Director handing over the newsletter to the chief guest of Convocation'18.
Greetings from your Director.

It has been quite an eventful August for NIT, Tiruchirappalli.

Convocation 2018 was an exhilarating occasion when we graduated over 1600 engineers. Some of them are joining top companies; a sizeable number preferring higher studies; an increasing number of civil services aspirants; and, a fascinating trend of a good many deciding to become innovators, entrepreneurs.

The Orientation Program has provided a smooth landing to the Freshers who are starting their exciting professional journeys.

Your Director travelled to the United States to meet our distinguished alumni and forge useful bonds that will add a valuable dimension to our campus life. The need for role-models and motivators cannot be overstated.

Before I sign off, let's spare a moment in prayer for our dear departed, Rajan Narayan, an alumnus who made a mark as an entrepreneur and, more notably, as the dynamic President of the Alumni Association. He was plucked away by Time in his prime and we only have the fine memories of a truly distinguished alumnus.

Thank you.

Dr. Mini Shaji Thomas
Director
director@nitt.edu
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The 14th Convocation of the National Institute of Technology, Tiruchirappalli was full of colour and culture with the students in traditional attire donning stoles.

Speaking on the occasion, Dr. Anil Sahasrabudhe, Chairman, AICTE stressed the need for a paradigm shift in Technical Education. He spoke about important changes that would drive overall development in colleges across India.

Dr. Sahasrabudhe highlighted the importance of promoting the overall development of students. Further, he emphasized enabling of interest in sports, music, dance, drama, painting, photography, aeromodelling, automotive, astronomy, history, and philosophy, so that, there is an activity of interest for every student.

This will help in their all-round development and create interest in other academic pursuits as well. Speaking about the transformation required, he said that interdisciplinary research is of critical importance. Dr Sahasrabudhe also spoke about the Government's digital initiatives. Addressing the new graduates, he also spoke at length about learning as a lifelong process. He advised them that it is the patience, persistence and perseverance, leading to perfection, which play a decisive role for success and invited them to join the national mainstream and make India a world super power.

Speaking on the occasion, the Director, Dr. Mini Shaji Thomas brought out the achievements of the Institute in the previous academic year. The 190-crore Siemens Centre of Excellence in Manufacturing was set-up this year and will pave the way for interdisciplinary research.
The Director also spoke about the faculty recruitment that took place after a span of ten years and added that 40 new faculty members across various departments from top Institutes had joined the Institute. 10 senior administrative officers recruited this year have injected new blood into the office administration. The Administrative office is getting fully automated, and soon, with the support of all stakeholders, a paperless office will be in place. She also said that the Institute has embarked on a greening initiative of the campus and its neighborhood, buoyed by the Green Campus award from the Tamil Nadu Pollution Control Board. 2,000 saplings have been planted in the last few months and another 10,000 will be added in the coming months.

Five alumni were awarded the Distinguished Alumnus Award in the field of Excellence in Corporate / Industry during the Convocation.


2. Dr. Kumar Balachandran, Expert, Wireless Communication Networks (Ericsson Inc.), B.E. (Hons.), ECE (1986)

3. Dr. Raghupathy Venkat Giridhar, Vice President, Non – Volatile Memory Solutions Group (INTEL Corporation), B.E. (Hons.) ECE (1980)

4. Mr. Rajamanohar R., Executive Director, (BHEL Tiruchirappalli), B.E. EEE (1980)


Two members were also awarded the DAA in the field of Excellence in Entrepreneurial Venture and one awarded YAA for Excellence in Academic Research

1. Mr. Srihari Balakrishnan, Managing Director (Sri Kannapiran Mills Limited & KG Denim Limited), B.Tech, Chemical Engineering (1990)
2. Mr. Swaminathan Jayaraman, Founder & Managing Director (Vascular Concepts Limited), Bachelors (1986)
3. Dr. Praveen Kumar, Centre Head, Young Scientist Centre, DRDO (ARDE, Pune) BE, MME (2002)

Retirement of Shri C. Palanisamy

Shri C. Palanisamy served NIT Trichy in various posts for 27 years and 8 months continuously. He retired from the Mechanical Department on 31st August 2018.
INDEPENDENCE DAY CELEBRATIONS'18

The 72nd Independence Day was celebrated with great gusto. It was attended in large numbers by the NITT community. The Director Dr. Mini Shaji Thomas hoisted the tri-colour and inspected the guard of honour by the Security Guard and NCC.

In her Independence Address, the Director underlined the academic independence of our universities and institutes which enables them to build capacity and develop human resources that will be relevant for the future. She mentioned that NIT Tiruchirappalli has a significant role to play as the leading NIT of the country. It has to take a lead in creating courses and curricula, collaboration and MOUs, which are locally relevant and, at the same time, globally competitive, to take the Institute forward in creating a better world.

She also informed a strategic plan for the next few years, to take the institute to the next level of world rankings. There is an India within national boundaries. There is an India beyond the national boundaries. NIT Tiruchirappalli is no different. There is an NIT within the campus walls, where the engineer of the future is shaped. Beyond the campus walls, there is an NIT Tiruchirappalli, who are shaping the world - The Alumni. In addition to the students, faculty and staff, the Institute has the fourth stakeholder, the alumni, a 30,000 strong force who are willing to contribute in many ways to the Institute.

As part of the green initiative, 150 trees were also planted in the hostel and academic zone of the campus.

The event concluded with a rendition of patriotic songs by students and members of the campus community. The parade was led by Mr G. Murugan, Security officer and Ms. Sai Keerthi, Parade Commander, NITT.
NITT Professors Appointed as Directors of 3 Institutes

G. Kannabiran
K. Sankaranaryanswamy
S. Selvakumar

NIT Tiruchirappalli has the unique distinction of being the only campus from where three NIT Directors were appointed by the President of India this year. Professor K Sankaranaryanasamy of Mechanical Engineering department became Director of NIT Puducherry, Karikal. Professor G. Kannabiran of the Department of Management Studies was elevated Director, IIIT Sri City, Chittoor, Andhra Pradesh and Dr. S. Selvakumar as Director, Indian Institute of Information Technology, Una, Himachal Pradesh.

IEEE Invited Article

Invited article on "Power Engineering Education: A Description of Current Academic Developments in India" by C. Nagamani, M. Venkata Kirthiga, and Mini Shaji Thomas (of the department of EEE) is published in Power and Energy Magazine, IEEE.

The article describes Engineering Education in India and an abstract is given below:

India has emerged as one of the world’s fastest-growing economies, and the Indian industrial sector competes globally by manufacturing engineering equipment, automobiles, chemicals and software.

Technical education, in general, and electrical engineering education, in particular, hold prime significance in this context. Electrical power engineering is a subject of choice for many aspirants in India who seek admission to a bachelor's or graduate degree in top-tier engineering schools. Electrical engineering graduates are much sought after for their superior analytical skills, they are employed across a variety of sectors in India and abroad. This article describes the growth of engineering education in India and changes in the programs and courses offered and also provides suggestions for improvement.

The article is published in the Sep-Oct 2018 issue and is available online as well as offline for reading.
INAUGURATION CEREMONY

The Director inaugurated Orientation ‘18 and spoke on various important topics helpful for the freshers. The HODs introduced their departments to the students and told them about the individual success of the departments. Hostel Administration also spoke on the occasion. The event concluded after an interactive session with the parents and the students.

DANCE TROUPE

During the Orientation, the Dance Troupe of NITT performed various types of dances like Classical, Western Classical, Fusion, Bollywood Dance, Hip-hop. It was one of the most eye-catching events of the whole orientation programme and the attendees found it hard to be in their seats while the Dance Troupe was on stage.
Music Troupe

The music troupe performed many songs in different genres from Classical Indian to Western. The performance was cheered by everyone and the variations in the songs were very high and the audience thoroughly enjoyed it. Being one of the prominent clubs of NITT, this was also the first time the freshers got to know about the Official Musical Club of NIT Trichy.

Alumni Talk

Several Alumni talks were given by both recent graduates like IAS State Topper Mr. Keerthivasan(alumni of Department of Civil Engineering-2016), as well as alumni of the previous batches including those from the very first batch of NITT. While the senior Alumni shared stories of how they contributed to the development of the institute, Mr. Keerthivasan talked about how he cracked the prestigious

Safety Drills

Fire safety drills and sessions on Healthy practices were conducted with the help of personnel from the BHEL, the police force, and Apollo Pharmacy. During the drill students were taught about various types of fires and about methods they should use to extinguish them. Guidance was provided on the use of different kinds of fire extinguishers. A fire drill was carried out to

Many more......

Over the course of more than 10 days, the orientation programme had many activities that ranged from informative to team building and enjoyable activities. Apart from the ones listed above they also conducted activities like Thanjavur Tour, Fresher’s Night, Bridge Courses, Club Briefings, Fest’s and Sports breifing along with the Student Council briefing. A Talent Hunt for Freshers was also organised which involved a very enjoyable selection process and the talents showcased on the stage were applauded by
EASTCOAST VISIT - NEW YORK & BAY AREA VISIT - SANFRANCISCO

Today, whenever one turns on the Television, opens the daily newspapers, or surfs the Internet, one is greeted by the success stories of the distinguished NITT Alumni, carrying the legacy of the institute forward through their splendid achievements in a myriad of fields and industries. Director Dr. Mini Shaji Thomas took a milestone step to further nurture the alumni relations by meeting the alumni in the East Coast, USA, at the Mykonos Restaurant, New York.

The spectacular meeting was organised by illustrious alumni themselves. It turned out to be a huge success with over 70 alumni and guests in attendance, with a strong representation from various batches, including Mr. Vir Gopalan (1969 batch - First Batch Alumni, REC-T) as well as the recent 2017 graduates.

Dr. Jayshree Seth, Corporate Scientist and Chief Science Advocate, 3M, USA (1989 Batch) was conferred with the “Distinguished Alumni Award (DAA)” by Dr. Mini Thomas. The alumni came up with measures to improve Alumni Interaction across the world and made plans to visit the campus soon. Dr. Mini Thomas was presented with a beautiful memento for her excellence in leadership. Meeting was adjourned with cheers, and a promise to meet in another 2 months, with a resolve to formally create an Alumni chapter for the East Coast USA.)
Following the extremely fruitful East Coast Alumni meet, the Director met the alumni of the Bay Area of San Francisco in Santa Clara for a grand reunion of the West Coast chapter, to assert the role of the alumni in making NITT a global brand. 150-plus graduates from the 1974 batch to those of the 2017 batch travelled from all over the West Coast to attend and help make the night a memorable one.

Mr. Krishna Sai, NITT/REC Alumni President RECAL spoke about how the Alumni were an integral part of the Alma Mater.

Mr. Ramkumar Vasudevan (1974 Batch), Mr. Richard Sekar (1983 Batch) and Ms. Deepa Balgi (1991 Batch), shared their thoughts and experiences as student/alumni and offered thought provoking messages to the younger Alumni and how they can give back to the institution and its students.

On the whole, it was a very eventful evening of fun, gala and promising decisions to improve alumni relations across the world with the aim of creating a global brand for NITT.

Dr. Mini Thomas, the Director of NIT Trichy shared the vision of making the institute a power house of innovation, research, and to enhance the brand of NIT, Trichy to be “Locally Relevant and Globally Competitive“. She honored Dr. Kumar Balachandran, Expert, Wireless Communication, Ericson (Batch of 1986) with Distinguished Alumni Award (DAA) for Corporate Excellence / Industry.
The second faculty lecture of FORUM @NITT was on "Mathematics from the Lotus Pond". The title is motivated by the popular story that Isaac Newton discovered the principle of universal gravitation by observing the fall of an apple and the speaker, Prof. V. Ravichandran of Department of Mathematics, NIT Trichy, is one of the 17558 known descendants of Isaac Newton. The talk began with the problem of computing the number of flowers in a lotus pond and the number of birds that came there.

The problem was stated thus: When the birds sat one on each flower leaving one bird without a flower and when they sat two on each flower leaving one flower without any birds how is one to decide the number of birds or the number of flowers? This problem which pushes one to come up with a suitable mathematical model, here, from linear algebra also took the audience into the fascinating world of numbers. Every culture has had its romance with numbers.

From the primitive attempts by the imaginative man with astrology to the modern scientific man with astronomy the affair with numbers have only become more complex and even more engaging for that matter. It would take a mind, like Professor Ravichandran's, to convince us that every one of us, Mathematics' friend or foe, carries on a love-hate relationship with numbers. We must grudgingly concede that without them our lives would be far less accountable and, doubtless, without meaning. The talk romped to other problems from real life. One such problem is about the weights 1 kg, 2 kg, 5 kg, and 10 kg used with the beam balance. Though any weight upto 18 kgs can be weighed at one go, the weights are not optimal. If the weights 1kg, 3kg, 9kg, and 27kg are chosen, then any weight upto 40 kg can be weighed at one go. The afternoon was enlivened by these and many more interesting numerical episodes.
ACHIEVEMENTS of FACULTY & STUDENTS

FACULTY PUBLISHES BOOK

Dr. B. Ravisankar along with professor P.C. Angelo has published a book on Non Ferrous Alloys; Structures, Properties and Engineering Applications and which is published by Cengage publishers.

Dr. B Ravisankar is a Professor in the Department of Metallurgical and Materials at NITT, while P.C. Angelo is a visiting professor at PSG College of Technology. He is an ex-scientist of DRML, and has authored many textbooks on Powder Metallurgy.

This book will be useful for the undergraduate students of Mechanical, Production and Metallurgical Engineering and to the faculty who are handling the subjects as well as to practising engineers.

PhD students getting selected for Conference's and awarded fellowships.....

Three Research Scholars of Dr. S. Raghavan of NITT have the unique distinction of being invited to present their research works in Japan.

Ms. Divya, Mr. Arvind Kumar and Mr. Krushnakanth were invited to present their individual research works in the field ‘Microwaves in Defence Research’ in the Asia Pacific Microwaves Conference (APMC) 2018 in Kyoto, Japan.

Dr. Haribabu Jebiti, recently received Ph.D. degree in Chemistry from NIT, Tiruchirappalli has been awarded with the prestigious JSPS (Japan Society for the Promotion of Science Post) Doctoral Fellowship to carry out advanced research at Tokyo University of Science, Japan for two years.
ALUMNI GUEST LECTURE ON ‘INNOVATION MANAGEMENT’
BY MR. SURESH KRISHNA, COO OF SLEEP NUMBER

The Alumni institute cell (AIIC) of the National Institute of Technology Tiruchirappalli (NITT) had organized a guest lecture on ‘Innovation Management’ by Mr. Suresh Krishna, the chief Operations Officer (COO) of sleep number, a manufacturing company of smart beds. Mr. Suresh Krishna is a 1991 alumnus of NITT, and holds an MBA from Kellogg’s Business School, where he currently also serves in the advisory board.

Mr. Suresh Krishna shared some of his personal experience in the domain of innovation and listed the key factors for successful innovation. He also described how some successful companies had addressed innovation. He then cited the example how sleep number innovates on revolutionizing sleep by using IoT (Internet of Things) to track sleep patterns and collect a sleep data bank.

Mr. Suresh Krishna laid out the vision and roadmap for success in innovation. “Leadership and execution are important introduction of new products” he said, further adding that “talent and cordial partnership with suppliers and the market are necessary elements of success”. He explained the ‘the stage gate process’ to the audience according to which companies need to have multiyear strategies by which small innovations and updates are regularly introduced.

Mr. Suresh Krishna later had an interaction with the audience giving several tips and technical advises to students on a range of management topics. He advises the students that it is always beneficial to pursue MBA programme after gaining a minimum work experience. He allayed fears about automation on empoyment by eradicating poverty by helping India’s GDP grow further. Finally he suggested that every MBA aspirant needs to intraspect why they need an MBA and thereby decide whether to pursue an MBA India or abroad, since MBAs abroad are expensive having limited scholarship for international students. Mr. Suresh Krishna concluded by saying that India has an untapped consumer market among which healthcare, automotive and IT have a perception abroad as being innovative, thanks to which a management career in India would ensure fast growth. The Dean (Institute Development and Alumni Affairs) thanked the gathering by insisting the need for more alumni interaction in future.
The IEEE Student Branch of NIT, Tiruchirappalli, organized a special lecture on "New Skills for Future Engineers" on 13th August 2018. Dr N Kumaresan, the Student Branch Counsellor of IEEE, organized the event. The lecture was delivered by the former Dean (Academic) of NIT, Tiruchirappalli, Dr. S. Arul Daniel. During his lecture, he emphasised that the goal of education is creating a just society by recalling Gandhi’s statement that "Education without discipline is sin". He also brought out that there is a conflict between insiders and outsiders of the academic ecosystem. While the outsiders are keen on short-term goals like better pay-package, instant skill-development, the insiders will be working on nurturing students for long-term goals like honing their minds, breeding life-long learners. Dr. Daniel emphasized that there are significant changes that have taken place in the corporate and societal environment such as super-structured organizations, the rise of smart machines, an increase in the longevity of existence, tremendous growth in computational power and availability of huge data. Due to these changes, the skill sets required by future engineers have also drastically changed. The Academic eco-system should be able to nurture the students with the new skills required.

Dr Arul Daniel added that the new skills are critical thinking, expertise in new media technologies, ease of being in diverse teams, interdisciplinary knowledge, cognitive load management, data sense and ability to work in cross-cultural heterogenous groups. He reiterated the importance of bringing in structural changes in the academic eco-system to nurture the new skills demanded by the changed scenario.

The audience felt the lecture was very informative and enjoyed it.
K. K. Ramachandra Pulavar And Group, the most prominent shadow puppetry group of India, showcased their skill at Tholpavakoothu programme in NIT Trichy, at Barn for our SPIC MACAY chapter on 2nd of August. The group has staged more than 500 performances all over the world. Being honoured with numerous awards like Sangeet Natak Academy National Award and Dr. B. R. Ambedkar Kerala State Award, Shri K.K. Ramachandra Pulavar portrays this pristine art form in its purest form, even after 13 generations of its birth.

The group enlightened an audience of nearly 800 students with the various forms of puppetry-live demonstrations of String puppetry, Rod puppetry, Glove puppetry and modern day American puppet shows, like Mr. Muppet. Prior to the actual performance, the artists elaborated on how the art of shadow puppetry is one among the oldest known art forms to mankind, and the place Tholpavakoothu occupies in Indian Mythology. The ambience, to put the audience in the mood for ethnic stories, was beautifully created through oil lamps and classical music.

The Ramayana was enacted by the puppets made of deer skin, hand stitched and engraved with exquisite designs. Along with the normal dialogues of characters, there was also the inclusion of songs to heighten the emotions. Due to shortage of time, an abridged version of the play was performed within a period of 2 hours. This was followed by an interactive session with the audience, which received both questions, and appreciation from the teaching staff as well as students. The special effects used, whetted the curiosity of the students whereas the background of the art form was interesting for the faculties. All this thirst of knowledge was quenched by the artists more than happily as they succeeded in their goal of inspiring people about one of the oldest art forms of India.

The scenes of Ramayana provided a source of motivation to pursue what one yearns for. The event also served as a means of recreation from the bustling student life. The students would tell the story of Ramayana to their younger relatives and pass on the beauty and grace of Tholpavakoothu to posterity.
TEDxNITTTrichy organized its annual conference on August 11, 2018 at the Barn Hall. The event started with a talk by the Curator of the event Mayank, followed by a socializing session where the attendants conversed with each other on a wide range of topics, with the theme being ‘strings’. Food historian and first speaker for the day Mrs. Chitrata Banerji then spoke of the cultural and emotional aspects and experiences related to food.

SOME TALKS

Following this were talks from Ms. Nidhi Gupta from the Takshashila Institution about the whys and hows of changes in our society. Cyber criminologist Mr. K. Jaishankar, analoised the Internet with Trishanku’s heaven Theatre artist Mr. Piyush Agarwal spoke extensively about his experiences in the field of theatre.

Post lunch, Mr. Arun Krishnamurthy gave a passionate speech about the flow of rivers such as Cauvery, reinforcing the need to save our rivers. Mrs. Srimonti Sarkar gave a scientific talk on Giardia, a stomach bug which defied normal cellular mechanism. After a short break, footballer Sangeetha, who represented the country in the Glasgow Football World Cup for ‘Homeless Children’ detailed her inspiring journey from being a girl in the slum to representing India at a global event.

SUMMARY

TEDxNITTTrichy has raised the bar once again when it comes to organizing an evening that every participant would enjoy. The session was highly appreciated by both the speakers as well as attendees.

Ms. Lasya gave the vote of thanks. TEDxNITTTrichy also organizes several other activities on the campus out through the year. Some of them being, but not limited to, TEDxNITTTrichy Salon, connecedTED, 7 Billion & Her Coffee Table Talks, etc.
Various Clubs of the Institute have kickstarted their activities oriented towards the Freshers in the new academic year. Most of them have been conducting various workshops, contests, guest lectures and even a Hackathon.

Details of some of the various workshops and contests organized are:

**GESTURE CONTROLLED ROBOTICS**

The EEE association held a workshop exclusively for the Freshers on Gesture Controlled Robotics. The Workshop was one of the first workshops on campus for the freshers and received a heavy footfall. It was an enjoyable experience for the students where they learnt many new things related to the field of Robotics as well as Gesture Control through Image Recognition and sensors.

**μCON Wireless Game Controller - IR transmission**

Students are given an opportunity by the team of SPIDER μCON-18 to take part in a workshop conducted by it on "Wireless Game Controller using Infrared Data Transmission" in which students will not only understand the various protocols and principals of Infrared Data Transmission but also build their own controller.

**Straight Outta School**

Balls by Picasso - the Literary and Debating society of NITT conducted an exclusive event for first years on 13th and 14th August. Its events included the likes of General Quiz, Debating, Dumb Charades, and Word Games. The event was very well received by the freshers. Prizes and certificates were also given to the winners and the event introduced the Freshers to the Literary Culture on the Campus.
NIT TIRUCHIRAPPALLI in the NEWS

Nearly 200 engineering colleges apply for closure every year: AICTE

Move to raid supply chains of gutka products

2 offer illegal boat rides for refugees to St. held

ACROSS INDIA

NIT-T to evaluate admission pattern of UG programmes

THE National Institute of Technology Tiruchirappalli (NIT-T) will soon commission a project across India to study the distribution of enrolment in its undergraduate programmes. NIT-T director M. Shaji Thomas said the exercise would help the institution raise awareness about JEE, better understand the pattern of enrolments and concentrate on areas having a limited turnout.

"Students are admitted as per quotas, and the breakdown is 50 per cent for seats are meant for Tamil Nadu students, and the rest for students across India. There is also a quota named Direct Admission to Students Abroad (DASA)," Thomas said.

Explaining about the project, she said, "The project will give us clarity on which region has maximum admissions in NIT-T. Once the weak areas are identified, campaigns about NIT-T’s teaching and research excellence and its programmes (ignite, IIE) will be organized to engage students over competitive examinations."

The study is likely to be commissioned in late August after undergraduate admissions get over. It is not a time-consuming study as all the data is collected easily from the MHRD’s Management Information System (MIS) portal.

The director informed that the 19th convention of NIT-T would take place on July 28.