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COMMUNITY

The Official Newsletter of NIT Tiruchirappalli



Theme: Nurturing NIT-T the Miyawaki Way: The Green Issue

DIRECTOR'S MESSAGE



Greetings.

As the pandemic rages on and we wade deeper into uncharted territory, our resilience appears to have only grown stronger. The theme chosen by the editorial team for this issue – “Nurturing NIT-T the Miyawaki Way: The Green Issue” – embodies this spirit of fortitude and our determined search for silver linings in times of crisis.

NIT Tiruchirappalli celebrated the achievements of its faculty and student community on its Institute Day, organized on March 6, 2020. The event was graced by Shri. Vikas Swarup, Secretary, Ministry of External Affairs, who applauded NIT Tiruchirappalli’s consistently stellar academic performance as well as the several community outreach initiatives undertaken by the institute. At the event, the students were honoured with awards for their excellence in academics and the faculty were recognized for significant contributions made to research in their respective disciplines.

Striking yet another hopeful note in these bleak times, NIT Tiruchirappalli organized a plantation drive oriented towards improving the green cover as well as the biodiversity of the campus. The plantation of two mini forests based on the Miyawaki method marks the commencement of this urban afforestation initiative, with the aim to encourage the growth of a dense forest cover of native plants on campus. With support from Trichy Corporation and with a vision to plant several such forests in different parts of the institute in the near future, this initiative hopes to contribute to the promotion of future eco-conservation efforts in the locality.

In continuation of its efforts to mitigate the spread of the virus, the institute, in collaboration with the Trichy District Administration, organized a workplace COVID vaccination drive at the Institute Hospital to vaccinate eligible and willing employees above the age of 45. The drive was conducted as per Government issued guidelines to promote the necessity of vaccination and to ensure the safety of institute employees. I am also delighted to report that despite the challenging circumstances, NIT Tiruchirappalli successfully organized a workshop on ‘Capacity Building for Women in Higher Education’ for a third time. This workshop was conducted with a view towards encouraging women faculty to move beyond mere teaching and research towards assuming leadership positions, thereby addressing the gender disparity in the fields of science, technology, engineering, and mathematics.

I present to you the current issue of the newsletter covering institute activities in the months of March and April 2021. It bears testament to the resilience of a campus community which has accomplished much more than merely keeping calm and carrying on in the face of adversity.

DR. MINI SHAJI THOMAS
DIRECTOR

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INSTITUTE DAY 2020

06.03.2021



National Institute of Technology Tiruchirappalli celebrated its Institute Day 2020 on 6th March, 2021. Mr. Snehith Galla, Students' Council President of 2019-20 welcomed the gathering. Dean Academic Dr. Ramakalyan Ayyagari highlighted the achievements of the students and faculty of the institute. Following this, he gave a brief about various student-related programmes such as Festember, Pragyan, Inter-Department Sports Fete etc. and how various challenges were overcome during the Pandemic by our institute.

Congratulating the achievers, Director Dr. (Mrs.) Mini Shaji Thomas outlined the institute's response to covid, national and international recognition garnered and strategic plan for the implementation of the New Education Policy (NEP). She announced that NIT Tiruchirappalli is the only NIT to appear in the QS world University Rankings by subject in the 451-500 rank bracket in both Electrical & Electronics and Mechanical Sciences. She also mentioned that NIT Trichy has made an impact, 5th year in a row by moving to 9th position in the Engineering category in 2020 and No.1 position among all the NITs in the NIRF rankings.

Other major achievements of the institute include an exclusive Innovation Facilitation Centre set up by the National Research Development Corporation (NRDC) and inauguration of a new Centre of Artificial Intelligence, IOT and Intelligent machines. The institute is also being selected to be a part of the Prime Minister's Research Fellowship (PMRF) mission, being in the top 25 Institutions in India. The Institute has become more vibrant and younger with the addition of 68 new Faculty members during the Pandemic, including 21 Women faculty.

Chairman, Board of Governor, Shri Bhaskar Bhat too commended the role of the strategic plan 2019-24 in making NIT, Trichy a leader in technical education. He also urged the institute to be ready for the future challenges of the NEP. He expressed his immense pleasure upon hearing the extraordinary achievements of NIT Trichy. He spoke on the topic 'leadership' and how as an institute we need to respond to the challenges posed by the global educational scenario. India has progressed on many fronts in technology, however, with many opportunities also come many problems. We, as future generation, should think how to tackle these problems through thinking and innovation. And to think with a heart, we need empathy.

MIYAWAKI FOREST

21.03.2021

On the eve of World Forest Day 2021, NIT-Tiruchirappalli's first Miyawaki forest plantation was inaugurated by Director Dr. Mini Shaji Thomas and Registrar incharge, Dr. Arivazhagan.

Miyawaki is a technique pioneered by the Japanese botanist Akira Miyawaki for urban afforestation. The technique ensures plant growth that is ten times faster and the resulting mini-forest 30 times denser than usual. The Director informed that the Miyawaki forest that is planned is of an area of 0.58 acres would house 60-70 native plants, 10-20 herb varieties, fruit and flowering tree saplings. She underlined that the forest will improve the green cover as well as the biodiversity of the campus, and that many such Miyawaki forests are being planned in different parts of the institute in the near future. These forests will act as the green lungs of the campus. Walking trails are also being laid out inside the forest to enable the campus residents enjoy a nature walk.



Speaking at the event as the chief guest, Vikas Swarup, Secretary, Ministry of External Affairs and the author of "Q&A" at the Institute day of NIT, Tiruchirappalli, talked on the 4 Cs of leadership (creativity, curiosity, communicate, contribute). Swarup dwelt on the many interrelated facets of leadership that will lead India to be a pioneer of innovation. He believed that a good leader requires 4 important attributes what he called as the 4 C's - Creativity, Courage, Communicate & Contribute. He also mentioned that NIT Trichy is already practising these through number of large social service projects. He applauded these efforts and said not to stop here. He asked the students to lead the race for new ideas, innovation and create their own future. He applauded the community outreach program of NIT, Trichy which includes low-cost street vacuum cleaner, solar cold storage for farmers, JEE coaching for local children and women entrepreneurship programs.

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. The function ended with the vote of thanks by Mr. P. Kamalesh Khanna, Student President 2020-21.

This edition of Community focuses on the benefits of some of the trees that are planted in our campus as part of the Miyawaki plantation drive. The current pandemic scenario has made the entire world to realise the importance of leading a sustainable life that does not disintegrate our environment. A green cover helps to balance the ecosystem that we are - human beings along with thousands of other species. Oxygen, rain, water, food, shade, habitat, medicine, preventing erosion are just top few in the list of the numerous benefits that trees provide. Let us do our part in understanding the values of these trees (and some interesting facts along the way) and their contribution to the planet that we co-inhibit.



The Miyawaki forest will have native plants including native trees like Millettia pinnata (Pungai), Simarouba glauca (Sorgam), Syzygium cumini / Jamun (Naaval), Pithecellobium dulce / Manila tamarind (Kodukkapuli), Terminalia arjuna / Arjuna tree (Neermarudhu), Madhuca longifolia / Mahua (Iluppai), Magnolia champaca / Champaka (Senbagam), a few shrubs and 10-20 herb varieties. 4000 saplings were planted in 4 days. Campus Residents (including faculty, staff and students) participated in the plantation drive.

The site was chosen because of its central location and accessibility from hostels as well as quarters zone. All the existing trees (about 40) on the site are kept intact. It took about 5.5 weeks to prepare the site. As part of the preparation for the plantation, the members of the HAC had visited the Miyawaki forest maintained by the Trichy Corporation at Srirangam. The plantation site soil was laid over with layers of dry leaves collected from the campus, 84 tonnes of compost donated by the Tiruchirappalli Corporation and another 20 tonnes of compost from the institute's own compost yard. The alumni funded for this project.



Institute's Director Dr. Mini Shaji Thomas presented a memento to Shri. P. Rajan IPS, the city's superintendent of Police, who planted a sapling at plantation drive on NIT-T's first Miyawaki forest.

NIT Tiruchirappalli planted its second Miyawaki forest on April 1, 2021. Adjacent to Amber Hostel, it covers an area of 7000 square feet including a pathway ranging 10 feet. Around 760 plants of different species were planted by the hostel administration with the assistance of 12 NMRs working in the hostel zone. The plantation area is divided into 4 bays with 48 canopy trees on Bay 1, 192 trees on Bay 2, 370 fruit and 150 flower-bearing plants on Bay 3 and 4 respectively. With an aim to nurture the environment that we all share, NITT hopes that its contribution serves to promote conservation efforts in the future.

NIT Tiruchirappalli retains top position in TEQIP - III Programme

NIT Tiruchirappalli consecutively out-performed in TEQIP III similar to TEQIP I and II. Based on the recently conducted performance audit by Prof N.C.SHIVAPRAKASH, Professor, IISc Bangalore, the audit score obtained was 1.03 for a scale of 3.0 (1.00 being the highest score) which is top among all NITs and all Govt. Institutes which participated in TEQIP III.

Third phase of Technical Education Quality Improvement Programme (referred to as TEQIP-III) was implemented during 2018-2021. Being top performer in TEQIP-I and II, NIT Tiruchirappalli was selected for TEQIP- III with a funding of Rs. 7.7 crores and as the mentor Institute for Dr.B.R. Ambedkar Institute of Technology, Pahargaon, Port Blair, Andaman & Nicobar Islands.

Under twinning arrangement, NIT Tiruchirappalli has been supporting DBRAIT in various activities such as SAR preparation for NBA Accreditation, Procurement of Goods and enable faculty members to pursue higher studies (M.S. and Ph.D.) at NIT Trichy. Students of DBRAIT also share the NIT Tiruchirappalli laboratory facilities and get trained in the Siemens Centre for Automation.

Under TEQIP - III various activities were carried out at NIT Trichy. 54 B.Tech. students visited various universities in Canada for internship under R&D head during May to July 2019 as part of the Student Mobility Programme by MITACS Canada & MHRD. GATE training was provided to B.Tech. final year students in the year 2019 and 2020. E-books have been procured and made available to students to access from their place of stay.

Workshops like “Faculty Startups & Entrepreneurship, Capacity Building of Women Managers in Higher Education, Computer Skills” were conducted. Faculty Induction Training Programme was conducted for all newly recruited faculty members. International conferences were organised. The papers presented were published in reputed journals. Orientation Programme for the first year B.Tech. students of all branches were conducted.

The Director congratulated the team of TEQIP III for adding yet another feather to the NIT Cap.

COVID-19 VACCINATION DRIVE

22.04.2021 to 23.04.2021

National Institute of Technology Tiruchirappalli with the Trichy District administration organised COVID workplace vaccination drive in the Institute Hospital for 2 days 22.4.2021 and 23.4.2021 to vaccinate all the eligible and willing employees of the Institute above 45 years against COVID infection.

The vaccination drive was inaugurated by the Institute Director Dr.Mini Shaji Thomas at 10 AM, in the presence of the Registrar Dr. Arivazhagan and the Chairperson Hospital Advisory Committee Dr.J.Hemalatha. The Director expressed that vaccines are safe and necessary in the present COVID scenario.



The Medical Officers Dr.R.Priyanka, Dr.Vignesh, Dr.Annapoorani and the medical team of the Institute Hospital along with the trichy government team conducted the vaccination drive. This is taken as a measure to promote vaccination among the Institute employees and ensure their safety during the pandemic as per the government advisory.

On Board Admission of New CEDI Incubatees

25.03.2021

Centre for Entrepreneurship Development and Incubation (CEDI), NITT conducted the On-Board Admission of New Incubatees, Faculty Startups and Alumni Startups. CEDI, NITT fosters new technology startups to address the challenges from idea to commercialization, offering assistance to early-stage startups and incubates, social and women entrepreneurs for creating livelihood and to make a societal impact. Dr. S.R.Balasundaram, Member, CEDI and Professor of Department of Computer application welcomed the gathering. The newly admitted startups signed the on-board agreement under funding and mentoring category of the CEDI Incubation program 2021.

Director of NITT, CEO/Chairperson of CEDI Dr. Mini Shaji Thomas was very much pleased to welcome the New Incubatees, Faculty and NITT Alumni startups. She expressed her appreciation towards the newly admitted onboard incubatees amidst the pandemic situation. She promised the new incubatees and startups necessary incubation support and encouraged them to raise concerns at the right time to avoid any commotion. Finally, she wished all success to the Incubatees and startups on board in their entrepreneurial journey to deliver innovative products and solutions to their target markets which will benefit by enlarge the country.

Healthcare_____	Wellness Trawello HealthCare Services (P) Ltd
Bio Medical Devices_____	Prognostik Healthcare Instruments(P) Ltd
AI Surveillance _____	Aid vision Solutions (P) Ltd.,
Engineering & Automation_____	Inventglo Technology solutions (P) Ltd.,
Electric Mobility_____	Greenerg Mobility solutions(P) Ltd.,
Composite Technology_____	Senvira engineering (P) Ltd.,
Job posting service_____	Taizo Technologies (P) Ltd.,
Tech Insurance claim services_____	V2RT Insure Claims solutions
Creating Livelihood_____	Social Welfare Integral Trust
Fuel and Energy_____	Ettenly Petrochemicals(P) Ltd.,
Travel and Tourism_____	SAWBON
AI-based Portable Electro Chemical Analyzer	AI AQUALYZER



Dr.M. Umapathy, Deputy Director and Director – CEDI, NITT concluded the event by proposing vote of thanks in the presence Dr.M.Duraiselvam Dean(P&D),Dr.S.Muthukumaran Dean(Research & Consultancy). Dr.G.Lakshminarayanan Member, CEDI Professor Dept. of ECE, NITT. Shri. G.Krishnan, Manager, CEDI- NITT.

APPOINTMENT OF DEPUTY DIRECTOR



Dr. M. Umapathy, Professor (HAG), Department of Instrumentation and Control Engineering, has been appointed as the Deputy Director of NIT Tiruchirappalli. He previously held the posts of Registrar In-Charge and Dean (Research and Consultancy), and is currently the Director of the Centre for Entrepreneurship Development and Incubation (CEDI), NIT Tiruchirappalli. Prof. Umapathy took charge as Deputy Director on 25th March 2021.

ATTHI or CLUSTER FIG TREE



Scientific name : *Ficus racemosa*

In India, the tree and its fruit are called gular in the north and atti in the south. The latex is used as home remedy. The fruits are edible and have medicinal values. The leaves fresh juice or decoction are also used in the treatment of many diseases. It is unusual in that its figs grow on or close to the tree trunk, termed cauliflory.

BICYCLE RALLY

19th March 2021

With a view to sensitize the general public for 100% voting in the ensuing TN assembly election, a bicycle rally was organised on 19.03.2021 by District Administration, Tiruchirappalli in association with NIT Tiruchirappalli. The rally was flagged off by Dr. Mini Shaji Thomas in presence of Mr. Anbalagan, Deputy Collector, Tiruchirappalli. Enthusiastically Participated by Students, Faculties, and Staffs & the local people, the rally marched through the Administrative block, NITT - Anna Valaivu - Administrative block, NITT.



DR.DARSHANA receives award

Dr. Darshana O. of NIT Tiruchirappalli's Civil Engineering Department has recently garnered the Young Women Engineer Award by the Institution of Engineers (India) - Tiruchirappalli Local Center, for her contribution to society and the engineering community. NIT Tiruchirappalli is proud of her achievement, and we wish her continued success in her future endeavors.



CAPACITY BUILDING WORKSHOP

22.03.2021 to 25.03.2021

National Institute of Technology Tiruchirappalli organised a Three-day workshop on Capacity Building for Women in Higher Education from 23-25 March 2021. This workshop is being organized for the third time in a row. The workshop was executed in a mixed-mode by hosting the resource persons online and participants in the video conferencing facility at NIT Tiruchirappalli.

The workshop was inaugurated by Dr. Mini Shaji Thomas, Director, NIT Trichy and the chief guest for the inaugural ceremony was Dr. Nandini Kannan, executive director at Indo-U.S. Science & Technology Forum (IUSSTF). Dr. Reicha Tanwar, former director, women studies research centre, Kurukshetra University spearheaded the conduct of program as an external coordinator. Dr. Reicha Tanwar sensitized the gatherings about the necessity of the capacity building workshop for women and the extensive execution of similar workshops across the nation.

Dr. Mini Shaji Thomas insisted on the vitality of the workshop. As a significant mark, NIT Trichy has proudly and successfully on boarded 20 female faculty members amongst the 67 newly recruited faculty in 2020. Dr. Mini Shaji Thomas encouraged women faculty to move beyond teaching, research and family, to accept leadership positions to “Lead and Make-a-difference”. Chief guest Dr. Nandini Kannan, highlighted the meager role of women in Science, Technology, Engineering and Mathematics (STEM) despite the ample talent amongst the women - the leaky-pipeline phenomenon.

Day 1 morning sessions were handled by Prof. Reicha Tanwar and Prof. Rajesh Gill while the afternoon sessions were by Prof. Bulbul Dhar James. The sessions were about Gender mainstreaming in Higher Education and how to manage personal and professional roles of women.

Day 2 sessions were handled by Prof. Reicha Tanwar and Prof. Renu Malaviya. The sessions concentrated on understanding power and about women's role in academic leadership. They emphasized on the creation of level-playing field through gender equality framework, and policies and procedures for successfully promoting and retaining women at all levels in Higher education.

Day 3 sessions were handled by Prof. Seema Parihar which was on the topic of Research and women - the scope, opportunities & society. The final session was on sexual harassment at the workplace. The workshop ended with a valedictory and feedback session. The participants felt enlightened on all issues related to women in academic careers and stated that the workshop provided an opportunity to develop a professional relationship among themselves.



INTERNATIONAL WOMEN'S DAY 2021

01.03.2021 TO 08.03.2021

National Institute of Technology, Tiruchirappalli observed this year's International Women's Day as a week-long celebration beginning from 1st to 8th of March 2021. In association with NIT-T's Officer's Club, a plethora of events ranging from invited talks to sports and cultural contests were held for the faculty, staff and students.

The programme was inaugurated by Prof.V.S.Elizabeth, the Vice-Chancellor of Tamil Nadu National Law University virtually and was presided over by the Director, Prof. Mini Shaji Thomas. Prof. V.S. Elizabeth talked about the insights that females have to gain in perceiving and availing the legal assistance that they are entitled to by the Indian Constitution.

The much-awaited second day witnessed women from the NIT-T family eagerly participating in the Throwball match that was inaugurated by the Dean (Student Welfare) Dr Kumaresan. The Director extended her solidarity by watching the match and congratulating the teams.



On the third day, Dr Lata Ramaseshan, member of CCASH, IIT-Madras spoke on gender sensitization. On the fourth day, there were on the spot competitions held in front of Barn Hall in which the participants actively engaged in various events such as Rangoli Designing, Mehandi designing, pot painting, face painting and vegetable carving. A panel of judges from our own campus evaluated the designs.

On the fifth day, Dr N.Kalaiselvi, Director of CSIR-CECRI, addressed the NIT-Trichy community and spoke about the role of women in science.

The sixth day had another sports event that was coordinated with the support of the Sports Officers. The Walkathon was flagged off by the Officer's Club president Dr Arul Mozhi Selvan. Including the Director all participants were enthusiastic about this early morning event and all of them finished the 4km Walkathon.

The 7th day witnessed the online streaming of selected entries of all online competitions and the winner announcements by the respective judges. There were five online events namely Photography competition, Lullaby singing contest, Solo dance contest, Poetry recitation contest and Elocution contest in three categories of students, staff and faculty. Judges from academic fields who were experts in specific arts appreciated the commendable efforts taken by NIT-Trichy to celebrate this year's Women's Day in a special way with an exhaustive list of events. All events except the on the spot events were streamed live beside an audio broadcast on NIT- T's Community Radio FM 90.8Mhz.

The valedictory function of the week-long celebration of Women's Day was held on 8th of March at 3.30 at NIT-Trichy. Dr. Arul Mozhi Selvam, the President of the Officers' Club welcomed the gathering. The Director of NIT-Trichy Dr. Mini Shaji Thomas preceded over the function in which Dr. Gitanjali Batmanabane, the Director of AIIMS, Bhubaneswar was the chief guest. She spoke about the importance of women in assuming leadership. There were dance performances by faculty members. The meeting adhered to the COVID protocol in place on campus.

National-Level Online Conference on Sustainable Business And Marketing

21.03.2021

The Department of Management Studies of NIT Tiruchirappalli hosted a national-level online conference on Sustainable Business and Marketing on 21.03.2021. In the conference, 55 Social Science researchers from all over India have presented their research works and new contributions.



Sustainable Business conference was graced by Prof. P. Kanagasabapathi, a prominent economist and an expert council member at the Indian Council of Social Science Research (ICSSR), New Delhi as the Chief Guest. He spoke about Indian vs. the Western business model, and pointed out the risks of having an unsustainable business model and emphasized on how Indian Business systems are better than the western counterparts because of our family values and culture. Prof. P. Kanagasabapathi highlighted the fact that 30 per cent of Indian innovations come from the illiterate or less educated people and accentuated the potential of India for being a global leader in the innovation index of the country.

Shri Tulasi Balasubramaniyan, Keynote speaker indicated that in the midst of global crises such as climate change, global warming, wildfires, COVID, fast track development through sustainable business models is the need of the hour. Dr.-ING. M. Duraiselvam, Dean of Planning and Development from the Department of Production Engineering, NIT Trichy who presided over the conference said, sustainability is the vital tool for business success and to improve the standard and quality of life.

Coordinator of the Conference Dr. G. Muruganantham, Head Management Studies NIT Trichy said, sustainability has become a new standard in business. Conference of this kind provides the platform for entrepreneurs, practising managers and academicians to discuss and deliberate the best business practices and to provide a road map for self-reliant and sustainable business models for India, to become competitive in the global marketplace.

KONDRAI or GOLDEN SHOWER



Scientific name : *Cassia fistula*

The flower is the state flower of Kerala. The tree is depicted on the 20-rupee stamp as well. It is an ornamental plant with its bark, leaves, flowers being used in herbal medicine. When not in the flowering phase, the tree provides shade. The flowers bloom in a drooping pattern in a cluster.

MARA MALLIGAI/INDIAN CORK



Scientific name : *Millingtonia hortensis*

Species was introduced in India less than 200 years but is now planted all over the country and is naturalized in many places. It is used as an inferior substitute for true cork. Mostly known for its ornamental values, it is used for making small wooden articles, in rare cases - furniture. Leaves are also used as cheap substitute for tobacco.

SPARC sponsored online workshop on Computing models and Data Analytics (with a focus on Internet of Things and Healthcare)

12th to 16th April 2021

The workshop sponsored by SPARC for the project titled, "Digital Health Records Storage and Analysis for Healthcare Provisioning of Global Patients: an India - Australia Initiative" was conducted online between April 12th and 16th 2021. It was organized by the Department of CSE and CA as the PI and Co-PI were from these two departments respectively. Among the short-listed 50 participants, 40 attended the workshop.

The workshop speakers were Dr. Rajeswari Sridhar, Dr. G. R. Gangadharan, Dr. Michael Sheng, Dr. Rajan Shankaran, Dr. Ranjani Parthasarathi, Dr. M. Sridevi, Dr. Varun P Gopi, Dr. P. Kumaran from academics, and Mr. M. Murali from Industry.



The topics covered include IoT, Cloud, Fog architectures, IoT concepts, protocols, Security, Web Services, Data Analytics, IoT Devices like Raspberry pi and applications, Wearable devices, Machine learning, Deep learning, AI in Image processing, Health care, and Data Analytics, Privacy and Security in Healthcare and research trends in IoT and healthcare. The theory sessions explained the architectures, algorithms, research aspects, and applications in a detailed manner. There were 2 Hands-on sessions to give a focus on implementation aspects. The workshop was well received by the participants and the feedback reflected the same.

International Workshop on Advanced Materials and Applications (IWAMA) 2021

March 1-2, 2021

The NITT-OSA and NITT-SPIE Student Chapters of the Department of Physics, NIT Trichy, organized a two-day virtual International Workshop on Advanced Materials and Applications (IWAMA) on March 1-2, 2021, to commemorate National Science Day. IWAMA '21 furnished a platform for students, young researchers, and faculty members across India and abroad to attend lectures delivered by distinguished speakers from Australia, Japan, and India.

Invited speakers, Dr. Vincent Daria (Australian National University), Dr. Balachandran Jeyadevan (University of Shiga Prefecture, Japan), Dr. Arti Agrawal (University of Technology, Australia), and Dr. Ayan Banerjee (IISER, Kolkata) illuminated the participants through their presentations on advancements in material synthesis, fabrication, and application in the field of Optics, nanotechnology, and neuroscience.



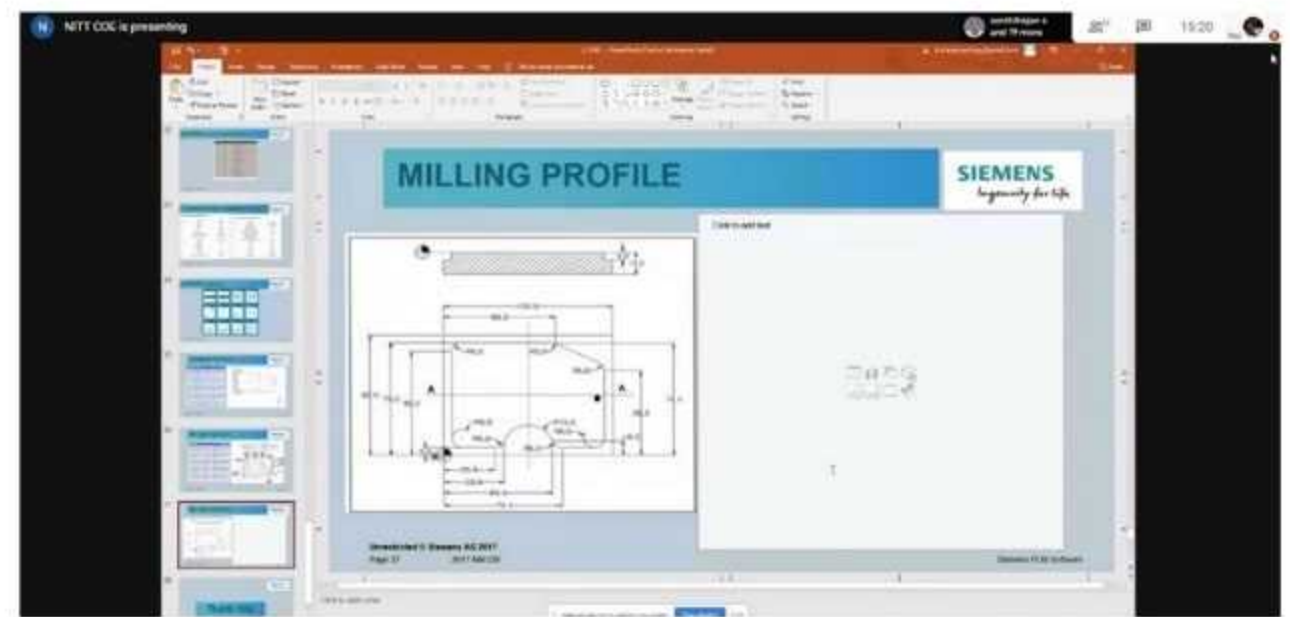
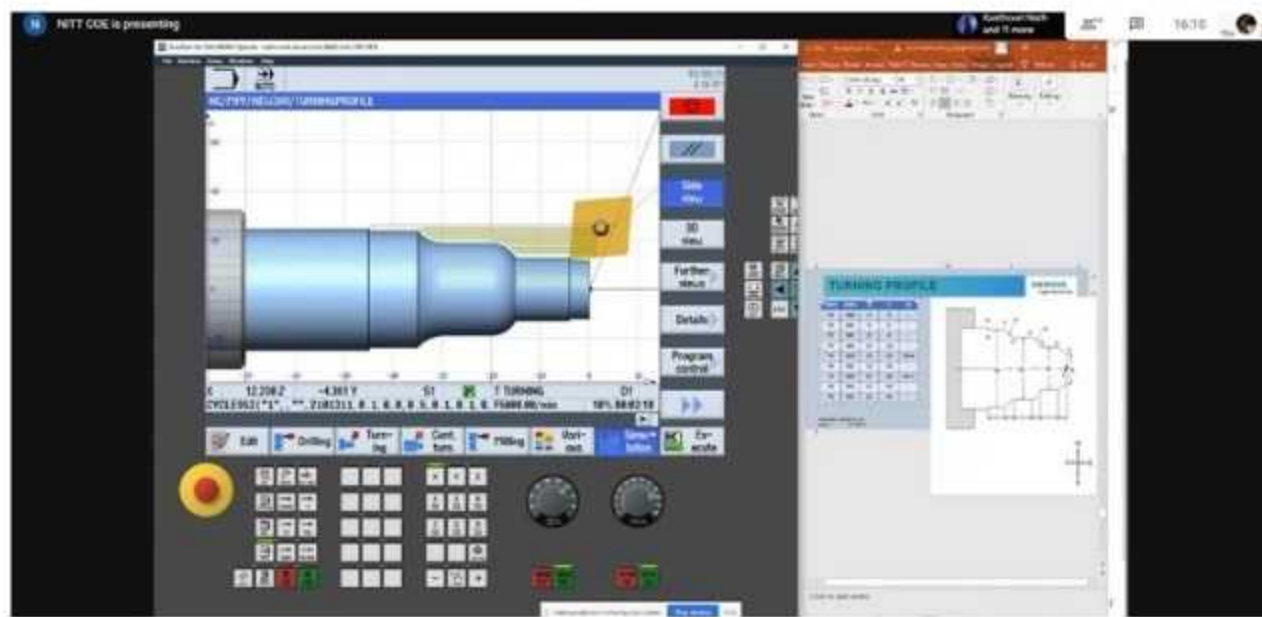
To evoke passion in science, they conducted a competition, "Reflect your knowledge," themed on current trends in material science for UG/PG students and awarded them with cash prizes. They have taken the long-standing tradition of celebrating National Science Day to elation by instituting an online International Workshop for the first time in the history of the Department of Physics. The officeholders of NITT-OSA and NITT-SPIE Student Chapters, through their zeal, effective co-operation, and invincible determination despite the challenges brought about by the aftereffects of the pandemic wave, instituted a new trend of events.

High End Workshop on “CNC – SINUMERIK Advanced Technology”

8th March 2021 to 13th March, 2021

National Institute of Technology in collaboration with Siemens Centre of Excellence in Manufacturing, NIT Trichy organised the High End Workshop on “CNC – SINUMERIK Advanced Technology” with the support of Science and Engineering Research Board (SERB) under Accelerate Vigyan Scheme of KARYASHALA from 8th March 2021 to 13th March, 2021. Invitation for open applications in the prescribed format was published in all social media pages and Institute website. Out of 28 applications received, the Selection committee shortlisted 25 applications. The workshop was inaugurated by Dr. M. Duraiselvam, Dean (Planning and Development) on 8th March 2021. The online workshop consisted of 11 lectures over a span of 6 days. The first lecture on Day 1 was an introduction and overview of the scope, salient features & major sessions of the workshop by Dr. M. Duraiselvam.

The second lecture was on Introduction to Control System – SINUMERIK, Coordinate systems, Basics Machine Setup, Dimensional system, Fundamentals of Programming, and Practice on SINUTRAIN for SINUMERIK: Profile detailing and Point Coordination and the third lecture on Sinutrain for SINUMERIK Operation, PC based Training was handled by Mr. Krishnamoorthy, Application Engineer, Siemens CoE in Manufacturing, NIT, Tiruchirappalli.



The fourth lecture was on Day 3, Turning & Milling Technology by Sriram Krishna by Application Engineer, Siemens CoE in Manufacturing, NIT, Tiruchirappalli. The fifth lecture on Day 3 about Turning & Milling Technology with SINUMERIK 828D was handled by Mr. Krishnamoorthy.

The sixth lecture on Day 4 was about Advanced Manufacturing by Dr. Sriram Kumar, Centre Head, Siemens CoE in Manufacturing, NIT, Tiruchirappalli. The seventh lecture was about 5 axis machining Concepts & Transformation by Mr. Prasanna Kumar DT, Application Engineer Siemens Ltd. Bangalore. The eighth lecture was about NX CAM – Basic by Mr. Biswajit Sahoo Application Engineer, Siemens CoE in Manufacturing, NIT, Tiruchirappalli.

The ninth lecture was on Day 5 on Sinumerik Multi-Tasking Machine Technology by Mr. Prasanna Kumar. The tenth lecture was about NX CAM – Advanced by Mr. Biswajit Sahoo. The eleventh lecture on Day 6 was a live Session of Turning & Milling CNC Machine by Mr. Krishnamoorthy, Siemens CoE in Manufacturing, NIT, Tiruchirappalli. A session was organized for the evaluation and feedback on the Day 6. The feedback was collected and Mr. Suresh Kumar proposed the vote of thanks to end the workshop.

INDIAN ALMOND

Scientific name : *Terminalia catapa*

Apart from the well known uses of kernels being edible and is used to make cooking oil, the trunk is a source of gum. The tree is also a source of tannin, has medicinal values and used as source of timber. When planted, it is used as a soil improver and helps in eradicating certain unwanted grass species. It is a drought tolerant species and contributes in preventing soil erosion.



Workshop on Functional Analysis and Numerical Analysis WFANA 2021

05 April 2021 – 09 April 2021

A Five Days National Level online Workshop on Functional Analysis and Numerical Analysis was organized by the Department of Mathematics NIT Tiruchirappalli, during 05 – 09 April 2021. Experts from reputed institutions/universities delivered the lectures. Around 130 participants from different departments in various institutions around India registered for the workshop with 45% of registrations being female candidates.

The objective of the workshop was to familiarize various topics on functional analysis and numerical analysis. Mathematical study of several real-life problems are incomplete without the concept of functional analysis. This workshop intended towards the bridging of two branches namely functional analysis and numerical analysis. Sessions also included the study of mathematical/numerical tools from an engineering point of view. Tutorial sessions were conducted for better understanding of the concepts.

The inaugural session was held at 09.30 am on the first day virtually. A total number of 150 participants attended. The organizers Dr. Jitraj Saha and Dr. Vamsinadh Thota welcomed all the guests, faculty, speakers and participants. The organizers conveyed their acknowledgement toward the institute administration for constant support and encouragement. The Dr. V Lakshmana Gomathi Nayagam, head of the department of Mathematics welcomed the Honorable Chief Guest Dr. (Mrs.) Mini Shaji Thomas, The Director NIT Tiruchirappalli to inaugurate workshop. The Deputy director Prof. M Umapahty, Dean of Academic Programme Prof. Ramkalyan Ayyagari, Dean of Student welfare Prof. N Kumaresan, also joined the inaugural session and address about the workshop . The speakers Dr. Jitendra Kumar from IIT Kharagpur and Dr. Shirshendu Chowdhury from IISER Kolkata.

Dr. Debajyoti Choudhuri, NIT Rourkela, Dr. C. R. Jayanarayanan, IIT Palakkad, Dr. Jitendra Kumar, IIT Kharagpur, Dr. S. Lalithambigai, Madurai Kamaraj University, Dr. P. K. Sanjay, NIT Calicut, Dr. Shirshendu Chowdhury, IISER Kolkata, Dr. Vishnu Narayan Mishra, IGNTU Amarkantak and Experts from NIT Tiruchirappalli handled the sessions.



Some of the topics covered were

- Topology, metric spaces, compactification
- Operator version of Hahn – Banach theorem.
- Three fundamental theorems of functional analysis via Zabreiko's lemma
- Weak, weak* topologies and Banach-Alaoglu theorem
- Analysis of linear and nonlinear PDEs
- Control of PDEs
- Analysis of hyperbolic / elliptic PDEs
- Numerical modelling and simulation (using MATLAB)
- Numerical treatment of real life problems

RED BEAD TREE



Scientific name : *Adenanthera pavonina*

This tree is useful for nitrogen fixation, and it is cultivated for forage, as an ornamental urban tree, and as a medicinal plant. These attractive seeds have been used as beads in jewellery. They were also used in ancient India for weighing gold. The seeds are curiously similar in weight. Four seeds make up about one gramme. It is also known for producing much litter in the form of leaves, twigs and especially seed pods.

One-week online workshop titled "Enabling Technologies for 5G and Beyond 5G Wireless Communication Systems"

19.04.2021 to 23.04.2021

The Department of Electronics and Communication Engineering, National Institute of Technology Tiruchirappalli, organized a week-long online workshop on "Enabling Technologies for 5G and Beyond 5G Wireless Communication Systems" from 19th to 23rd April 2021. About 32 Participants attended the workshop. The objective of the workshop was to disseminate the knowledge on advancements in wireless communication systems and their research aspects toward 5G and Beyond 5G Technologies.

The resource persons were Dr. V. Sudha, Dr. R. Pandeeswari, Dr. D. Sriramkumar, Dr. P. Sudharsan and Dr. P. Maheswaran from the Department of Electronics and Communication Engineering, NIT Tiruchirappalli, Dr.A. Ananth (Post Doctoral Fellow), University of Saskatchewan, Canada and Mr. Pratik Khurana (Senior Application Engineer), Keysight Technologies EESOF division.



Topics covered in the workshop:

- Stochastic geometry analysis for 5G Wireless
- Reconfigurable Intelligent Surfaces (RIS) for Beyond 5G
- OFDM and New Waveforms for 5G
- Millimeterwave Wireless Communication Systems for 5G
- Performance Analysis of NOMA Systems
- Smart Antennas
- IoT & Security issues in IoT
- SystemVue Demo
- Metamaterial inspired Antennas & Antennas for 5G
- Selection Combining Receiver Design for Space Shift Keying System
- Time Successive SSK M-ary Modulation for second order Transmit Diversity



MANTHARAI or ORCHID TREE



Scientific name : *Bauhinia variegata*

A popular ornamental tree in tropical climates, grown for its scented flowers. It blooms for several months. A highly medicinal tree by nature and its leaves are sometimes recycled artistically to make bowls and cups in India. Also has a postal stamp released in India for its commemoration.

VAAGAI or LEBBEK TREE



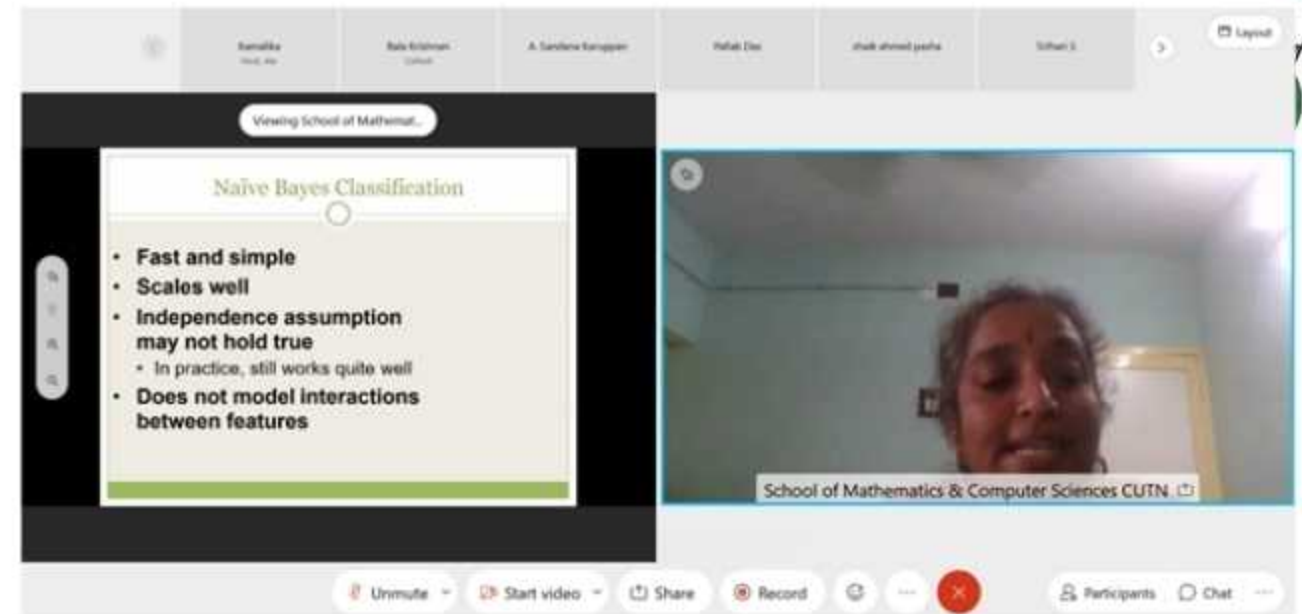
Scientific name : *Albizia lebeck*

In some part of the world, this tree is known as a 'Shak Shak Tree'. This species of trees do not grow close to each other. It is a nitrogen fixing tree and has various medicinal uses. Ancient tamil kings wore garlands made of the flowers to symbolise victory. Vaagai also means victory in tamil.

5 days online workshop on Machine Learning – Concepts & Application

19.04.2021 to 23.04.2021

Machine Learning – Concepts and Applications Workshop was a five day online workshop organized between 19th and 23rd April 2021 by Dr. R. Bala Krishnan, Dr. Sai Krishna Mothku and Dr. Kamalika Bhattacharjee, Assistant Professors of the Department of CSE, NIT Tiruchirappalli. Nearly 55 participants from various disciplines registered for the workshop.



The aim of this workshop was to educate the beginners of ML and at the same time to fill the gap between the theoretical knowledge and practical implementation. Nearly 6 hours of the total 30 hours time duration of the Workshop were dedicated to hands-on sessions.

The workshop was inaugurated by Dr. Rajeswari Sridhar, HoD, CSE, NIT Tiruchirappalli.

Day 1 focused on Introduction to Machine Learning and Data Preprocessing. It comprised of four sessions which were handled by Dr. Srilatha Chebrolu from NIT-Andhra Pradesh.

Day 2 focused on Data Preprocessing and Data Visualization techniques. It comprised of four sessions which were handled by Dr. V. Uma from Pondicherry University, Dr. Manjubala Bisi from NIT Warangal, Dr. G. Aghila from NIT Puducherry.

Day 3 focused on Evaluation Metrics and Model Building. It comprised of four sessions which were handled by Dr. Vijay Bhaskar Semwal from MANIT Bhopal, Dr. C. Oswald (PDF Scholar) from IIT Kanpur, Dr. Tanmoy Hazra from IIIT Pune and Dr. R. Bala Krishnan from NIT Tiruchirappalli.

Day 4 focused on Building Machine Learning Models. It comprised of four sessions (including hands-on session) which were handled by Dr. K. Nandhini and Dr. P. Thiyagarajan from Central University of Tamil Nadu Tiruvarur, Dr. Srilatha Chebrolu from NIT Andhra Pradesh.

Day 5 focused on Building Machine Learning Models and Introduction to Deep Learning. It comprised of four sessions which were handled by Dr. Rajeswari Sridhar and Dr. M. Sridevi from NIT Tiruchirappalli, Dr. Shounak Chakraborty and Dr. Preeth R. from IIITDM Kurnool.

A valedictory function was held to thank all the participants and resource persons. Feedback from participants was collected orally and through Google Forms.

NEER MARUDHU / ARJUN TREE

Scientific name : Terminalia arjuna

A higher number of trees of riverine habitats thrive under the canopies of old arjuna trees. The soil under these trees' enormous canopies is moist and higher in organic carbon. This makes a case to recognize it as a keystone species – one that plays a crucial role in the landscape – say scientists. It is an important cardiogenic plant described in the Ayurveda.



NCMAA - 2021 - National Conference on Mathematical Analysis and Applications

23.04.2021 - 24.04.2021

A Two-day National Conference on Mathematical Analysis and Applications (NCMAA - 2021) was organized by the Department of Mathematics, National Institute of Technology Tiruchirappalli (NITT) during 23-24 April 2021.

The conference was inaugurated by the Director of NITT Dr. Mini Shaji Thomas. The chairman of NCMAA - 2021 Prof. R. Ponalagusamy welcomed the dignitaries and participants, following which the Director delivered the presidential address. The inaugural function was also addressed by Prof. V. Vetrivel, Head of the Department of Mathematics, IIT Madras, Prof. M. Umapathy, Deputy Director of NITT, Prof. Ramakalyan Ayyagari, Dean (Academic), and Prof. N. Kumaresan, Dean (Students Welfare). The function ended with the vote of thanks by Dr. V. Lakshmana Gomathi Nayagam, Head of the Department of Mathematics and the convener of NCMAA - 2021.

The Technical sessions commenced with the talk of Prof. V. Vetrivel, IIT Madras, on Convex Optimization. He spoke on the optimality of the convex optimization problems along with the convergence of the standard fixed point and stressed the need for the application of optimization in engineering, economics and other sciences. In the next invited talk, Professor Lee See Keong of University Sains Malaysia briefed on the recent developments in Zalcman conjecture.

On first day, 27 research papers were presented on the broader areas of Complex Analysis, Functional Analysis, Topology, Fuzzy Analysis, and Fluid Dynamics. The first day programs ended with the talk of Prof. P. V. S. N. Murthy, IIT Kharagpur on A Review of Magnetic Drug Targeting in a Microvessel with Multifunctional Nanoparticle based Carrier Particle.



The second day of NCMAA-2021 started with Dr. A. Chandrashekar, CUTN, Thiruvarur talking on Linear Complementarity Problems and Positivity of Linear Maps. 18 research scholars and academicians presented their research findings. The session ended with the invited talk of Prof. T. Sengadir, CUTN, Thiruvarur on Asymptotic Stability of Infinite Delay Equations. 24 papers were presented by the scholars in the afternoon.

The valedictory function of NCMAA 2021 was held at 3.30 pm, in which Dr. I. Jeyaraman, the organizing secretary of NCMAA 2021 welcomed the gathering. During the feedback session, Mr. S. Sowndrarajan from Raja Doraisingam Govt. Arts College, Sivagangai informed that he was motivated by the invited talks. Dr. K.Radha from Bharathidasan University and Abhik Digar from IIT Ropar appreciated the way in which conference was organized.

A total of 99 participants participated, among whom 69 presented papers. During the valedictory session, Dr. V. Lakshmana Gomathi Nayagam presented the conference report, while the vote of thanks was presented by Dr. N. Prakash, the organizing secretary of NCMAA-2021.

ILUPPAI or BUTTER TREE

Scientific name : *Madhuca longifolia*

An Indian tropical, fast-growing tree that grows to approximately 20 meters in height. It is adaptable to arid environments. Wine prepared from Madhuka flowers finds mentioned in several Hindu and Buddhist literature works. It is considered holy by many tribal communities because of its usefulness. The fat has many medicinal purposes.



NATIONAL CONFERENCE ON BUSINESS MANAGEMENT AND ANALYTICS

30th April 2021

Department of Management Studies, National Institute of Technology Tiruchirappalli organized a one-day National Conference on Business Management and Analytics in the theme “Life after Pandemic-From New Normal to New Future” on 30 April 2021. The conference was conducted virtually by hosting the conference participants and session chair from across India, online.

The conference was inaugurated on 30 April 2021, presided by Dr. Mini Shaji Thomas, Director, NIT Trichy and the chief guest Dr. K Ganesh, Senior Knowledge Expert, McKinsey & Company. Dr. P.Sridevi, Department of Management Studies greeted the gathering for the BMA conference 2021 with a welcome note emphasizing the theme of the conference. The conference was scheduled with 9 parallel tracks in the areas of Analytics, Finance, Marketing, Human Resources & Organizational Behavior, Operations & Information Technology.



Dr. Mini Shaji Thomas emphasized the importance of understanding and capturing changes in business paradigm during the pandemic. She mentioned NIT Trichy has pioneered in embracing emerging technologies in the field of education to focus on the new future. Chief guest Dr. K. Ganesh, spoke about how life after the pandemic has changed the business in all aspects. He deliberated on how the pandemic has worked as a fuel in the business transition process. During the pandemic, around 90% of people have tried new brands, new shops or new ways of shopping in the new normal. The most important objective of priorities of supply chain is to attain the profit margin, then ensure cash flow and followed by high delight services. Dr. Ganesh has stressed on the impeccable role of advanced analytics and artificial intelligence in understanding and managing business in all aspects.

The Conference created an invaluable knowledge sharing platform for researchers from across the nation to share their insightful findings and implications with scholarly society. Dr. Gangadharan, Associate Professor, Department of Computer Applications concluded the inaugural session with the vote of thanks.

A Five-Day Short-Term Course on Modelling and Simulation Tools in Electrical Engineering (Level-1)

12th April 2021 – 16th April 2021

The course was coordinated by Dr. Josephine.R. L, Dr. Ankur Singh Rana and Dr.S.Moorthi. The online short-term course was open to UG/PG/Research Scholars/Faculty and Industry participants. The course emphasized the importance of online tools in the Electrical Engineering stream. The course content included hands-on training on all five days. This was a basic course designed for EEE students. The course included introduction to MATLAB/SIMULINK, Variables and functions in MATLAB, Matrices in MATLAB: Arrays, vectors, special matrices, etc. 2D and 3D graphs, plots and subplots, Data import/export and analysis, Power electronic converters, Power system networks, Electrical machines, Control systems and their respective case studies. The extension of the course is also planned.



One Week Online Workshop on Recent Trends in Cyber Security and Forensics

26th-30th April, 2021

Objective of this workshop conducted by Department of Computer Science and Engineering was to provide exposure on the recent advancements on various topics, tools and research aspects of cyber security and forensics. The course content included Cyber Security Foundations, Information Security Basics & Threat Landscape, Introduction to VAPT & Practices, Web Application Security and Exploitation, Incident Response and Crisis Management Plan, Advanced Persistent Threats, Cyber Forensics Foundations, Social Media Forensics, Cyber defense with AI and ML and Case Studies.

On Day 1, the first session was an Introduction to the Cyber Security, presented by Dr. Leela Velusamy R. Session 2 was handled by Dr. Ghanshyam Bopche on Topic- Information Security Basics. He introduced topics like Confidentiality, Integrity, Availability, Authentication, Authorization and accountability/Non-repudiation.

Session 3 was handled by Dr. Mohammed Misbahuddin on the topic "Cyber Hygiene and Use Cases of AI/ML: A Cyber Security Perspective". He introduced Cyber Hygienic practices like safeguarding identity, authentication, protection against social engineering, etc. The final session of the day was on "State of Cyber Warfare and Defense: Now and Beyond" by Mr. Dhanith Krishna B. He explained emerging attacks on corporates like Remote Office attacks, Insider attacks, Industry espionage, Ransomware and Phishing. He stressed on DevSecOps and Zero Trust / SASE.

On Day 2, Dr. Hiran V Nath, Assistant Professor, presented a talk on "VAPT & Vulnerability Metric System" in the first and second sessions. He gave two hands-on demos by hosting servers and launching attacks on it using opensource tools.

The third session by D. Digvijaysinh Rathod on the topic, "Mobile Application Security Pen-Testing". This hands-on experiment session was performed using the tools Santoku OS, Genymotion, Drozer and MobSF. The final session was by Mr. Ramya Shah on the topic, "Know your mobile device-From an eye of Digital Forensic Professional". He gave guidance on how to secure your digital profile and much more on social media presence.

On Day 3, the first two sessions were by Dr. Hiran V Nath on the topic- Advanced Malware Threat & APT. From the timeline of Malware vs Detection Technology to an in-depth analysis of malware using tools like IDA. The third session was a case study on SolarWinds Cyber Attack by Mr. Kranthi Kumar, Cyber Security Engineer at FactSet Research Systems Inc., Hyderabad. The final session of the day was by Dr. Kunwar Singh on the topic- Block Chain Technology. This session gave in-depth insights on cryptographic technologies behind digital currency.



On Day 4, Dr. B. M. Mehtre, introduced the foundation of cyber forensics. Session 2 and 3 were taken by Lt. Arjun Choudhary, on the topics "Cyber Crime and its Investigation Techniques" and "Digital Forensics Analysis using Autopsy Tool and other Online Tools". Session 4 was on the topic "Biometric Security & Forensics" by Dr. M. Sandhya. She discussed the vulnerabilities in fingerprint, face recognition and multibioetrics by providing pointer for future research.

SHISHAM OR INDIAN ROSEWOOD

Scientific name : *Dalbergia sissoo*

A tree native to the Indian Subcontinent. It is used as firewood, timber, poles, posts, tool handles, fodder, erosion control and as a windbreak. Oil is extracted from the seed and tannin from the bark. The juice of this plant is a potent ingredient for a mixture of wall plaster, according to a Sanskrit treatise. It is the wood from which 'mridanga' is often made.



FIVE-DAY SHORT TERM TRAINING PROGRAMME on SOFTWARE TOOLS FOR POWER CONVERTER DESIGN

26th-30th April, 2021

The 5-day Short term Training Programme (STTP) on "Software Tools for Power Converter Design" organised by the Department of Electrical and Electronics Engineering was inaugurated by Director, Dr. Mini Shaji Thomas, Director on 26th April 2021, in the presence of over 124 participants. Dr. V. Sankaranarayanan, HOD, Department of Electrical and Electronics Engineering addressed the gathering during the inaugural function. The virtual training programme provided an overview of the latest software tools employed for developing power converters for academic research and industry applications.



The training programme comprised of 11 sessions. Dr. R Sudharshan Karthik, Associate Professor, IIST Trivandrum, Dr. Sanjeev Pannala, Post-Doctoral Research Associate, Washington State University, USA, Dr. Amardeep B. Shitole, Research Fellow, Singapore University of Technology and Design, Dr. Ashok Kumar, Assistant Professor, NIT-Tiruchirappalli, Mr. Rajdeep Banarjee, PhD Scholar, IIT Kanpur, Mr. Sagar Indalkar, Simulation Engineer, Nayak Power Systems Pvt. Ltd., Mr. P Subrahmanya Adiga, Executive Director, Apsaram Technologies Pvt Ltd., Dr. Arjun M, Director (Technical), Apsaram Technologies Pvt Ltd, were the resource persons for this STTP. Dr. Pinkymol K.P, Dr. Ashok Kumar and Dr. Naveen were the coordinators of this STTP.

On the day 1, Session 1 was on the topic Basics of Finite Element Analysis in Electromagnetics & Introduction to ANSYS Maxwell by Mr. Rajdeep Banarjee while the session 2 was handled by Mr. P Subrahmanya Adiga which was Part 1 of PCB Design using Open Source Tool- KiCad.

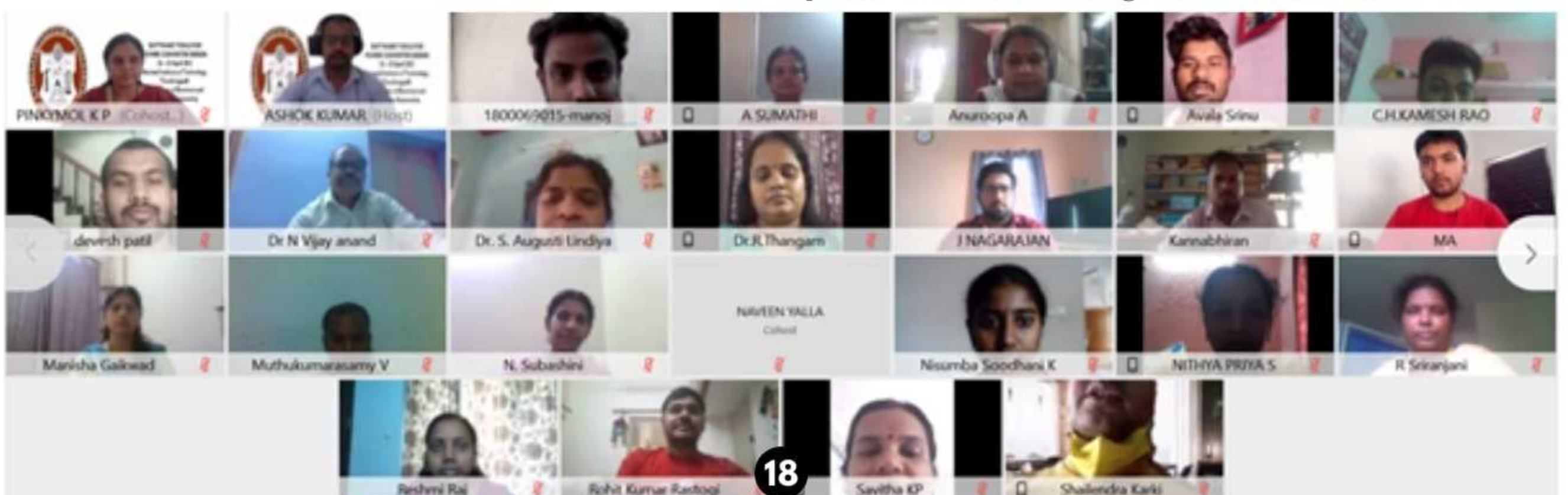
Day 2 Session 1 was on the topic Power of Real-time Digital Simulations in Accelerating Converter Driven Electric Grid by Dr. Sanjeev Pannala and the second session was Part-2 of PCB Design using Open Source Tool- KiCad by Mr.P Subrahmanya Adiga and Dr. Arjun M.

Day 3 Session 1 was on the topic Power hardware-in-loop emulators for Electric Machine Emulation by Dr. R Sudharshan Karthik. The session 2 was Part-3 of PCB Design using Open Source Tool- KiCad by Dr. Arjun M

Dr. Amardeep B. Shitole, handled Day 4 Session 1 on the topic MATLAB Simulink Real Time for HIL Applications and the session 2 was handled by Mr.P Subrahmanya Adiga and Dr. Arjun M which was Part-4 of PCB Design using Open Source Tool- KiCad

Day 5 had 3 sessions on the Introduction to RTDS Simulation, Power Converter Modelling and Part-5 of Simulation using MATLAB and CB Design using Open Source Tool- KiCad handled by Mr.Sagar Indalkar, Dr.Ashok Kumar and Mr. P Subrahmanya Adiga respectively.

Participants shared their feedback about the training and showed interest to participate in the future programmes organised by the department, especially in the area of practical approach for power converter design and controllers.



SPONSORED PROJECTS

Dr. S. Kumaran, Professor, Department of Metallurgical and Materials Engineering, has been awarded Rs. 87 Lakhs for the project titled 'Development of oxide dispersion strengthened tungsten heavy alloys: A study of their structure-property relation' sponsored by the DRDO ARMREB.

Dr. S. Senthil Kumar, Associate Professor, Department of Electrical and Electronics Engineering has received a grant to the tune of Rs. 84 Lakhs from MEITY for the project titled 'Design and development of WBG device based high current converters for Industry applications.

Dr. S. Moorthi Associate Professor, Department of Electrical and Electronics Engineering, has been provided with a subvention of Rs. 55 Lakhs for the project named 'Wireless sensor node for online data transfer of parameters from electrical machines and drives' from MEITY.

Dr. N. Samsudeen, Assistant Professor, and Dr. Dr. M. Matheswaran, Associate Professor, both belonging to the Department of Chemical Engineering have been granted DST Indo-Egypt sponsored Project titled 'Development of Graphene based nanomaterials for bioelectricity generation through tannery wastewater treatment using microbial fuel cell'. The project amount is Rs. 9 Lakhs.

CONSULTANCY PROJECTS

Dr. K. Baskar, Professor, Department of Civil Engineering has been granted consultancy project for Vetting of Design and Approval of Drawings of Civil RCC building, Structural Steel Sheds and RCC Tank Foundation for Petroleum Storage Terminal of IOCL at Asanur and the sanctioned amount is 7.08 Lakhs.

Dr. K. Muthukkumaran, Professor, Department of Civil Engineering has been granted consultancy project for geotechnical investigation and foundation recommendation for the proposed construction of new ATC Tower and NITB expansion at Madurai Airport and the sanctioned amount is 19.23 Lakhs.

Dr. Jeevan Joseph, Assistant Professor, Department of Civil Engineering has been granted consultancy project for Trichy (H) NABARD and Rural Roads Division - Trichy and Musiri (H) NABARD and Rural Roads sub-divisions - Conducted Soil Test - Trichy Subdivision (6 areas) and the sanctioned amount is 6.02 Lakhs.

Dr. K. Muthukkumaran, Professor, Department of Civil Engineering has been granted consultancy project for Geotechnical Investigation and Foundation Recommendation for the Proposed "Construction of a Barrage with Head Sluices across the river coleroon at RD 74/3 miles in Adhanur and Kumaramangalam village in Cuddalore and Nagapattinam District and the sanctioned amount is 2.07 Lakhs.

Dr. K. Muthukkumaran, Professor, Department of Civil Engineering has been granted consultancy project for testing of soil samples for High-Speed Rail Project, Vadodara, Gujarat and the sanctioned amount is 5.99 Lakhs.

GRANTED PATENTS

Dr. R. Anand, Associate Professor, Department of Mechanical Engineering, has been granted a patent for an invention titled 'Biodiesel from Non-Edible Semecarpus Anacardium Seed Oil and Method Thereof'.

Dr. G. Swaminathan, Professor (HAG), Department of Civil Engineering, has been granted a patent for an invention titled 'A Solid Waste Barrier Liner Composition for Landfill with Clay and Microsilica'.

Dr. G. Saravana Ilango, Associate Professor, Dr. P. Srinivasa Rao Nayak, Associate Professor, Dr. C. Nagamani, Professor (HAG), Department of Electrical and Electronics Engineering, have been granted a patent for an invention titled 'A Photovoltaic System and A Method of Arranging PV Arrays in PV System'.

Dr. M. P. Selvan, Associate Professor, Dr. S. Moorthi, Associate Professor, Department of Electrical and Electronics Engineering, has been granted a patent for an invention titled 'S3 Grid-Tie Inverter

STUDENT DESIGN SCHEME PROJECTS FUNDED BY MSME

Dr. V. Sunitha (PI), Assistant Prof, Civil Engineering, and Dr. S. Muthukumaran (Co-PI) Professor, Metallurgical and Materials Engineering have undertaken project titled Traffic Rules & Signs-Based Toys and the project cost is 1.3 Lakhs.

Dr. M. C. Santhosh Kumar (PI), Associate Professor, Physics has undertaken project titled Optimization of Sintering Process Parameters of Kiln for Traditional Mud Toys and the project cost is 1.5 Lakhs.

Dr. C. Roobala (PI), Scientific Officer, SIF, has undertaken project titled Identification & Analysis of Raw Materials to Improve the Traditional Toy Quality and the project cost is 1.5 Lakhs.

POOVARASU or INDIAN TULIP



Scientific name : *Thespesia populnea*

A fast-growing evergreen shrub or small tree with a dense, broad crown; it can grow up to 20 metres tall. An important tree for "MIYAWAKI" – urban forest. The wood from the tree was used by ancient Tamils to make instruments. Also it is used in traditional medicines. A multipurpose tree, providing food, medicines and many other commodities for local use. It is a sacred tree in many parts of the Pacific.

ARASA MARAM or PEEPAL TREE



Scientific name : *Ficus religiosa*

The Largest oxygen provider and home to varieties of creatures. It spreads its root so deep and strong that it automatically stands against soil erosion, help in water harvesting etc. The tree has many religious implications in Indian sub-continent. Unlike other trees, it releases oxygen even at night. Has a highly medicinal value. There are a lot of myths, superstitions and beliefs associated with the Tree.

ACHEIVEMENTS IN GATE 2021

Laxman Rao from the Metallurgical Department, 2020 batch has achieved the remarkable feat of securing AIR 1 in the competitive Graduate Aptitude Test in Engineering 2021 (GATE) examination conducted by IIT Bombay this year. Additionally, recent graduates Karan Kumar (AIR 157), Manan Suraiya (AIR 253), Sakthi Gnanavel (AIR 463), and graduate of batch 2019, Maadhav (AIR 14) have also achieved remarkable results. Shivam Negi, & S Ananthanarayanan Potti, final year B.Tech Chemical Engineering student have secured All India Rank 8 and 220 respectively in the Chemical Engineering stream among 16705 students appeared in this stream all over the country. Dr. Mini Shaji Thomas, the Director of NITT expresses her heartiest congratulations to the achievers. NIT Tiruchirappalli recognizes and congratulates the determination and hard work of the students, and wishes them success in their future endeavors.



KODUKKAPULI or MADRAS THORN



Scientific name : *Pithecellobium dulce*

The tree is drought resistant and can survive in dry lands. Madras Thorn is a multipurpose tree. Its pods are edible in few countries. Oil can be extracted from the seeds and is used for cooking or for making soaps. And it is also used in traditional medicine. It is a host plant for some varieties of caterpillars and moths. It has the ability to shed off the leaves during the pest attack and avert pest attack.

IGNITTE – MOCK TEST – EUREKA

IGNITTE, the official teaching club of NIT Trichy conducted the second Free JEE Main Mock test for school students. The test was conducted on the club's website - www.ignite.org from March 12 to March 14. The Top Ten students of the test will get an opportunity to discuss with the students from NIT Trichy, to discuss about the strategies for the exam. The first test conducted by the club on February 20th and 21st, received over 150 applicants, including many students from government schools. The questions for the exam are curated by the students of the club, who have cleared the exam themselves.

ACTIVITIES OF TECH COUNCIL

The Technical Council, NIT Tiruchirappalli monitors and manages the activities of various technical clubs on the campus. During the early start of the year, the Technical Council conducted **Mock Interviews** on the following domains: electronics, analytics, embedded systems, management, software, and HR targeted towards aspirants looking to gain insight into their domain PIs. In collaboration with DSC NITT, **Android Study Jams** were held to help aspirants to learn the fundamentals of Android Development, to introduce beginners to app development and to give them the resources to get started. To help freshers get better acquainted, Technical Council and Orientation '20 team organized a Panel Discussion with the club heads from all the tech clubs of NITT and answered their queries about the tech clubs. Technical Council also organized **InHoTT 2021** - In-house Edition, a tournament for the tech enthusiasts of the first years in NIT-Trichy where multiple events were conducted in collaboration with the tech clubs. Workshops and Community seasons where freshers can understand the working of various tech communities functioning in our campus such as **Google DSC, Women in Tech, and CryptoNITT** were held.

Launch of WIN-NITT

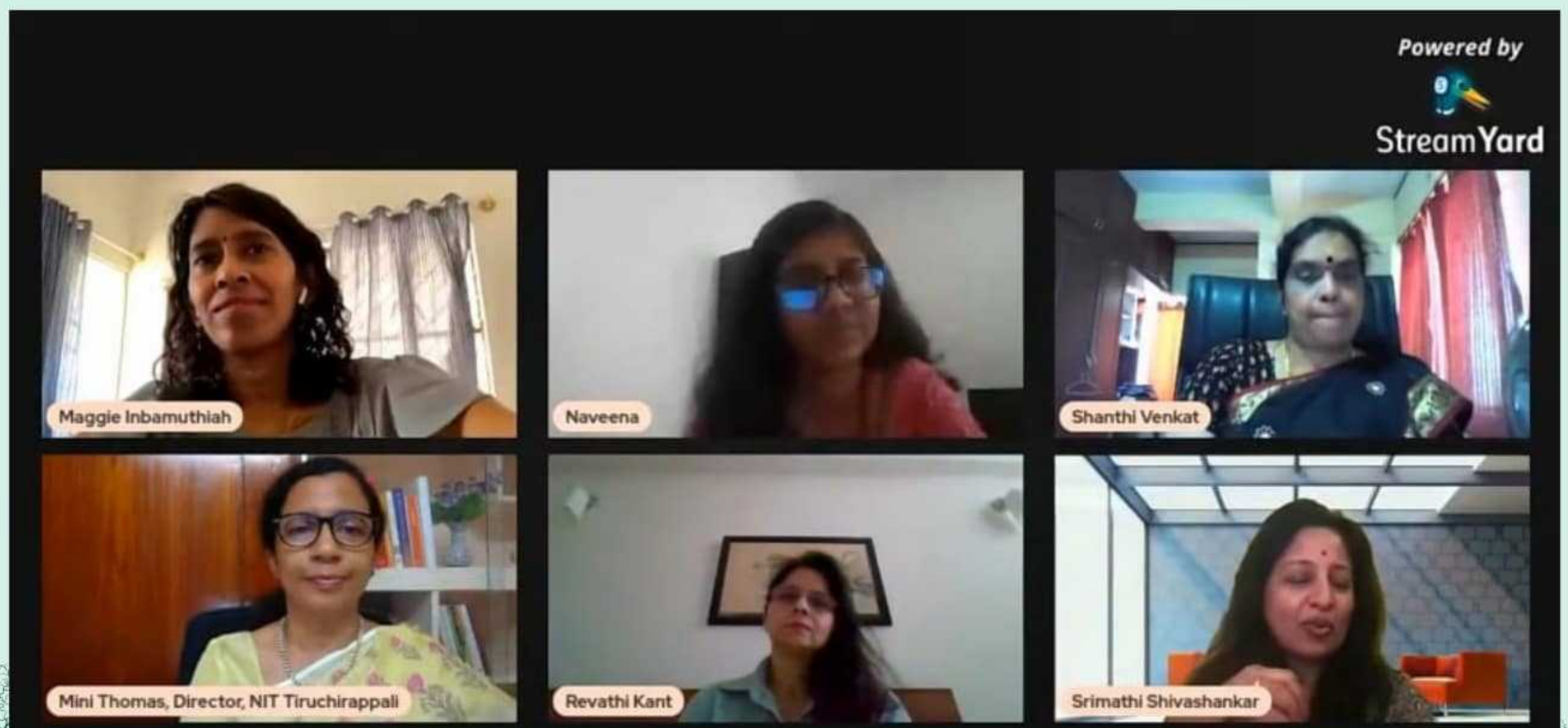
13.03.2021

The event on March 13th, held in association with The Paper Dolphin marked the celebration of Women's Inclusivity Network of NITT. This community was first conceptualized at GAM, the Global Alumni Meet, its main aim is to inspire and enable women alumni to achieve their career inspirations through networking and support from NIT Trichy alumni. WIN-NITT is grateful to the alumni for bringing more alumni into the loop to equip women NITT-ians enough so that the obstacles faced on account of being a woman don't hold them back from fulfilling their dreams.

Women in Tech is a recent initiative in place on campus to empower the current women students of NIT Trichy called the Women in Tech Community. This community was conceptualized with the aim of improving the representation of women in tech and removing any form of existing bias associated with women's performance in STEM fields, by establishing a supportive peer group where each woman empowers other women, thus leading to collective growth. Inspired by seniors' efforts, this community was infact launched by the students. Women in Tech is meant to be a safe space for women at various stages (beginner, intermediary, expert) of learning, with the motto that there is no end to learning and growing.

Four NITT Women Alumni in Leadership, Mrs. Srimathi Shivashankar, Corporate Vice President - HCL Tech, Mrs. Maggie Inbamuthiah, Founder-Happifeet, CEO-Puppetica Media, Former MD-Anita B.Org India, Mrs. Revathi Kant, Chief Design Officer - Titan Company Limited and Mrs. Shanthi Venkatraman, Director-Delivery Excellence-Cognizant were Chief Guests for this occasion. The event kick-started on YouTube Live with the launch of WIN-NITT by the Director, Dr. Mini Shaji Thomas.

Mrs. Srimathi Shivashankar delivered a talk titled "Decade 21 - Transformational Paths". This was followed by Mrs. Maggie Inbamuthiah, delivering a talk on "A Vision for Diversity, Inclusion, and Equity in Technology". The third talk was by Mrs. Revathi Kant titled "Innovating Business Strategies Through Design." The final talk was by Mrs. Shanthi Venkatraman titled "Data: A Key to Transform the Future of Technology." This series of talks was followed by a panel discussion. There was also a host of events such as Scavenger Hunt, Gallery of Thoughts, X-Session, Fun with Doodles, and Coffee Chats.



PRAGYAAN

The 17th edition of Pragmaan, NIT-Trichy's annual techno-managerial festival was conducted from 25th March-12th April 2021, with The Metaverse as theme. Pragmaan '21 strived to adapt to the pandemic situation and pulled off an impressive feat. Students across the country participated enthusiastically in events and workshops, despite its virtual nature.

Pragmaan'21 officially commenced with the inauguration ceremony on 28th March 2021, with Dr. Vandana Verma, Chief Engineer of Robotics Operations at NASA as the Chief Guest and Mr. Deepankar Bhattacharyya, Autodesk Education Head, India as the Guest of Honour.

Pragmaan Guest Lecture series, Illuminare, brought down experts from various fields to share their insights and experience. The series had 5 lectures, delivered by Dr. Vandana Verma, Prof. Rishiksha T Krishnan, Dr. Ken Yeang, Mr. Philip Rosedale, and Mr. Yogesh Gupta. Pragmaan '21 conducted various workshops on the fields of Data Analytics, 3D printing, automation, AI, Industrial IoT, Robot Simulation, etc. Also, Pragmaan '21 conducted several events like Manigma, Conception, Concreate, Pandora's Box, Bytehoc, Roborex, Phronesis, and Ewitts, where students participated with great enthusiasm.



Pragmaan Infotainment featured four renowned artists who put on electrifying shows - TheRealSullyG, LEDRebel, Soumyajit Pyne, and Anne Klinge. Pragmaan '21 also featured exhibitions such as Prosthesis - the largest tetrapod exoskeleton, and an interview with famed German sculptor Julian Voss-Andreae. For the gaming enthusiasts Pragmaan '21 conducted the Escape Room event and the eSports competition.

For the tech enthusiasts, Pragmaan presented Sangam, the annual intra-college hackathon, and Ingenium, an inter-college technical exhibition and competition providing students with two excellent platforms to show off their skills and compete with their peers. Young Techie 2.0 called upon school children to showcase their skills and compete while being mentored by the tech clubs of NIT-Trichy.

In its first-ever virtual episode, Pragmaan '21 came to a conclusion on April 12, 2021. The valedictory ceremony was held with Mr. S. Krishnaswamy, Joint General Manager of Ordnance Factory Tiruchirappalli as the Guest of Honor.

SCIEnT Annual Meet

SCIEnT is a multi-disciplinary innovation centre, providing opportunities to students to delve into the ever-expanding world of technology, and discover, hands-on, the incredible scope for innovation that the world offers today. The SCIEnT annual meet was held on 17.04.2021. Followed by welcome address, the SCIEnT student activities were presented by SCIEnT Head, Hari Chandan P who highlighted the various achievements and activities of 2019 - 2021. Alumnus Speech by Krishna Sai and alumni from other batches followed. The SCIEnT annual report has also been presented by Overall Coordinator, Saran. This was followed by interactive session with Alumni, Faculty Advisor (Dr. Bakthavathsalam), Faculty Administrator (Dr. Ganesh) to students of all departments. After the successor team was announced, the meet concluded with a Vote of Thanks from Student representative, Chennika.

FESTEMBER '21

Festember '21 launched off with its first set of activities from March, starting with observing Earth Day. The event took place on the 27th of March, in which all followers were requested to turn off their lights for an hour as a way of paying tribute to Mother Earth and her kindness.

This was followed by an Instagram Live held in collaboration with Shweta Bahri, the founder of No More Waste - a startup that tackles waste management in the country. It was accompanied by a Shadow Photography contest sponsored by Sustainbubble.

Soon after, the Carpe Diem guest lecture series kicked off with their first speaker Mr Arturo Fontes, a retired FBI agent. He specialised in tackling cartels that operate along the United States - Mexico border. His recount of the capture of El Chapo, one of the most powerful drug traffickers in the world, had the audience spellbound in awe.



Following this, Festember, in collaboration with Sony Music, brought down renowned composer and singer Santosh Dhayanidhi for a quick chat and a performance of a medley of his songs, including his latest hit Kutty Pattas. The show was very well-received by the audience and left them in anticipation of what more the fest has to offer in the upcoming months.

SHENBAGAM/ CHAMPAKA

Scientific name : Michalea champaka

It is known for its fragrant flowers, and its timber used in woodworking. It is an ever green tree that grows to a height of 50 feet or above. Bark, seeds, flowers and leaves are used in traditional medicines as they have anti cancer, antimicrobial, antioxidant properties. The most common use if in the perfume industry.

HORIZON-21

23rd and 24th April 2021

The Department of Chemistry organized the 27th National Level Annual Students Symposium 'HORIZON-21' on 23rd and 24th April 2021 with the theme 'Natural products and Ayurveda' to cherish our innate nature and highlight its growing significance in our lives. It was conducted online and was inaugurated by the Director, Prof. Mini Shaji Thomas.

The chief-guest, eminent scientist Prof. Tushar Kanti Chakraborty, Department of Organic Chemistry, IISc Bangalore delivered an informative and enlightening talk titled 'Natural Products, Our Body, Mind and Well-being' on Day 1. Prof K.V. Radhakrishnan, Sr. principal scientist, CSIR-NIIST Thiruvananthapuram delivered an interesting and inspiring lecture titled 'Ayurvedic Medicinal Plants in Mitigation of Epidemics' on Day 2 of the symposium.

Many interesting and innovative events were organized by the M.Sc. students like Chemtionary, Quizon, Think and Link, I'm expert in, Treasure Hunt etc which had huge participation and was thoroughly enjoyed by all the participants. The symposium was a grand success and received positive feedback from the Deputy Director of NIT Trichy Prof. M. Umapathy, Dean (Academic) Prof. Ramakalyan Ayagari and all the participants and guests.



PROBE 21

12th to the 14th of March 2021

The Department of Electronics and Communication Engineering's annual technical symposium, Probe'21, took place virtually this year, from 12th to 14th of March'21. The 29th edition of Probe saw 6 events, 6 technical workshops and 4 guest lectures being offered. During the inauguration ceremony, which was attended by 300 people, Shri. Umamaheshwaran, Scientific secretary, ISRO was the chief guest and Mr. Subhash Chintamaneni, Head ASIC group, Micron was the guest of honour. The chief guest presented the evolutionary story of ISRO – its rise from humble beginnings, their current geographical mapping and disaster management capabilities, and their future projects such as Gaganyaan and reusable launch vehicles. The guest of honour Mr. Subhash Chintamaneni talked about the rising demand for storage, security and analysis of data, and outlined the technological advancements made in memory technology by Micron. The Director of NIT Tiruchirappalli Dr. Mini Shaji Thomas, and the HoD of ECE Department Dr. Muthu chidambaranathan, wished success for the symposium.



The official Probe' 21 website went live on February 28 enabling prior registrations. The first day commenced with the quizzing event, ProbeIT and Always@verilog testing digital electronics and Verilog coding skills. The two three-day workshops, “CPU design using Verilog” and “Mazebot” also were kick-started. In addition to them, the evening also witnessed a guest lecture on “The Art of Data Science” by Mr. Koushik Raghavan, the Director of Data Science division at Micron Technology. On day 2, three workshops were held - “Demonstrating the role of memory in computer systems” by Mr. Partha Parthasarathy Director of Technology development at Micron, “ASIC and Physical design” by Marvell Technologies & “Wireless communication: 5G and beyond” by Chandhar Research labs. “Cryptech” tested the aptitude skills of the participants and the finals of “Embedtronix” took the students into the realm of digital electronics. Furthermore, there were two guest lectures. “The Fab Way” – dealt with the challenges faced in the fabrication business by Mr. Howard Chua, Mr. Parag Mohanty, Ms. Sarita Yadav and Mr. Praveen Ramapuram from Micron. The role of technology in healthcare infrastructure and ecosystem was discussed as the “Healthcare Infratech” by NITT alumnus, ECE batch of '14, Ms. Sneha Balan.

Day 3 commenced with a workshop on “Deep learning for computer vision” by Ms. Usha Rengaraju. The last day saw a guest lecture - “Introduction to NAND Flash” by Mr. Kalyan Kavalipurapu. A GNU Octave coding contest “Matrix-Octave” was also conducted. The events of the three-day symposium ended with the finals of the PCB design event “Paths and holes”. The ECEA also conducted a series of interviews with eminent personalities from science and technology in the form of a podcast series - “Probe FM 55.5; All that needs is a small trigger” in this academic year. A mock GATE exam for ECE aspirants was conducted on 1st of February. Though online, the edition was yet another memorable addition of Probe history.

VILA MARAM / WOOD APPLE

Scientific name : Limonia acidissima

Wood apple is a Citrus fruit tree native to the Subcontinent. It has many health and nutritional benefits. They usually require at least 6 hours of sunlight and require very little maintenance.



It is considered sacred in some parts of the country. It is a slow-growing tree and bears fruits only after 15 years.

Online Workshop on Cyber Security and Ethical Hacking By IEEE Student Board

16th - 20th April 2021

IEEE Student Branch, National Institute of Technology, Tiruchirappalli in association with IEEE Computer Society Chapter of student branch organized 5-day workshop on Cyber Security and Ethical Hacking during 16th - 20th April 2021. Mr. Ajinkya Lohakare, Certified Ethical Hacker, Founder & CEO of Ditto Security, was the speaker. The workshop had 5 technical hands-on sessions with 30 registered participants.

The Inaugural ceremony had welcome address by Mr. Balasubramanian, Vice-chairman, IEEE CS Chapter. A brief introduction about the IEEE SB and the workshop was given. Mr. Ajinkya started the session with videos demonstrating the vulnerability of the smart/internet enabled devices. Email spoofing, SMS spoofing, Call spoofing website phishing was explained with the tools in Google collab and other sites. Various tools and topics were discussed including, Crypter softwares to hide the viruses inside application, Recon engine to get the information of a person from internet, Phishtank to check suspicious sites, Shodan to connect with IoT enabled devices, Diskpart to rename and hide the disks from system, OSINT framework for analyzing and finding vulnerability with respect to several attributes.

The session 2 started with introduction to Tor browser. Maltego, an open-source intelligence (OSINT) graphical link analysis tool was instigated. The session concluded with an emphasize on network Scanning Tool.

Session 3 began with a spell-out of various Malware Software. Also, the detection of Trojans and worms, wrappers and viruses were elucidated along with System Hacking and Password Hacking. The day ended with a hands-on experience of Pwdump7 Tool.

Session 4 of the forum unfolded with Rainbow Tables. To follow on, Password Cracking Tools like Lophtrcrack and Ophcrack were presented. The presentation included Keyloggers, Spyware Steganography and Hashing, Blockchain Techniques, Packet Sniffer and securing Android devices, followed by Wireless Hacking methodology and an overview of SQL injection. Webserver Attack Methodology and Enumeration Tools were elaborated.

Session 5 started with Cryptography Tools and Disk Encryption Tools. Then, a contrasting view of Spoofing and Hijacking was interpreted. Wireshark a network packet analyzer was unraveled. The session on IOT hacking methodology called it off for the day.

The valedictory ceremony had the welcome address by Mr. Kannadasan K, Chairman, IEEE SB NITT & IEEE CS Chapter followed by Dr. M. P. Selvan, Counsellor, IEEE SB NITT, addressing the gathering and felicitating Mr. Ajinkya, speaker of the event. Dr. M. P. Selvan in his voted of thanks, thanked the speaker, the organizing student team & the participants for making the event a great success.



MAGIZHAMPOO/ SPANISH CHERRY

Scientific name : *Mimusops elengi*

Its timber is valuable, the fruit is edible, and it is used in traditional medicine. The flowers are very aromatic and retain their fragrance for a long time after being dried. The name bullet wood is due to the fruit's shape.



Synergy is the annual national technical symposium of the Mechanical Engineering Department. The 2021 edition of Synergy was held online from 16th - 18th April.

Events of day 1 included a workshop on "Launch Vehicle Development and Space Mission Design by ISRO". With over 100+ participants, this workshop was a whopping success and helped students gain an insight into the processes that go behind our prestigious space missions. On the same day, another workshop on Sinumerik Advance Technology by CNC, a fun competition called "Guess My Profession" for the inquisitive minds and Quiz on all things of Mechanical was held. The day also witnessed the first Guest Lecture of the Confab Series with the chief guest of the evening, Mr. IV Rao. The executive advisor of Maruti Suzuki narrated his inspiring journey in the company and answered various queries of all the students.



Day 2 witnessed had two workshops on 3D Printing and Autonomous Driverless. The highlight of the day was the second CONFAB Guest Lecture delivered by Dr. Saptarishi Bandyopadhyay, from NASA. The IITian taught the students to dream and about the workings of the Lunar Crater Radio Telescope. Paper Presentation, Delineation Design, and Mission Cushion were the other events that saw a surge of participants on Day 2.

Day 3, included a second workshop session on Autonomous Driverless and one on Autonomous Robots. Blast of Power, a case study that preceded the valediction showcased the excellent problem-solving skills of the participants. A virtual Scavenger Hunt was also organized on Day 3 through our Instagram page. Synergy '21 concluded with the third Guest Lecture of CONFAB, delivered by Mr. MV Kannan, the former Senior Scientist at ISRO in the Valediction and winners of all events were also announced.

The technical symposium of the Department of Chemical Engineering at NIT Trichy, Alchemy, was inaugurated on 23rd April, 2021. The online event was organized by the Chemical Engineering Association (ChEA) of NIT Trichy.

The event kickstarted with an address by Prof. T. K. Radhakrishnan, Department of Chemical Engineering. He appreciated the entire team of student organisers and thanked Prof. Sarat Chandrababu, the faculty advisor of Alchemy. This was followed by the presidential address by the director, Dr. Mini Shaji Thomas. Prof. P. Kalaichelvi, the head of the Department of Chemical Engineering thanked all the participants, organizers and members of the faculty for their support in making the event a grand success. The chief guest, Prof. M K Jha, president of the Indian Institute of Chemical Engineers gave an enlightening speech elaborating the cutting-edge technology in the field of petrochemical engineering.

The Dr. S. H. Ibrahim Endowment Lecture, initiated in memory of the Founding Head of the Department of Chemical Engineering took place during the inaugural day. Mr. Ravi Sankaran, lead engineer at Fluor Australia Ltd, gave his lecture on 'Process Safety'.

Multiple events will took place over the course of the three days including paper presentations, quizzes and guest lectures by eminent personalities like Suresh Kumar Bhatia (Professor, University of Queensland) and Sudhhasatwa Babu (Director of Council of Scientific Industrial Research). Several workshops were also organised that provided hands-on training in Matlab, Aspen and research paper writing.

Alchemy has been conducted successfully since 2013 and attracts over 1000 students every year from different institutions all over India. The symposium witnessed high numbers of registrations this year too and proved to be a great success.

MANORANJANI '21

April 8th to 11th 2021

Amruthavarshini is a student-run organisation consisting of group of Carnatic music enthusiasts who are involved in learning, teaching and promoting Carnatic music in and around our campus. Manoranjani '21 is the Annual gala celebration of classical music and the flagship event of Amruthavarshini. It was conducted online, in association with Psiog Digital from April 8th to 11th, consisting of various events.



Inauguration session was held on 9th April followed by talks by sponsors, alumni and faculty. The Inaugural concert was the first of Manoranjani '21 with a soulful performance by our own alumni S. Srivathsan (batch of 2014) - Vocal, M. Shrikanth (batch of 2014) - Violin, N.C. Bharadwaj - Mridangam & S. Krishna - Ghatam. A Thyagaraja Aradhana was conducted by the club members virtually. The first lecture demonstration themed "Music of India: from Bollywood to Classical" was presented Dr. Lakshmi Sreeram, a noted classical vocalist in both Hindustani and Carnatic traditions. The second one themed "An insight into the beauty of the compositions of Sri Muthuswamy Dikshitar", was presented by Vid RK Shriramkumar, noted Carnatic violinist.

The Karnatik Quiz was conducted on 8th April over Google docs, open to all. Around 90 people participated in the event. Karnatik Quiz Finals was conducted on 11th April. Of the 90 participants, 8 were shortlisted.

Vadhya Lahari, the final event of the year, was a Tala Vadhyam concert, or a Percussion Ensemble. Artists were Salem Sri. K. Srinivasan (AIR Trichy) - Mridangam, Sri. N. C. Madhav (AIR Trichy) - Violin, Trichy Sri. S. Krishnaswamy - Ghatam, Vishnupuram Sri. K. Ragu - Morsing, Mridangam support by students of Trichy Sri S Krishnaswamy, Chiranjeevi S. Jagannathan & Chiranjeevi M. D. Vishaal Narayanan.

TECHNOFANIA' 21

TECHNOFANIA is an Inter-Departmental Technical Symposium which is conducted every year by the Open Source Open Community (OSOC) of National Institute of Technology, Tiruchirappalli. It was successfully conducted virtually on April 24th and 25th, 2021. It included both technical and non-technical events.

Agamyā, the flagship event of Technofania, was organized differently this time, as a software hackathon. After the online submission of abstracts by different teams, the 1st review was conducted. Out of seven teams, four were selected for the final review round. The final round of Agamyā was held on the second and final day, with the alumni of OSOC also in attendance. Mr. Rajesh Sethi, software engineer at Walmart Labs, and Mr. Palash Maran, software engineer at Microsoft, constituted the judging panel. In this round, the four teams that had made it to the finals presented their projects. Two of the teams - Team Drifters (Jasbir Shikhawat, Harsh Rai, Amandeep Yadav, Shashank Shekhar Pandey) and Team Pentagon (Paras Tiwari, Ankit Singh, Simran Garg, Yasser Osman Khan, Saurabh Anand) were declared winners of the event.



Other events included Anybody Can Art, in which participants showcased their creativity in various domains of art which were later posted on the Facebook page of OSOC; Word Traps, an event based on a game application developed by one of the members of OSOC; Greedy Queen, an activity that the basic aptitude skills of the participants; CSS Battle, an event conducted to test the participants' web development skills. Coding events – like Decrypt – were also hosted on various platforms to test the technical and developing skills of students.

Additionally, a talk session with the alumni was held as part of the symposium where they shared their industrial experience and offered their guidance to students on matters of internship and placement. The symposium concluded with the declaration of the results of the various events and the distribution of prizes and certificates.

NAAVAL MARAM or INDIAN BLACKBERRY

Scientific name : *Syzygium cumini*

The tree that is native to Indian Subcontinent is favored for its fruit, timber, and ornamental value. It can live more than 100 years. A rapidly growing plant, it is considered an invasive species in many world regions. The wood is water resistant after being kiln-dried. Because of this this tree is also favoured in carpentry. It has culinary and medicinal values as well. Fruit is known for the purple shade that it produces while it is eaten.



VILVAM or BAEL

Scientific name : *Aegle marmelos*

The tree is a native of India and is found wild throughout the India. It is considered to be the most sacred plant in India the tree is planted extensively in temples for the same reason. It is also known for its culinary values. The fruit takes about 10 to 11 months to ripen. According to Ayurveda, it is a healing tree and this accreditation seems also largely due to its diverse medicinal properties as all parts of this tree, namely, root, leaf, trunk, fruit, and seed, are used to cure various human ailments



MAHENDRA DURAI

Mahendra Durai, a Computer Science graduate of NIT Tiruchirappalli's 1990 batch, previously serving as Chief Information Officer, has now been named Senior Vice President and Chief Technology Officer of Hearst. Mr. Durai has graciously donated \$50,000 to the RECAL Foundation, directed towards the Heritage Centre, Stadium and Scholarships. NIT Tiruchirappalli is grateful for his kind gesture and wishes him well in his new beginning.



OSCAR AND PONNI

Mrs. Ponni M Concessou and Mr. Oscar G Concessou, Architecture graduates from NIT Tiruchirappalli, have been featured in the Forbes Magazines' March-April 21 edition under the folio of THE OUTPERFORMERS, for their various contributions in the field of architecture. Throughout their career, they have worked on numerous esteemed projects, created award winning designs and published technical papers on topics as diverse as architecture, urban design and women's rights.



SRIMATHI SIVASHANKAR

An alumna of the 1986-90 batch and Vice President at HCL Technologies, Srimathi Shivashankar has been awarded the 'Business Woman Excellence Award 2021'. Srimathi has also been instrumental in the growth of the CSE Department. NIT Tiruchirappalli take immense pride in celebrating her achievements and wish her every success in all her future endeavours.



P.MANIVANNAN

NIT-T is proud to announce that DAA recipient Mr. P Manivannan from the 1994 batch has been promoted to the rank of Major in the Territorial Army. A 1998 batch Karnataka cadre IAS officer, he achieved the exemplary feat of being the first IAS officer from Karnataka to join the Territorial Army in 2014 where he was commissioned as a Lieutenant to the Parachute Regiment. NIT Tiruchirappalli salutes his valor and dedication to our great nation.

RECAL Ride April 4th 2021



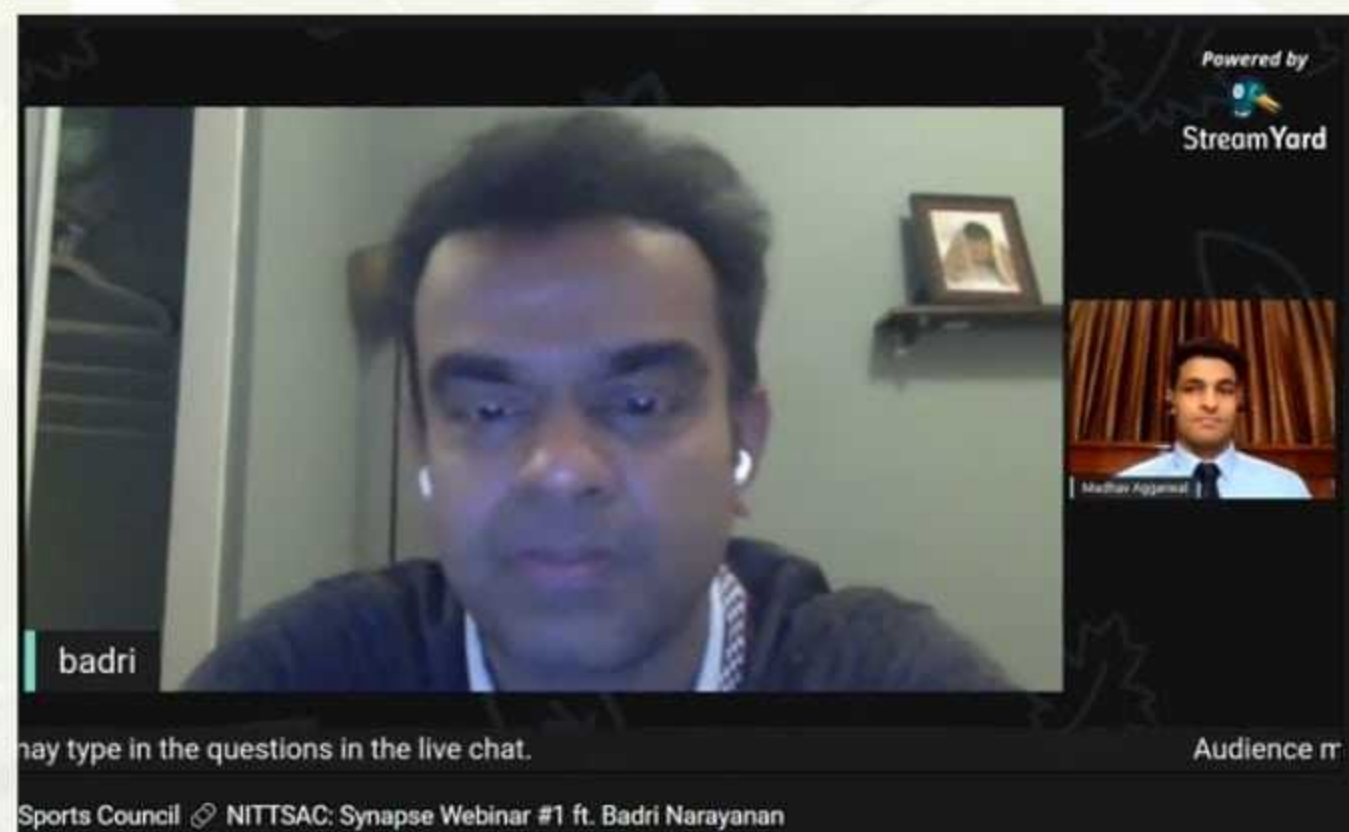
Rajshekar, 1974	6. Logesh, 2009	11. Mahalingam, 1985	16. Harini, 2002
Siva, 1997	7. Pratap, 1990	12. Karthikeyan, 1969	17. Srinivethan, 2009
Kosalraman, 1995	8. Sai, 1990	13. Raju, 1973	18. Amirtharaj 2005
Shiv, 1990	9. Ravi, 2009	14. Venkatachalam, 1974	19. Janani, 2010 (Missing in Group)
Ram, 1988	10. Venkatrama, 1988	6. Harikumar, 2009	

On April 4, Sunday, RECAL organised its very first cycling event which saw an enthusiastic participation from alumni members belonging to different batches from 1969 to 2010. RECAL President Mali, 1985, joined the event to extend his support and is also planning host more sporting events such as badminton and cricket that encourage alumni to be mindful of their physical well-being.

Webinar series 'SYNAPSE' - Dr. Badri Narayanan

As a kick start to the collaborative webinar series SYNAPSE conducted by NITTSAC was 'Careers in Sports after Graduation' which was organized on March 21, 2021, in collaboration with the Sports Council. The speaker Dr. Badri Narayanan, NITT ECE batch of '98, is a sports psychologist, keynote speaker and a mental conditioning & high-performance coach, who worked with Shikhar Dhawan, Joe Salisbury, Narain Karthikeyan, Divij Sharan and many more stars across various sports.

During the webinar, Dr. Badri talked about the importance of mental health and how it effects one's performance irrespective of how skilled they are. He shared his personal experiences on transition from a technical institute like NITT to a sports career. He enlightened the audience on career opportunities in sports which include data analytics, sports psychology, nutrition, sports science etc., and how these have become quite important in the field and also explained about the risks of putting one's self on the line. The webinar ended well with Dr. Badri answering a few interesting questions raised by the audience which included queries on maintaining mental strength, approach to players after they've won or lost a match or when they're severely injured, and about his experiences training famous players like Shikhar Dhawan. The event met with an overwhelming response.



PUNGAI OR PONGAMIA OIL TREE

Scientific name :
Milletia Pinnata

The tree is a high-oxygen producing tree. Most parts of India's important roads are reasonably populated with this Pungai tree for its usefulness in preventing soil erosion. This tree has the tendency to absorb heat to maintain uniform temperature.



Pongamia oil is extracted from the seeds and is used in many traditional medicines and Many studies have been done to convert pongamia oil into biodiesel.

INTERVIEW WITH DR. RAJ IYER

27.03.2021



NITTSac, in collaboration with Feeds, hosted Synapse 'Interview with Dr. Raj Iyer' on March 27th. He is an esteemed alumnus of NITT (EE'92). After graduating from NIT Trichy, he pursued his Masters & Ph.D. at The University of Texas. He also pursued his MBA from the University of Michigan Stephen M Ross School of Business. Dr. Raj has held numerous profound roles at Public & Private Sectors. Currently, he is the Chief Information Officer for the US Army.

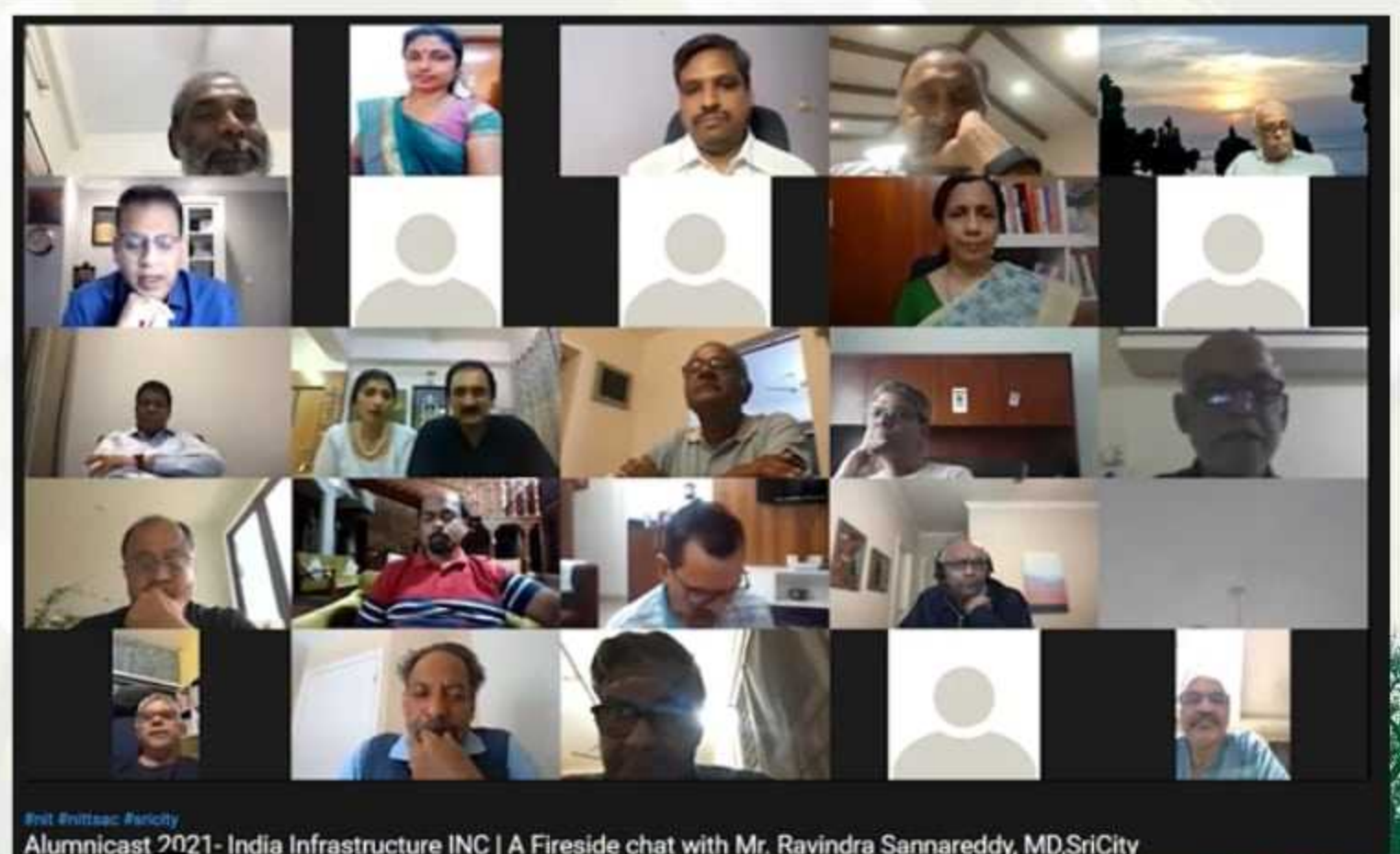
Dr. Raj was pleased to answer the thoughtfully curated questions from the Moderators and students. The questions ranged from the roles and responsibilities of a Chief Information Officer, the need for such a position in the Army, what drove Dr. Raj towards the US Army, and many more. The one piece of advice that Dr. Raj wanted to pass on to the student community was that "The toughest and challenging tasks are tiring in the short run, but in the long-run, that's what creates a strong character. Never shy away from the toughest of tasks." Even though the interaction was virtual Dr. Raj was delighted being associated with NIT Trichy after 30 years.

ALUMNICAST

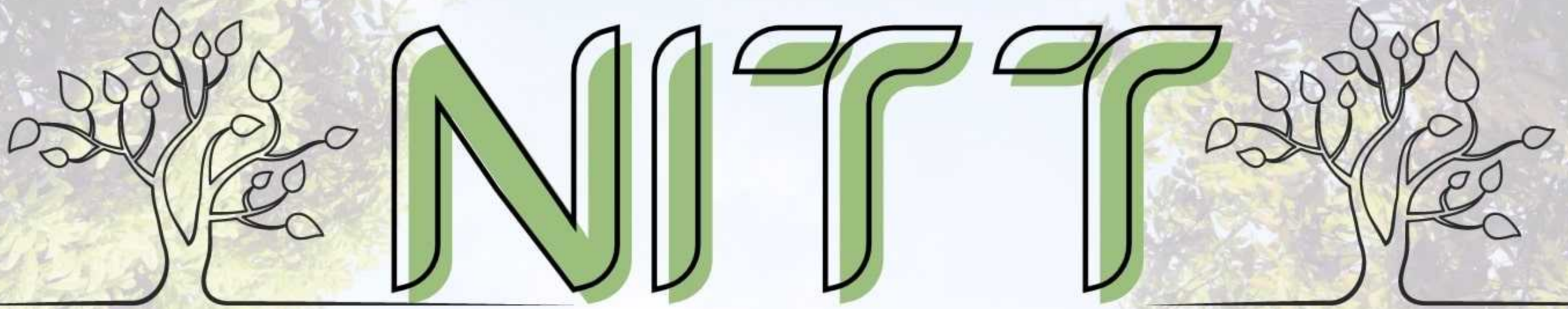
21.03.2021

"Alumnicast" is a series of webcasts conducted by RECAL, AIIC, and NITTSAC to learn about the developments happening at the institute and initiatives undertaken by our alumni to make NITT a world-class institute. The first session for the year 2021, 'INDIA INFRASTRUCTURE INC.,' was conducted on March 21, 2021. The event started with a welcome address by Director Dr. Mini Thomas, followed by an introduction on the speaker - Mr. Ravindra Sannareddy, Civil Engineering, Batch of 1985, the Founder and Managing Director of SriCity (P) Ltd. He shared his early life experiences and education at REC Trichy and what helped him before founding SriCity.

He also discussed how India lags in the manufacturing sector and the need to develop world-class infrastructure. He described how his motto 'Work- Learn-Live' helped him transform SriCity from a special economic zone to a leading site for employment and industries. He also discussed the need for Civil Engineers in the future in the infrastructure and housing sector and encouraged people to pursue civil engineering. The event was inspiring and it ended with a fun rapid-fire session with the guest.



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