his topics with the backing of visual aids.

In addition to the guest lecture delivered by Dr. Frederick J Raab, LIGO Associate Director for Observatory Operations shortly followed. The topic of the highly technical and detailed speech he delivered was LIGO and the detection of gravitational waves. The day was concluded by shows by bubbleologist Graham Maxwell and foot puppeteer Anne Klinge.

The second day of Pragyan ’19 began with a plethora of events and workshops happening simultaneously at the NI Tech Arena, and other labs of NIT Trichy. The events namely, The Ultimate Manager, Marketing Hub, Code Venetic, Circuitrix, HoverOne, Aakriti, spread over Manigma, Byethoc, Roborex and Concreate respectively took place, events continuing from Day 1, the Pragyan Premier League, Sherlock and Fundamental were also conducted. Workshops, such as Computer Vision on Embedded Platforms by PathPartner, IoT and Prototyping by i3-Hubs, working of Heat Exchanger by HRTI, Mercedes IC Engine Analysis by Anvira Estudson, Computational Fluid Dynamics by ANSYS, Data Acquisition using LabView by National Instruments were conducted. An interactive workshop in Deep Learning in association Hewlett Packard Enterprise was also conducted and HPE accredited certificates were awarded to the participants. Gamescape organised entertaining activities such as Laser Tag, Archery Tag and VR games.

As part of its Exhibitions lineup, Pragyan hosted the “Slow Dance” exhibit at the Golden Jubilee Convention Centre (GJCC), along with projects made by students as part of Sangam and Ingenium. Guest Lectures for day 2 were by Dr. Ramesh Venkateswaran, an accomplished professional of GE Healthcare, The 2nd edition of Human Library was held in association with Human Library, Hyderabad.

The final day of Pragyan ’19 saw the conduction of the final leg of the various events that were organised through the course of the three days. A highlight of the day was the guest lecture by Dr P G Diwakar, current deputy director of RASAA, NRSC. The topic of the guest lecture was “Space Technology and Applications”. Pragyan hosted over 30 competitive events spread over 7 clusters. With the completion of all the student participative events in store, Pragyan concluded with a solemn valedictory ceremony. The prizes for Sangam and Ingenium were distributed by the dignitaries as well, with the reassurance that the winning projects of Sangam will be funded further for prototyping, by the institute.

The last event of Pragyan ’19, the infotainment shows by Heimdall and Sonic Snares happened at the NSO ground. The laser harp of Heimdall enthralled the crowd of nearly 400 at the NSO Ground on Day 3 of Pragyan. The conglomeration of art and science was alluring and invigorating as the audience were left in awe at the musical extravaganza. The light show was dazzling and it’s fusion with music boosted the energy of the crowd to surreal levels. Combined with the jaw dropping beats and dazzling visual extravaganza of Austrian based artiste Sonic Snares, Pragyan 2019 ended with a blast, and truly was, a tribute to the technological spectrum.
Blood donation camp

National Institute of Technology, Tiruchirappalli (NITT) has organised a blood donation camp on 6th April 2019 at the NITT Hospital, to support the blood bank of Mahatma Gandhi Memorial Government Hospital, Tiruchirappalli. The camp was jointly organized by NSS, NCC and Institute hospital, NITT and marked a huge success with more than 125 volunteers’ noble deed of donating blood. Prof. S. Raman Sankaranarayanan, (Dean – Institute Development, NITT) not only inaugurated the camp but also donated blood. The Dean informed that the institute can plan to conduct blood donation camps in a three months interval to help the needy people. Dr. Bhuvaneshwari, Medical Officer of Mahatma Gandhi Memorial Government Hospital Blood Bank, NITT Medical Officers Dr.R.Priyanka, and Dr. Moorthy, NSS Coordinator Dr. V. Mariappan, NCC Officer Dr. Mohan, NSS programme officers K. Panneerselvam, Dr. M. Brindha and Dr. Ganesh Chandra Nandi along with the NSS and NCC volunteers managed the event. The medical officer of blood bank ensured that the donated blood goes for the poor patients who are in need of blood, especially anaemic mothers, newborn babies and children admitted in a government hospital.

The corridor of the hospital was abuzz with young volunteers and donors, happy to be able to play their part in lending a helping hand to people in the region. The doctors accepted the donors after thorough medical check-up to donate blood and, the donors were directed with medical advice by the doctors.

The samples were carefully sealed and transported away, while the NSS and NCC volunteers and hospital staff helped in registration, assisting the donors, distributing the certificate and clean-up of the area. The donors received a certificate of recognition by the Govt. of Tamilnadu. The NCC and NSS volunteers expressed their sincere gratitude to the college administration for offering their best support.

Presentation in European Conference on Antennas and Propagation (EuCAP 2019)

Two research papers contributing to the miniaturization of the antennas (for Satellite applications) from Dr S Raghavan, Ms. Divya and Ms. Arvind, NIT Tiruchirappalli, were presented in the International European Conference on Antennas and Propagation (EuCAP 2019) held in Poland, Europe during 31st March-5th April 2019. The merits of the paper were appreciated by researchers of different countries across the world. The group were given travel grant by the EuCAP organizers based on the usefulness of the research in defence and Satellite applications. Around two thousand research scientists from USA, Europe, Middle East, Australia, Asia and Ceylon took active participation. The EuCAP 2019 is one of the finest conferences in Microwave domain, especially for Antennas. Internet of Things I Microwaves and Antennas, Technical innovations in 5G, Microwave Medical Engineering developments both diagnostics and Therapeutics are few of the many topics discussed in the conference.

Ezhuchi under Unnat Bharat Abhiyan

by the Institute under the Unnat Bharat Abhiyan and conducted a guest lecture for them under the banner ‘Ezhuchi’. Mrs. Alima Banu Siddharr is the founder and chairperson of the NGO ‘Palankarangi’, well known for their association with Madurai Corporation under the scheme ‘Pasilla Madurai’. She enlightened the students about the harsh realities of life and motivated the students to grab opportunities that come their way. She also stressed on the importance of agriculture and its scope. As a part of the initiative Ezhuchi, seed pencils were distributed to 100+ government school students to encourage them to contribute to the green cover of our planet. The Mechanical Engineering Association of NIT Trichy donated Rs. 10,000 to the Government School of Vashavandhankottai for providing water facilities at the school.

Amruthavarshini

Manoranjani, the annual 3-day event of Amruthavarshini was conducted between the 22nd and 24th of March, 2019. Various events were held over the three days, showcasing the beauty and elegance of the art and also inculcate awareness and interest about the art, in the campus.

Day 1 began with the fusion nite by the ‘Alkemy’ band. Lead by Keshav Vinod, the band performed various Carnatic-infused and inspired pieces and Raga-based film songs.

Team NSS, NIT Trichy in association with the Social Council of NIT Trichy invited the students of schools located in the villages adopted

Day 2 of Manoranjani started with a lecture-demonstration on techniques to improve Manodharmam. Titled ‘Shrishti’, this event was helmed by Smt. Gayathri Venkatraghavan, a senior and esteemed artist. The lecture provided rich insight on the topic. This was followed by the Grand Concert of Manoranjani, in the evening by the same artist. She and her team of co-artists left the entire audience spellbound and enthralled. Rendering beautiful ragams and various pieces including a Ragam-Thanam-Pallavi in Raga
Saraswathi, the event culminated in a long, standing ovation. Day 3 started with the GhostiGanam (Group Rendition) of Sri Thyagaraja's Pancharatnam. Led by senior artists belonging to Trichy, the Aaradhanai saw nearly 100 artists and music students come together and render these masterpieces. This was followed by an Akhandam, a stage for students of music. About 45 students participated for a total of 5 hours. The day ended with the Finale violin concert by Sri. M. Srikanth, an NITT Alumnus and team. The three-day event saw a turnout of nearly 500 people, contributing to the success of the event.

Easter Extravaganza 2019

NIT Tiruchirappalli celebrated the 15th Easter Extravaganza at the Barn Hall on 30th March, 2019. This year’s theme, "Grace Unplugged" was presented through a series of events by the members of NITT Prayer Cell. Capturing the true essence of Easter, the students presented their multifarious talents which focused on the grace of God.

Featuring a band, choir, chooreo, and mime, Easter Extravaganza 2019 lit up the Barn with music and enthusiasm. The band presented two songs, ‘Unido’ and ‘Sea of Faces’ which encouraged the audience to break free from the burdens of life and rest in the forgiveness of God. In beautiful harmony, the choir thrilled the audience with the songs ‘Nobody’ and ‘Gracefully Broken.’ Apart from music, a group of energetic and graceful dancers performed the theme of the event by dancing to Hindi/Tamil mashups. Short inspirational videos were also played in between these events.

The highlight of the event was the mime performance which focused on contemporary issues that teenagers faced, addressing the increasing instances of depression and lack of satisfaction that most youngsters struggle with. Interspersed with narration and music, the performance portrayed the life of a typical youngster who evolves from feeling worthless to one who is made alive. Following the mime, an alumnus of NITT Prayer Cell, George Mathew shared his testimony about the wonderful grace of God. Adding to the rich performances by the Prayer Cell members, a group of kids also performed a glow stick dance to the song ‘Light of the World.’
QS Ranking
Under the QS World University Ranking, NIT Tiruchirappalli has featured in the rank of 551-600 for Computer Science & Information Systems, 401-450 for Electrical and Electronics Engineering & Mechanical, Aeronautical and Manufacturing streams. In the QS-Asia category, the institute has been featured under rank 211. NITT has improved its QS BRICS ranking from 161-170 during 2018 to 126 in 2019.

National Institutional Ranking Framework (NIRF) 2019
President Ramnath Kovind announced the NIRF Rankings for Indian educational institutes at Vigyan Bhavan, New Delhi on 8th April 2019 and National Institute of Technology (NIT) Tiruchirappalli won 4 awards.
NIT Tiruchirappalli retained its first position and has been ranked as the TOP National Institute of Technology among the 31 NITs with overall 10th rank in engineering category in 2019 improving the last year’s rank by one slot this year, 7th rank in Architecture and 17th rank in Management. The institute improved from 31 to 24 in the overall ranking. NIT, Tiruchirappalli is the only NIT to find a place in the top 10 Engineering Institutions in the country.
Director, Prof. Mini Shaji Thomas congratulated each and every member of the NIT Tiruchirappalli family, including faculty, staff and students who worked hard to achieve this feat.

Young Woman Engineer Award 2019
To honour the contribution of Women to the engineering community and society, IIE TLC celebrated the International Women's Day on 13th March 2019. As part of the celebration, IIE TLC honoured a Young Woman Engineer for her accomplishments. Dr. P. K. Srividya, Dean Academic of Periyar Maniammai Institute of Science & Technology, Thanjavur was the Chief Guest. She delivered the address related to the theme of International Women's Day 2019, “Think Equal, Build Smart, Innovate for Change”.
Seven Nominations were received, out of which the evaluation committee selected Dr. C. Geetha, Assistant Professor, Department of Instrumentation & Control Engineering (ICE), NIT Tiruchirappalli as the recipient of the Young Engineer Award – 2019. The result was announced by Er. D. Harsha, Evaluation Committee Member in International Women's Day Celebration function held on 13th March 2019 at IIE TLC Premises. The award presentation function was organized on 19th March 2019 along with World Water Day Celebration at the premises of Tiruchirappalli Local Centre at BHEL campus.

The function was presided over by Dr. N. Kumaresan, Chairman IIE TLC. In his presidential address he complimented the recipient of the award for the year 2019 and highlighted her contribution in the area of engineering community and society. He also narrated the role of woman in family and society. Then he presented the Young Woman Engineer Award 2019 to Dr. C. Geetha along with Er. A. Anand Hon. Secretary Tiruchirappalli Local Centre, Dr.T.A. Daniel Jeyaraj Deputy Director of Boiler, Er. K. Nagarajan GM/CIVIL BHEL, Dr. P.R. Natarajan Chairman IIE Coimbatore Local Centre, Er. S. Samudas IIE TLC Committee Member, Er. D. Harsha IIE TLC Committee Member and Er.N. Rajasekaran IIE TCL Committee Member. The certificate of merit was handed over by Dr.P.R. Natarajan, Chairman IIE Coimbatore Local centre.

In her acceptance speech, Dr. Geetha thanked Tiruchirappalli Local Centre for honoring with the award and briefly explained her research experiences and shared struggles faced in her carrier. She dedicated the award to her family and spouse who stood behind her in her journey. Also she complimented the wonderful role played by the institution of Engineers, Tiruchirappalli Local Centre in conducting technical activities.

The program was coordinated by Er. A. Anand Hon. Secretary Tiruchirappalli Local Centre and Er. A. Leelavinothan Former AGM BHEL.

Professor of Chemistry joins the Editorial Board
Dr. R. Karvemuth, Professor, Department of Chemistry, has joined the Editorial Board (Early Career Board) of Inorganica Chimica Acta, a prestigious Inorganic Chemistry Journal (SCI) published by Elsevier, on invitation.

DST FIST sponsored Department
Department of Chemistry had been sanctioned Rs 237 crores to strengthen the post graduate teaching and research facilities in the Department under DST FIST program.
1. Dr. Ganesh Chandra Nandi, Assistant Professor of the Department of Chemistry received a grant to the tune of Rs 36,96,240 for Design, Preparations and Utilisation of Sulfinimidoxy Hydrazides as Novel Precursors to Construct Difficult-to-Access-Synthetically and Biologically Important Sulfoximines under SERB-ERC scheme for 3 years.

2. Dr. Somnath Garai, Assistant Professor of the Department of Chemistry received a grant to the tune of Rs 38,06,240 for Metal-Oxide Super-Fullerene Delivers a Versatile Platform for Catalytic Water Splitting Under Confinement: Investigating the Beauty of Encapsulation Chemistry Inside the Nano-Cavity under SERB-ERC scheme for 3 years.

3. Dr.Jeevan Joseph, Assistant Professor of the Department of Civil Engineering received a grant to the tune of Rs 28,85,850 for The effect of soil-water retention behavior on the land use pattern for drought mitigation under SERB-ERC scheme for 3 years.

4. Dr. F.A. Kathick, Assistant Professor of the Department of ICE received a grant to the tune of Rs 39,12,120 for Development of nonlinear signal processing schemes for the assessment of neural and muscle functions under SERB-ERC scheme for 3 years.

5. Dr. Vedharaj S, Assistant Professor of the Department of Mechanical Engineering received a grant to the tune of Rs 43,05,860 for Study on High Efficiency Pre-Chamber Combustion Concept to Extend Gasoline Lean Limit in a Constant Volume Combustion Chamber under SERB-ERC scheme for 3 years.

6. Dr. Jaya Bharata Reddy M, Associate Professor of the Department of EEE received a grant to the tune of Rs 31,56,780 for Realization and Implementation of Wide-Area Disturbance Monitoring and Protection Methodology for Future Grids using PMUs under SERB-ERC scheme for 3 years.

7. Dr. Karthik S, Associate Professor of the Department of Physics received a grant to the tune of Rs 43,25,255 for Multiple Exciton Harvesting at Zero-Dimensional/Two-Dimensional (ZnO/MoS2)-Polymer Heterostructures under SERB-ERC scheme for 3 years.

8. Dr. Justin Josephus, Associate Professor of the Department of Physics received a grant to the tune of Rs 20,06,400 for Thermorelaxation mechanism in core-shell nanoparticles with highly magnetic FeCo Core under SERB-ERC scheme for 3 years.

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<tr>
<th>Title</th>
<th>Principal Investigator</th>
<th>Co Principal Investigator</th>
<th>Institute</th>
<th>Institute</th>
<th>University</th>
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<tr>
<td>Development of Upward Mass Transfer: An Abundance of EID for Water Infiltration and Treatment Applications</td>
<td>Prof. Chetan Dixit, National Institute of Technology, Warangal, India</td>
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<td>Rs. 30,70,100</td>
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<tr>
<td>Research and Developments for Higher Altitude and High-Value Processes Using Nanomaterials and Nanoparticles</td>
<td>Prof. Parvateerath R., National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 32,32,700</td>
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<tr>
<td>Universite: Based Low Power Hybrid VLSI Systems in 3G &amp; 4G Applications</td>
<td>Prof. Balasubramanian S., National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 32,12,100</td>
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<td>Potential To Pre Demonstrate a Non-Equilibrium System in a Non-Linear Oscillator</td>
<td>Prof. Uday Shankar Das, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 30,91,800</td>
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<td>Design of DC-based Energy Harvesting in Smart Wireless Networks</td>
<td>Prof. Daouda Ouedraogo, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 31,25,100</td>
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<td>Solar-Powered Water Purification System</td>
<td>Prof. Ultraviolette A., National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 32,22,200</td>
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<td>Chemicals: Preparation of New Materials for Food and Industrial Use</td>
<td>Prof. Damodaran, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 30,91,800</td>
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<td>Additive manufacure of Biodegradable materials</td>
<td>Prof. Neeraj Bapat, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 30,90,100</td>
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<tr>
<td>Right-based Li-ion Batteries for Electric Vehicles and Electrical Applications</td>
<td>Prof. Subramaniyan, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India</td>
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<td>Rs. 30,90,100</td>
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<td>Table: List of proposals sanctioned under Scheme for promotion of Academic and Research Collaboration (SPARC)</td>
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Consultancy

1. Dr. Sivakumar, Professor, Department of Instrumentation and Control Engineering on Emergency Response Support System, Rs 500000, for M/s. CDAC(T), T.C/14/992, Vellayambalam, Thiruvananthapuram, Kerala.

2. Dr. S. Visvairaksham, Professor, Dept. K. Balasubramanian, Associate Professor, Dept. of Mechanical Engineering on Service Order from Power Mech Projects Limited for safety audit at North Chennai, Rs 24,78,000 for M/s. Power Mech Projects Limited, Hyderabad.

3. Dr. Baskar, Professor, Department of Civil Engineering, on Vetting of Design Calculation and drawing for the project on BSH House Hold Appliances Manufacturing Pvt Ltd, Chennai, Rs 33,20,000 for M/s. PTK Project Consultants LLP, 13/51 Haddons Road, Chennai & Structural Design and drawing of MCC, Rs 11,80,000 for M/s. The Commissioner, Kollulamai Municipality, Kollulamai District.

4. Dr. Muthukumar, Professor, Department of Civil Engineering, on Geotechnical investigation for the Reconstruction of ROB No 4A at 440/490 of Varanasi-Munyakamur road (Abandoned NH7) SHU 100 near Palanganathan in lieu of existing Railway overbridge no 44 in between Madurai and Usilampatti Railway stations, Rs 82,20,000 for M/s. The Divisional Engineer (H), Project Division, Madurai-2 & on Geotechnical Investigation for work Extension of Terminal Building, Construction of staff quarters, Construction of Apron and Extension of Runway at Coimbatore International Airport, M/s. The joint General Manager (Engg-Civil), Airports Authority of India, Coimbatore International Airport, Coimbatore, 442 204, 5.

5. Prof. R. Jayasekhar, Associate Professor, Department of Civil Engineering, M/s. The Executive Engineer, Tamil Nadu Slum Clearance Board Trichy, 472000.
Q&A with Dr. A.V. Reddy

1. Before starting on the professional side, we would first want to know about your Childhood, and about your hobbies then. We belong to farmers’ community in Andhra Pradesh. I studied in Telugu medium till +2. Ours was a joint family. At that time, I took a break of 1 year from 1970 to 1971 and involved myself in farming post which I was put into PUC near Krishnagiri. I pursued my B.Sc. B.Ed. integrated programme on Mathematics for 4 years in Regional College of Education (now it’s Regional Institute of Education – RIT), Mysore. Again, I came back to my native place. I lost my father in 1984, and mother in 1973. For one year, I did agriculture once again. I felt very bad and was depressed. I made up my mind and hence decided to continue my education in Regional College of Education. I was very strong at Mathematics.

I applied and got it in 1977. I have become the pet student of my PG professors. I didn’t try for a job. I applied for ISI Kollata and IISc Bangalore and got seats from both of the colleges to pursue my PhD. I preferred Bangalore as it was close to my native. In 1984, I finished my PhD in applied mathematics and joined as a lecturer in REC. In 1999, I became a professor. I’ve been the HoD for more than 3 years. It was when I served as the Chief Warden under Dr. Chidambaram and Dean, Students’ Welfare under Dr. Sundarajan that I started associating with many people. Many good measures were implemented during my tenure of Chief Warden for 3 years. I had a wonderful team of hostel administrative committee. The present Director ma’am was very helpful too. It was in March 2018 that I retired.

2. Can you tell us a bit about your alma-mater?

After coming here, I actually wanted to leave this place and then go to IISc/abroad. I immediately got married, but I got friends in RIT Mysore as well as Bangalore, and people were settled in various places. I am well connected with my friends from my alma matter.

3. You have a depth in multiple high demand areas of Computing, and have a wide breadth in areas from Algorithms to Data analytics, how do you maintain your knowledge in such vast fields in today’s fast paced environment?

After REC became NIT, the PhD programme was implemented and only then, we were allowed to take students. We wanted to refresh our knowledge, we read a few textbooks due to exposure to mathematics. To take classes, I had to up-to-date knowledge. I was happy with the subjects and the way I’m teaching the students. I’ll guide the students to find out what’s happening in the current world so that they’ll discuss in the class on what they have learnt.

4. With over 33 years of experience in the teaching field, how do you think the teacher-student relationship has changed over the years?

That depends from faculties to fields as to how you treat your students. My relation with my students is really nice. They can interact with me anytime. I never have been bossy to them. They will be treated with due respect. I never felt that students were afraid of me. Teacher has to tell them exactly what to prepare. They can come and have a discussion with me regarding any sort of doubts. I’ll guide them on what exactly to read in order to enhance their knowledge. Nowadays, everything is available in the internet. It’s essential that they’ve to spend time to get answers. Once the brain is matured, the student can easily understand every concept that the teacher understands.

5. What do you think are the required skills a student should possess in today’s world?

They’ll get the Subject oriented stuff from myself and internet. They’re in internet with alumni, what’s the present scenario, the upcoming development and work on projects accordingly. They’re to discuss with faculties and have a couple of projects ready, that will get them good jobs with good remuneration. They must work according to what the companies expect.

6. What would your advice be to the new teachers and professors just starting out?

Academic profession has peaceful life, and good salary over the last couple of years. You can get involved in teaching, do research and spend time with family also. Teaching is an excellent field. One should have fundamental knowledge in their subject. Communication skills are required. Once you’re strong in subject, even if you lack communication skills, students will like your classes, and it’ll come slowly by teaching. You need to love the subject.

Q&A with Dr. R. Narayanasamy

1. If you had to describe your Journey so far at NIT in one word, how would you describe it as?

I would describe it as a very good journey. I was able to concentrate more on research to my full satisfaction and that’s most important. Dr. Pandey from the Metallurgy Department was helpful to me in carrying forward my work as far as results are concerned. Mathematics support from Dr. Kumaran. Dr. Sivaraj, a young professor, of my son’s age group helped in taking the latest computing technology.

2. Tell us about your life before entering in the professional world as a Student and about your Alma-Mater?

I completed my B.E in PSG College of Tech, Coimbatore in 1977 post which I joined IITM (passed entrance). Studied Metallurgy and Metal forming. Then I worked in Tube Products of India for two years on metallurgical aspects of Mechanical Engineering. Then, I moved to McMaster University, Canada where I concentrated mostly on Mechanics and Metallurgical Engineering, and metal forming operation. Then I joined Central Metal Forming Institute, Hyderabad. There, I couldn’t register for PhD as I didn’t get permission and hence, I joined REC Trichy where I fulfilled all my achievements.

3. Before venturing into the Education world as a lecturer, you were working as an Engineer, what drove that change and what differences do you find in between the Industrial and Educational sector as an employee?

I worked at the Tube Products of India under the guidance of Dr. B.N. Das. He was the retired Deputy Director of National Metallurgical Laboratory, Jamshedpur. He taught about Metallurgical aspects of Metal forming. Then, I went to McMaster. Orientation is different. They concentrated on mathematical study and metallurgy. Then, I joined Central Metal Forming Institute extrusion of races. I was working on the project. I worked for 3 years. They didn’t let me register for PhD. I got married, and had to look after my family. I joined this institute, National Institute of Technology Tiruchirappalli.

4. You have exposure to both the Foreign and Indian Educational systems, what do you think are the key differences in them and what do you think of the quality and aptitude of the students comparatively?

Quality of education in Canada is really good. All universities in Canada are controlled by Government. I studied at McMaster University. I had been trained by Cambridge professors, where I learnt a lot about mechanics and metallurgical aspects of metal forming. Then, I picked myself up by going through books, and enhancing the subject knowledge and went with research. In McMaster, there were 3 courses per semester. Or, 2 courses for the whole semester. The depth of knowledge is very deep. We go shallow, and not into the depth of the subject. So, we need to focus more on the depth.

5. You rank in more than one area in the esteemed Scopus International Rankings, what do you think differentiates you from other researchers?

Usually, I send papers to Scopus journals. Scopus journals expect some novelty in the paper. New ideas must be introduced in the paper. Otherwise, they don’t accept it. Earlier, I was finding difficulty in publishing paper. Everytime, I need to put in knowledge and new innovation. Otherwise, they don’t accept my papers. My published papers are ranked high in top journals. They expect high quality, and high impact factor papers.

6. What would be your advice to students who wish to enter the field of Teaching later on?

It’s a good field. Now a days payment is good, attractive. Earlier they pay less. IITs and NITs are highly attractive in payment. They can work for teaching and research and improve the knowledge. They should aim for high quality papers and journals. The level should be above the other universities as well. Students should do their post graduation in Canada / USA. After that, they can come back and work here.

7. Can you please give us an incident that impacted you a lot?

Basically, I was interested in research. I wanted to complete my PhD as early as possible. Immediately, I joined for PhD and completed. I was interested in publishing papers like foreign professors. That’s why I was concentrating more on research apart from my teaching load. Dr. Pandey was my motivator who gave me strong motivation. Dr. Kumaran helped me with Maths. Dr. Sivarajad, young and knowledgeable person was also very helpful to me. That’s why I could achieve so many papers.