

COMMUNICATION OFFICIAL Newsletter of NIT Tiruchirappalli

MAY - JUNE 2021 Volume 03, Issue 03



Theme: NITT Responds to the Pandemic



DIRECTOR'S MESSAGE

Greetings.

Poised at the threshold of a new academic year halfway through 2021, we are slowly but steadily recuperating. The present issue of the newsletter highlights NIT Tiruchirappalli's continued efforts to mitigate the impact of the ongoing crisis on the campus community and the academic fraternity at large. This issue serves as a showcase of the manifold initiatives undertaken by us to combat the adverse effects of the pandemic on multiple fronts.

I take this opportunity to laud the unstinting support offered by RECAL, the Alumni Association of REC/NIT Trichy. Through the RECAL Cares initiative, the alumni association has extended invaluable support to the NIT Trichy family – including contract labourers, mess employees, alumni families and the campus neighbourhood – to help us overcome some of the challenges posed by the pandemic. Owing to the generous contributions of alumni donors, RECAL has been able to offer support to uninsured alumni requiring critical medical care and the families of needy deceased alumni, in addition to providing infrastructural support, campus neighbourhood support, overseeing the setting up of a COVID helpline and countless activities small and large. NIT Trichy is proud of RECAL's COVID-assistance initiatives and considers it a privilege to have played a part in fostering this scientific community with a humanitarian outlook.

On the academic front, we continue to make great strides, and the fellowships awarded this year to NIT Trichy students under the Prime Minister's Research Fellows (PMRF) Scheme are particularly noteworthy. By virtue of being the only NIT to feature in the top 25 institutions in the NIRF ranking, we were recently inducted into the pool of premier national institutions eligible for this prestigious fellowship. I am pleased to announce that 13 of the students shortlisted and recommended by us managed to secure the coveted PMRF fellowship out of the 16 seats allotted to us in 2020-21. This serves as an indisputable demonstration of the quality of research conducted at NIT Trichy as well as the national and global relevance of the problems we engage with. I extend my congratulations to the awardees and their supervisors. I am also happy to announce that this academic year, we are introducing direct admissions to the Ph. D. programme for B.Tech. /B.Arch. graduates. An integrated M.Tech. /M.Arch. + Ph.D. programme for selected candidates has also been introduced this year.

Despite the prevailing circumstances and its attendant restrictions and limitations, several departments successfully conducted Faculty Development Programmes and online workshops to benefit the broader academic and scientific community. These workshops tackled a diverse range of relevant themes, such as the challenges of delivering quality education virtually, capacity building for 21st century educators, the exploration of new trajectories in solar energy technologies, to name but a few.

I present to you the current issue of the newsletter covering these events and others that occupied us in the months of May and June 2021. I hope that the campus community takes succour from this account of what we have managed to achieve in the last two months, despite the odds.

DR. MINI SHAJI THOMAS DIRECTOR

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Published by Public Relations & Media TEAM

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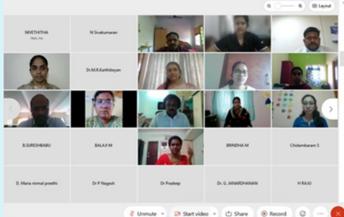
STUDENTS

INSTITUTE

Faculty Development Program – 'Embracing Online Teaching and Learning'

03rd – 07th May 2021

File Edit Share View Audio & Video Participant Meeting Breakout Sections 1



A 5-day Faculty Development Programme on

'Embracing Online Teaching and Learning' was organized under the scheme of AICTE Margdarshan from 03rd - 07th May, 2021. The programme was conducted with the intent to bridge the gap between online teaching and learning skills in the context of delivering education over an online setting.

A team of four-faculty organized the FDP: Dr. V.Lavanya, Assistant Professor, Dr. P.Sridevi, Associate Professor, Dr. S.Nivethitha, Assistant Professor - Department of Management Studies and Dr. M. Brindha, Assistant Professor - Department of Computer Science Engineering.

Inaugurated by Dr. N. Sivakumaran, Professor, Department of ICE, NIT Trichy and Chief Coordinator of AICTE – Margdarshan Scheme, the programme provided a holistic knowledge on contemporary methods of online teaching and learning approaches along with hands-on experience on various online tools available to facilitate the e-learning process among students.

With an engaging participation of faculty members from IITs, NITs, NITTR and Central Universities, the programme addressed the need for training and quick adaptation of online instructional methods. A range of topics were covered and discussed in these sessions including online assessment strategies, emotional intelligence in online learning and other pedagogical techniques that help aid student engagement.

Faculty Development Program – 'Technologies for Smart Electrical Power Grid'

Department of Electrical and Electronics Engineering 24th – 28th May 2021

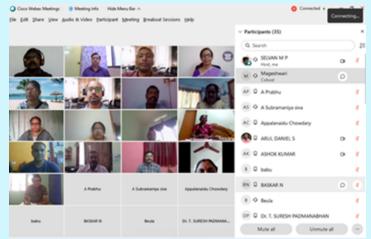
A 5-day development programme for faculty members on 'Technologies for Smart Electrical Power Grid' was organised under the aegis of AICTE – Margadarshan Scheme, during 24th – 28th May, 2021. Organised by

Dr.S.Mageshwari and Dr.M.P.Selvan from the Department of Electrical and Electronics Engineering, the programme received an engaging participation from over 31 faculty members from various educational institutions.

The programme was inaugurated by M K Ramesh, Senior General Manager (REMC & CnM) Southern Regional Load Despatch Centre Power System Operation Corporation Limited, Bangalore. In his felicitation address, Dr.V. Sankaranarayanan, Professor. & Head of EEE Department mentioned that the event marked the 19th FDP to be hosted by the Department of EEE.

The workshop covered the following main themes:

- Architecture and Control of AC and DC microgrids
- Smart Metering and Advanced Metering Infrastructure
- Demand Side Management
- Distribution Automation & SCADA
- Computer Relaying
- Applications of AI, Embedded Systems, IoT and Blockchain for implementation of smart grid
- Business models in smart grid



The inauguration also featured the presidential address of our Director Prof. Mini Shaji Thomas, who shared her experiences as a power system automation researcher at POWERGRID. With speakers from well established institutions such as NIT Surathkal and NIT Goa including research organisations such as ERNET India, the programme covered varied topics over 15 sessions.

National Workshop on 'Recent Research Trends and Future Research Directions in Solar Energy Technologi<mark>es'</mark>

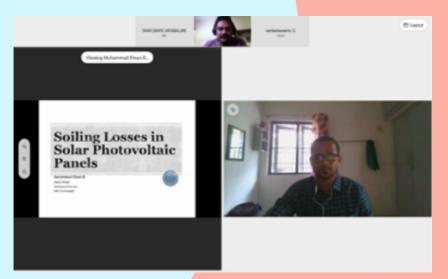
18th to 22nd May 2021

An enlightening workshop on 'Future Trends and Research in Solar Energy Technologies' was held from 18th – 22nd May 2021. Dr. K. N. Sheeba, Associate Professor (CE Dept.) and Dr. Sishaj P Simon, Associate Professor (EEE Dept.) hosted the event which brought together 18 experts from reputed academic institutes and industries.

The workshop also witnessed the participation of 72 research scholars, undergraduates, postgraduate students, faculty members and scientists from numerous industry and research centres. The workshop was divided into eighteen sessions and concepts encompassing every area of solar energy were deliberated.

With a wide range of topics covered from elementary concepts such as Solar Thermal Energy to advanced studies on Solar Fuels, the workshop enlightens the researchers on topics related to future trends and research directions in solar energy technologies.

Session Content Covered included Decentralized Applications of Solar Thermal Energy -for Livelihood Expansion and Sustainability. Recent Advancements in Solar Energy Technologies Introduction to Maximum Power Point Tracking and Partial Shading in PVs Bifacial PV Solar PV Cooling Techniques Solar Latent Heat Thermal Energy Storage **PV Inter Connection Schemes** Vacancy Ordered Perovskite Materials for Solar Water Splitting Power System Planning Studies using Solar Power Solar Thermal Application for Drying and Dehumidification Industrial Applications of PVs Solar Fuels Potential of Solar Thermal Energy in Industrial Process Materials for Solar Photovoltaic Energy: future Prospects Issues and Challenges in the Concentrating Solar Power Systems Effect of Soiling on PV Modules and its Mitigation -using Hydrophobic Nanocoatings Solar PV Mirroring Integrated Solar Energy System for Sustainable Environment



In the wake of the pandemic as the world stood motionless and looking ahead at a bleak future, the obligation for reforms was necessary to accustom to a new lifestyle. As an influential educational institution. National Institute of Technology Tiruchirappalli needed to make decisions that benefitted the lives of its students and the people associated with its functioning. The administration team worked closely with the faculty, alumni and students to develop solutions to the limitations imposed upon our society.

Several pivotal decisions were taken on the medical sector for the safety of all frontline workers in and around the campus. On account of the interests of the students, online web portals and Eresources were made available to their growing requirements.

This issue focuses on identifying all these efforts that has been taken so far as one compilation. under the theme "NITT responds to the Pandemic"

Short-term course on A New Cooperative Wireless Strategy: Soft Information Forwarding Department of Electronics and Communications Engineering





A short-term course titled "A New Cooperative Wireless Strategy: Soft Information Forwarding" was organised by the ECE Department in collaboration with TOMSK Polytechnic University, Russia.

Organised by Indian Principal Investigator Dr. P. Muthuchidambaranathan and Co-Principal Investigators Dr. G. Lakshmi Narayanan and Dr. G. Thavasi Raja, the event was held successfully from 28th April to 14th May. The course received active participation from various educational and cultural backgrounds, including 6 students from Sri Lanka, France and Russia.

Capacity Building for Teachers in the 21st Century Skills and

Education

21st June - 02nd July 2021

Department of Humanities and Social Sciences + Department of Management

A 12-day online workshop on "Capacity Building for Teachers in 21st Century" was organised by Dr. S. Mekala and Dr. N. Thamaraiselvan from 21st June to 2nd July 2021 for the faculty members from ICSSR approved institutions.

Sponsored by ICSSR, the programme was held with the objective to equip the teachers to be competent in facing the challenges of the dynamic learning environment.

In her welcome address, Dr. S. Mekala, Programme Coordinator expressed that the dynamic leadership of the Director had been the source of inspiration to launch this event. Further, she emphasised that the programme encapsulates social, personal, intellectual and emotional skills that aims at preparing learners to lead meaningful and successful lives in a globalized context.

NIT Tiruchirapalli and its associated communities have done to the best of their capabilities in an effort to help others in these desperate times. The actions have been put to words in a bid to honor the people who have spent tirelessly to serve for the betterment of the community.



Dr. N. Thamaraiselvan, Programme Coordinator introduced the themes of the programme such as emotional intelligence, collaboration skills and work-life balance and described its significance in the current scenario of the digital era.

Dr. Mini Shaji Thomas, in her presidential address acknowledged the efforts that went into the programme and encouraged more such initiatives that promote engagement among students and faculty. Insights on the recent mindset of recruiters and the employability of the students was discussed by Dr. T. Ravichandran.

The main focus of the course included 21st Century skills, Work-life Balance, Leadership Skills, Group Dynamics, Effective Communication Skills, Emotional Intelligence, Achievement Motivation, Interpersonal Skills, Flipped Classroom, Technology for Teaching and Research Purposes, Digital Learning, Quality Assurance in Higher educational Institutes

Short Term Course on 'Sustainable Power Systems'

Department of Electrical and Electronics Engineering

07th June – 11th June 2021

A 5-day short-term course on 'Sustainable Power Systems' was organized by Dr. Vivek Mohan and Dr. Karthik Thirumala, faculty members of EEE department from 7th – 11th June 2021. The event is sponsored by SPARC in collaboration with The Hong Kong Polytechnic University and is also the third event organized by the coordinators under the aegis of SPARC.





The sessions were on 5 modules, one on each day, on the following topics

- Future Electric Grids: Analysis and Prospects
- Distribution System and Microgrid: Reliability and Protection
- Power Electronic interface and control for renewable energy integration
- Power system stability analysis considering renewable energy integration
- Power Quality analysis and Mitigation

The Resource persons included Dr.Siqi Bu of Hongkong Polytechnic University, Dr. Arul Daniel of NIT, Tiruchirapalli, Dr.Ganesh B. Kumbhar of IIT Roorkee, Dr. Rupesh Wandhare from IIT Hyderabad, Dr. E.A. Gopalakrishnan from Amrita Vishwapeetham, Dr. P. Raja, Dr. Naveen Yalla, Dr. Shelas Sathyan, Dr. Karthi Tirumala from NIT, Tiruchirappalli and Dr. Nimal Madhu from Asian Institute of Technology, Thailand.

The objective of the course was to disseminate knowledge on advanced techniques for sustainable operation and planning of future electric grids with renewable energy penetration. A total of 165 participants registered for the course that covered varied topics such as microgrid protection, stability analysis of renewable energy integrated power systems and much more over 10 sessions every day.

Faculty Development Program - 'Perspectives of Teaching Power

Systems' Department of Electrical and Electronics Engineering

17th - 21st May 2021

A 5-day Faculty Development Programme on 'Perspectives of Teaching Power Systems' was organized under the scheme of AICTE Margdarshan from 17th – 21st May, 2021. The event was coordinated by Dr.M.P.Selvan, Dr.M.Venkatakrithika an Dr.P.Raja. The programme was conducted in an effort to simplify the methods of teaching intricate concepts in relation with Power Systems.

The workshop was articulated to cover the Effective Teaching of

- •Transmission and Distribution of Electrical Energy
- •Power System Analysis
- •Power System Operation and Control
- •Power System Protection and Switch Gear

With speakers from reputable institutions such as IIT Madras, IIT Bombay, IIT Roorkee and IIT Patna, the sessions received an engaging participation of 30 faculty members.

Webinar on Latest developments in Robotic & Manual MIG

Welding Systems Siemens Centre of Excellence in Manufacturing

3rd June 2021

Siemens Centre of Excellence in Manufacturing, NIT, Tiruchirappalli organised a webinar on "Latest developments in Robotic & MIG welding systems in association with Advanced Manufacturing Automation and Robotics Technologies AMAR TECH, Bangalore and KEMPPI India on 3rd June 2021 from 10:30am to 2:30pm.

The webinar was conducted by Mr. Sridharanand and Mr. Harikrishnan from KEMPPI India and received an engaging participation of 200+ attendees from Institutes and Organizations from all over Tamil Nadu. The 2-hour session articulated 2 modules; the first one conducted by Mr. Sridharanand who introduced the attendees to the KEMPPI company and discussed the advancements in the field of welding applications. He gave an insight about the parameters to be adjusted in controllers and discussed about the double pulse MIG welding process, and touched upon the arc mobile control along with Reduced Gap Technology (RGT).

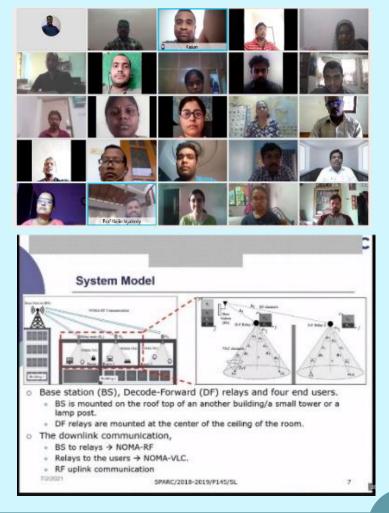
The second module was elucidated by Mr. Harikrishnan who spoke on the topic of robotics and MIG welding applications. He started with an introduction of the robots in welding systems and discussed about the overall system components used in a MIG welding robotic cell. During the latter half of the session, he briefed about Through Arc Seam Tracking (TAST), Wire Arc Additive Manufacturing systems (WAAM), and multiple web user interface systems along with the methods of changing controller parameters through computer devices and a Kuka pendant. After the completion of the second module, the webinar ended with an interactive Question and Answer session.

Short Term Course IV – 'Non-orthogonal Multiple Access

Technology for 5GB' Department of Electronics and Communication Engineering

14th – 25th June 2021

In collaboration with TOMSK Polytechnic University, of Russia, Department Electronics and communication Engineering, National Institute of Technology, Trichy conducted a SPARC sponsored short term course on "Non-orthogonal Multiple Access Technology for 5GB" from 14th - 25th June. Foreign Principal Investigator Prof. Dushantha Nalin K. Jayakody organized the workshop which saw a victorious participation from 100 members of various colleges, Universities, Research and development Labs from India and 20 members from abroad (Srilanka, France, Russia, Bhutan, and Pakistan). Indian Principal Investigator Dr. Ρ. G. Muthuchidambaranathan and Co-Pls Dr. Lakshminarayanan and Dr. G. Thavasi Raja executed the course successfully.



Faculty Development Program on "ElectricVehicles"

Department of Electrical and Electronics Engineering

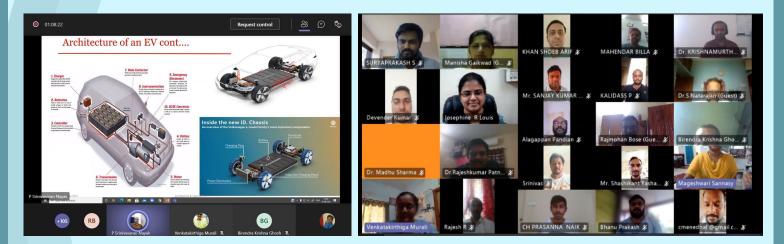
7th June – 11th June 2021

A Five day Faculty Development Program on "Electric Vehicles" was organised under the aegis of AICTE -ATAL Scheme between 7th-11thJune, 2021. Dr.M.Venkatakirthiga, Dr.P.Raja and Dr.S.Mageshwari, faculty members of the Department of EEE at the National Institute of Technology Tiruchirappalli were the coordinators for the FDP. The main focus of the FDP is to disseminate the fundamentals of Electric Vehicles to various sectors of the society in a view to equip themselves to cope with the upcoming vehicle technologies which is to be the state of the art of transport currently.

The inauguration of the FDP took place along with 43 FDPs organised in a combined manner initiated by the AICTE where the Director IIT, BHU, Varanasi was the chief guest. The combined inauguration took place on 7thJune 2021, at 11.00 a.m. and was broadcast on youtube.

The FDP started on 7thJune with sessions on Introduction to Electric Vehicles followed by architecture and drive train topologies for EVs. Other topics covered include Power Converters and Battery Charging Technologies used in EVs, Charging technologies and choice of motors for EVs, Embedded Control for EVs and Battery Management Systems involved. A gist on safety measures of Mechatronics Systems and impact of EV charging on grid quality is also included. As per the guidelines from AICTE-ATAL scheme, one session on Stress Management and Organisational Behaviour handled by the Art of Living Centre Bengaluru, is also included in the FDP.The invited speakers are from reputed institutions viz., IITGandhinagar, BARC Mumbai, Delft University of Technology Netherlands, University of Houston, NIT Tiruchirappalli, and NIT Suratkal.

Speakers were also invited from Entuple Technologies Bengaluru, to give the participants a flavour on industry practices. The FDP includes 15 sessions (3 sessions per day, 120minutes per session) arranged over the span of 5 days. An overall count of 115 participants attend the FDP which include faculty members from various institutions, post graduate and research scholars and industry personnel.



DR. SAMBANDAM ANANDAN - EDITORIAL BOARD MEMBER SELECTION

Dr. Sambandam Anandan, Professor, Department of Chemistry has been selected as an editorial board member in the journal Ultrasonics Sonochemistry in Elsevier Journal. NIT Tiruchirappalli takes immense pride in his achievement and wishes him more accolades in his career.

National Workshop on Outcome Based Education

14th June – 18th June 2021



National Workshop on Outcome Based Education under AICTE – Margadarshan Scheme was organized from 14th – 18th June. The workshop coordinated by Dr.S.Moorthi, Dr.M.Venkatakrithika, Dr.P.Raja of Department of Electrical and Electronics Engineering, highlighted the importance of adaptability to the contemporary ecosystem of the remodelled academic pattern and the betterment of online student engagement. Global Outlook on Higher Education. The theme covered the following topics:

- Perspective of Engineering Curriculum
- Role of Teachers in Today's Academia
- Student Engagement in Classroom
- Active and Cooperative Learning
- Emotional Pedagogy
- Online Assessment Tools
- Overview on Accreditation

Certified speakers from IITM, NITTTR, NIT Tiruchirappalli, UNSW Australia & UCW Canada will be articulating 15 sessions over a span of five days. Dr. Jayashri Ravishankar, Deputy Head of School (Education) UNSW Australia, inaugurated the workshop and also handled two sessions. The workshop received an enrolment of 50 faculty members and several research scholars from various academic fields. The programme was articulated over 15 online sessions on the Cisco WebEx platform.

Indo-Australia Workshop on 'Nano & Biomaterials: Synthesis & Applications'

21st June -25th June 2021

An Indo-Australia Workshop on Nano & Biomaterials: Synthesis and Applications was held during 21st - 25th June 2021. With very scarce expertise on developing technologies and hesitant researches with the assumption of this domain being out of scope, the workshop aimed at eliminating the common misconception among the masses.



Research scholars were the main participants as the event focussed on the complete overview of various viewpoints of Nano Biomaterials and their synthesis and applications towards health, energy and environment. Intriguing topics were covered in this course such as Engineering Nanomaterials for Biomedical Application and Ultrasound and Chemical Reactions over 5 lectures delivered by esteemed faculty of University of Melbourne and RMIT.



Upholding their motto of 'Mission to Serve,' RECAL, the alumni association of NITT stood steadfast to assist and cater to the needs of the larger NITT community. RECAL has helped save the livelihoods of workers with their donation programs, vaccination drives, supply of grocery & hygiene products, medical equipment among many others.

RECAL was quick to set up the RECAL Cares initiative to fight the pandemic. Various efforts were taken to respond to the crisis, such as the donation of oxygen concentrators, supply of hygiene products to in-campus workers, make-shift hospitals and 24/7 helpline, scholarship to studens who lost their parents to COVID-19 and other similar initiatives.

National Level Workshop on Algebra, Analysis and Differential Equations

Department of Mathematics

14th June – 18th June 2021

A Five days National Level Workshop on "Algebra, Analysis and Differential Equations" (WAAD 2021) was organized by the Department of Mathematics during 14-18, June 2021. In the inaugural session, the Head of the Department of Mathematics, NITT and the convener of WAAD – 2021, Dr. V. Lakshmana Gomathi Nayagam welcomed the dignitaries and participants. The Director of NITT, Prof. Mini Shaji Thomas inaugurated the workshop and delivered the presidential address. The inaugural function was felicitated by Prof. M. Umapathy, Deputy Director of NITT, Prof. Ramakalyan Ayyagari, Dean (Academic) NIT-T, and Prof. Dr. S. Muthukumaran, Dean (Research and Consultancy) of NITT. The function was concluded with the vote of thanks by Dr. R. Tamilselvi, a convener of WAAD 2021.

The first technical session was delivered by Dr. A. Sairam Kaliraj, IIT Ropar, on Complex Analysis. Mr. R. Gnanaprakasam from GPC, Madurai handled the afternoon session on Abstract Algebra and trained the participants to solve problems on Abstract Algebra. On the second day of the workshop, Dr. A. Sairam Kaliraj, IIT Ropar, continued the session with problem solving on singularities in Complex Analysis. Further, Mr. R. Gnanaprakasam discussed some topics on Linear Algebra.



Real and Complex Analysis were the topics of discussion for the third day taken ny Mr. R. Gnanaprakasam after which Dr. S.V. Bharanedhar, CUTN, Thiruvarur, continued the topic on singularities and the day ended with a tutorial session on Complex Analysis which was handled by department PhD scholars.

The next day began with a discussion on Ordinary Differential Equations by Dr. V. Shanthi, NITT, which was continued by Dr. M. Sivanesan, NITT, to Partial Differential Equations. Dr. Vamsinadh Thota handled Metric Spaces in the afternoon technical session, and the day ended with two tutorial sessions on Differential Equations and Real Analysis which were handled by department PhD scholars.

The morning session of the last day started with the lecture of Dr. Satyanarayana Engu, NIT Warangal on Ordinary Differential Equations, which was continued to Partial Differential Equations by Dr. M. Sivanesan, NITT on solving problems using different methods. In continuation with Metric Spaces, Dr. Vamsinadh Thota discussed some topics on Topological Spaces.

The valedictory function had Dr. V. Lakshmana Gomathi Nayagam, Head of the department of Mathematics, NITT making the concluding remarks about the workshop.Following the feedback session, Dr. N. Prakash, Coordinator of WAAD 2021 proposed the vote of thanks. A total number of 213 post graduate students, research scholars and faculty members from various states had participated and benefited in WAAD 2021.

Faculty development program on Blockchain and Smart Contract Technology

25th June – 29th June 2021

The five day Faculty development program Sponsored by AICTE Margdharshan Scheme on "Blockchain and Smart Contract Technology" began on 25th June, 2021 virtually with a participation of academia, researchers and Industrialists. The workshop lasts for 5 days and completed on 29th June, 2021. The event was organised by Dr. Kunwar Singh and Dr. M. Brindha, Assistant Professors, Department of Computer Science and Engineering and Dr. B. Janet, Assistant Professor, the Department of Computer Applications. 78 Participants including 17 Mentee and 61 Non-Mentee were actively engaged in this workshop. With the expertise of eminent people in Block chain from NIT, Trichy, Statistical Institute, IIIT Hyderabad and TCS, a concoction of both the theoretical framework combined with demonstration sessions on Ethereum block chain, NEAR blockchain and Hyper Ledger made the five-day workshop enlightening and educative to the participants. The coordinators of the workshop were Dr. Kunwar Singh, Dr. M. Brindha and Dr. B. Janet. All the Lectures were recorded and made available to the participants in youtube.



The workshop started with a welcome address by Dr. M. Brindha. Dr. Kunwar Singh told about objective and outcome of the workshop. Prof. N. Sivakumaran, Chief Guest, briefly introduced the theme of the workshop, mission, vision and activities of Margdarshan. Dr. B.Janet concluded the inauguration with vote of thanks.

First day of the workshop also saw Dr. M. Brindha explaining cryptographic primitives required for Blockchain. Dr. Kunwar Singh discussed ECC and Bitcoin. On the second day of the workshop, Dr. Kunwar Singh discussed the Ethereum smart contract and Mr. Lohith J.J demonstrated smart contract on Ethereum. During the third day of the workshop, Dr. Mahavir Jhavar from Ashoka University delivered technical talk on construction of Bitcoin and demonstrated on Hyperledger.

The fourth day of the workshop had Ms. Gnana Lakshmi T C delivered technical talk on NEAR Blockchain. She also demonstrated smart contract on NEAR Blockchain. On the fifth day of the workshop, Dr. Kannan Srinathan from IIIT Hyderabad delivered a technical talk on Distributing Trust: The Blockchain Approach. Also Vigneswaran R , TCS, Chennai delivered talk on Introduction to Permissioned Blockchains – Applications, Research, and Challenges. The workshop ended with feedback from participants and a vote of thanks by Dr.B.Janet.

Miyawaki Forest to expand

With great success over the plantation of the two Miyawaki method-based forests in campus, National Institute of Technology Tiruchirappalli has decided to extend the plantation to more spots in the campus premises.

Three months after the seedlings were sown, the once vacant land near Orion is now embedded with a 6-feet tall green cover. Miyawaki plantation ensures the upward growth of plants and helps rejuvenate water ponds guaranteeing water storage throughout the year. Director Dr. Mini Thomas also commented on the increase in the number of butterflies and birds that have bestowed a serene ambience in the campus. The pictures here show the growth of plants over the months.





After 2 months

KARYASHALA - High-End Workshop on Methods and Tools for Effective Dissemination of Research Ideas and Findings

14th June - 20th June 2021

The workshop sponsored by Accelerate Vigyan scheme of SERB, India was conducted between 14-Jun-2021 to 20-Jun-2021. Dissemination of results is a crucial part of doing research. The prime objective of the course is to expose the students and research scholars to the various methods and tools available for effective presentation and dissemination of the outcomes from their scientific research. Only little progress can be achieved if the outcome and relevance of research one does is not properly communicated. Extremely promising results which are not properly documented will not create any impact among the readers.

The expert talks centered on methods that will effectively improve the quality of writing in the participants. For example, one of the methods to improve both the flow in the write-up and recording all creating thoughts is covered by separating the tasks of generating the content of the document and editing it for proper organization. Further, the method of splitting the writing process into well defined steps like literature review, drafting, revising, and editing was also covered in the content.

Further, techniques for reference management, structuring literature review, improving the lucidity of introduction and methodology sections, describing the most important findings from the numerical results, improving the visibility of research, etc. were given to enrich the large spectrum of skills required to draft convincing manuscripts.

In addition to introducing the participants to the methods of improving the effectiveness of write-up, the workshop also gave them hands-on experience in various tools created for the aforementioned methods.

The major content of the workshop were:

- Methods to become a productive academic writer.
- Segmentation of tasks for generating the content and editing it.
- The definition of the writing process.
- Reference management and bibliography generation.
- Techniques to effectively visualize the numerical results.
- Causes and remedies for manuscript rejection.
- Writing project proposal for funding agencies.
- Hands-on workshops on tools like: Latex, Beamer, GNU Plot, Inkscape, and plot digitizer.





NITT Hospital Facilities

The NITT hospital continues to provide telephonic medical consultation and 24/7 emergency services. It is also fully equipped with 02 cylinders, nebulizer, ECG machine, multipara monitor and defibrillator with an additional ten-bedded ward for the institute fraternity. Vulnerable groups of residents are given special attention. Regular refill of medicines at one's doorstep are made accessible for the residents of NITT. Non-residents of NITT were advised to procure their medication from the nearest Jan Aushadi store, and their bills are duly reimbursed. Patients showing symptoms are monitored telephonically by the hospital staff on a daily basis. Medical Officers have been in constant coordination with district administration to arrange vaccination

NITT Hand Sanitizer Initiative

Following the recommendation of WHO regarding the effectiveness of alcohol sanitizers, the institute hospital teamed with the Chemical Department to produce hand sanitizers at a nominal cost. Due to increasing necessity, more sanitizers were made and were distributed to the Security Office for the department and public use.

NITT

NITT Faceshield for Trichy Police

health and sanitary staff.

Multiplying efforts to cope with the pandemic,

the institute produced low-cost 3D reusable face-shields at its Centre for Manufacturing

Technology. It was issued to frontline workers, including the police department, security,

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IoT-based Ventilators, Task Force Monitor & Psychology

Life-saving IoT based innovative ventilators were designed and developed and rolled out in July 2020. A task force was set up to monitor the campus through tele-surveillance and data gathering for early detection and effective management of potential cases. A clinical psychologist was engaged for students handling the stressful times.

Screening & Sanitation on Entry

Since the onset of COVID-19, a screening checkpoint was set up at the main gate that worked round the clock. Commuters in and out of the campus were reviewed with an infra-red noncontact thermometer and their details were noted. The activity continues to function to date.

> A Few Early Measures by the Institute

Essential Personal Services for Residents

Essential items for in-campus residents were made possible by 2K Market - the provisions shop through Google Forms/Whatsapp texts. Vegetables were delivered at the doorstep of households by vendors in similar fashion. Other commodities like milk and water continued to be supplied. Even during the second wave of pandemic in 2021, these measures continued.

Medical Safety Kit For Frontline Workers

A safety kit containing immunity-boosting supplements zinc and vitamin C tablets were provided to the medical saviors of NITT. Further, the equipment also held an ORS packet on account of hot weather and an additional reusable cotton face cover.

Vaccination Drive continues in NIT Tiruchirappalli

In response to the fast-evolving pandemic, the Institute organized various incampus vaccination drives at the NITT Hospital and later at the Institute Barn Hall to accommodate the influx in recipients and to maintain a necessary social distance. The first vaccination camp was held in May 2021 in coordination with Trichy District Administration for willing and eligible people above 45 years of age. Medical Officer Dr. R Priyanka and the medical team of the institute hospital along with district administration conducted the vaccination drive as per the government advisory.

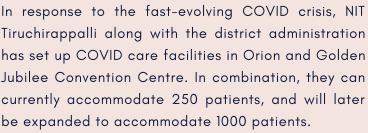
Further vaccination drives in the subsequent months were extended to all employees, scholars/students and family members of workers of the institute above 18 years of age. Covishield and Covaxin were the vaccinations made available according to the accessibility and the count for the maximum number of vaccinations administered in a single day stood at 310 on 26 June 2021. Some of the vaccination drives have also been supported by RECAL and done with the support of district administration.

The vaccination drives were presided over by the Institute Director Dr. Mini Shaji Thomas, Deputy Director Dr. Umapathy and Registrar of the Institute Dr. Arivazhagan. In an effort to maximize the awareness of the significance of vaccines, the director in her words, conveyed that, "vaccines are safe and an important tool to protect everyone in the present scenario" and encouraged all employees to come forward and take the vaccination.

All the vaccination camps were held in acceptance with precautionary COVID measures and standard operating procedures. The beneficiaries were approved for vaccination after an initial screening for vital parameters by the doctors. Post-vaccination recipients were also kept under observation for a duration of 30 minutes and were later handed their provisional vaccination certificates. The institute vehicle accompanied by an authorized security guard was arranged for the pickup and drop of the beneficiaries after vaccination. The Institute also emphasized on the point that while the vaccination was an important tool to safeguard oneself, it was still an individual duty to continue wearing a mask, washing hands regularly, maintaining social distance and staying safe as a society.

COVID Care Centre in NIT Tiruchirappalli





The facility was visited by Minister Anbil Mahesh Poyyamozhi on May 15th to oversee the service provided to the district administration. The facilities are completely isolated from the rest of the campus using a separate entry and barricades.





The Continuing Efforts in 2021



PRIME MINISTER'S RESEARCH FELLOWSHIP SCHEME (PMRF) SCHOLARS

The Prime Minister's Research Fellows (PMRF) Scheme has been designed for improving the quality of research in various higher educational institutions in the country. Up until last year, no institute other than IITs, IISc & IISERs were included under the PMRF scheme, but this year it was extended up to the top 25 NIRF overall ranked Institutions.

The Scholars at NIT Trichy got awarded 13 fellowships under the PMRF scheme out of the 16 slots allotted to us in 2020-21. This establishes the quality of research work that is conducted at NIT Trichy and the relevance of the research problems we solve. We congratulate the scholars, their supervisors and the members involved in the process.

RESEARCH SCHOLARS

- NIKIHIL BHANDARI
- S NIVEDITHA
- RIMA DAS
- ROJA VADLAMUDI
- AMARISELVAM
- GEETUPAUL
- AMALPURUSHOTHAMAN
- VISHNUNARAYANAN V P
- KANNADASAN K
- HAREESH KRISHNAN H
- BALAMURUGAN R

GUIDES

PROF. T SRINIVAS Department of Architecture

DR D KANNAMMA Department of Architecture

PROF K MUTHUKKUMARAN

Department of Civil Engineering **PROF D SRI RAM KUMAR** Department of Electronics & Communication Engineering

PROF M JAIBHARAT REDDY

Department of Electrical & Electronics Engineering DR NAGAJYOTHI VIRIVINITI

Department of Chemical Engineering DR S MUTHU KUMARAN

Department of Metallurgical & Materials Engineering DR A SREEKANTH

Department of Chemistry DR B SHAMEEDA BEGUM

Department of Computer Science and Engineering PROF A BAKTHAVATSALAM

Department of Energy and Environment PROF A CHANDRA BOSE Department of Physics

SPONSORED RESEARCH

Dr. D. Ezhilarasi, Associate Professor, Department of Instrumentation and Control Engineering, has received a Grant of Rs. 43 Lakhs for the project titled 'Design and development of low cost multifunctional lower limb exoskeleton system for motion assistance to paraplegics' sponsored by the SERB POWER.

Dr. R. Manjula, Assistant Professor, Department of Civil Engineering has received Rs. 13.3 Lakhs sponsored by TATA STEEL for the project titled 'Application of Natural Fibre Reinforced Polymers as Alternative to Synthetic Fibre Reinforced Polymers "

CONSULTANCY PROJECTS

Dr. K. Muthukkumaran, Professor, Department of Civil Engineering has been sanctioned Rs. 4.4 Lakhs for a consultancy project for Airports Authority of India.

Dr. J. Karthikeyan, Associate Professor, Department of Civil Engineering has been granted consultancy project for Public Works Department-Water Resources Department, Kallanai and the sanctioned amount is 1.2 Lakhs.

Dr. Jeevan Joseph, Assistant Professor, Department of Civil Engineering has been granted consultancy project for Public Works Department, Vennar Basin Division and the sanctioned amount is 1.2 Lakhs.

Dr. S. Moses Santhakumar, Professor, Department of Civil Engineering has been granted consultancy project for Trichy City Corporation for Third party Inspection and the sanctioned amount is 2.2 Lakhs.

Dr. V. M. Biju, Associate Professor, Siemens Centre of Excellence has been granted consultancy project for Bharat Heavy Electricals Limited (BHEL R&C) and the sanctioned amount is 5.6 Lakhs.

AICTE ATAL FACULTY DEVELOPMENT PROGRAM 2021-22

Four proposals have been selected for sponsorship by AICTE for conducting Faculty Development Programs.

1. Dr. Kunwar Singh, Assistant Professor, Department of Computer Science and Engineering, received approval for the proposal on conducting Faculty Development Program under thrust area of Cyber security on the topic "Introduction to Cryptology".

2. Dr. Venkata Kirthiga, Associate Professor, Department of Electrical and Electronics Engineering, received approval for the proposal on conducting Faculty Development Program on the topic "Electric Vehicles".

3. Dr. P. A. Karthick, Assistant Professor, Department of Instrumentation control Engineering, received approval for the proposal on conducting Faculty Development Program on the topic "Instrumentation, Signals and Images for the Evaluation of Physiological Systems" under the thrust area of Precision Health Technology.

4. Dr. Ruben Sudhakar, Assistant Professor, Department of Energy Engineering, received approval for the proposal on conducting Faculty Development Program under thrust area of Energy Engineering on the topic "Biomass to fuels, chemicals and value added products".

AICTE MARGDARSHAN SCHEME

Ten proposals have been approved for conducting Faculty Development Program / Short Term Training Program under AICTE Margdarshan scheme.

1. Dr. Kunwar Singh and Dr. M. Brindha, Assistant Professors, Department of Computer Science and Engineering and Dr. B. Janet, Assistant Professor, the Department of Computer Applications received approval for the proposal on conducting Faculty Development Program titled "Block chain and Smart Contract Technology".

2. Dr. V. Lavanya, Assistant Professor, Dr. P. Sridevi, Associate Professor, Dr. S. Nivethitha, Assistant Professor, Department of Management Studies and Dr. M. Brindha, Assistant Professor, Department of Computer Science and Engineering received approval for the proposal on conducting Faculty Development Program titled "Embracing Online Teaching and Learning".

3. Dr. G. Muruganantham, Associate Professor, Department of Management Studies received approval for the proposal on conducting Faculty Development Program on "Education 4.0: Pedagogic Principle, Accreditation and Outcome Based Education".

4. For the proposal to conduct Short Term Training Program titled "Perspectives of Teaching and Learning of Engineering Sciences for Outcome based Education", Dr. M. Venkata Kirthiga, Dr. P. Raja, and Dr. S. Moorthi, Associate Professors, Department of Electrical and Electronics Engineering received approval.

5. Dr. P. Srinivasa Rao Nayak, Dr. K. Sundareswaran and Dr. Sishaj P. Simon, Department of Electrical and Electronics Engineering received approval for the proposal on conducting Faculty Development Program/Short Term Training Program titled "Recent Advances in e-mobility and Charging".

6. Dr. M. P. Selvan, Associate Professor, and Dr. S. Mageshwari, Assistant Professor, Department of Electrical and Electronics Engineering received approval for the proposal on conducting Faculty Development Program titled "Technologies for Smart Electrical Power Grid".

7. Dr. S. Kumanan, Professor, Department of Production Engineering and Dr N Sivakumaran, Professor, Dr. K. Srinivasan, Associate Professor and Dr PA Karthick, Assistant Professor, Department of Instrumentation and Control Engineering received approval for the proposal on conducting Faculty Development Program/Short Term Training Program titled "Applied Soft Computing Techniques".

8. Dr. M. Venkata Kirthiga, Dr. P. Raja and Dr. M. P. Selavan, Department of Electrical and Electronics Engineering received approval for the proposal on conducting Faculty Development Program/ Short Term Training Program titled "Power System Engineering".

9. Dr. K. N. Sheeba, Associate Professor, Department of Chemical Engineering and Dr. Sishaj P Simon, Associate Professor, Department of Electrical and Electronics Engineering received approval for the proposal on conducting Short Term Training Program titled "Recent Research Trends and Future Research Directions in Solar Energy Technologies".

10. Dr. A. Arunagiri, Dr. K. N. Sheeba, Associate Professors and Dr.P. Kalaichelvi, Professor, Department of Chemical Engineering received approval for the proposal on conducting Faculty Development Program titled "Quality Assurance in Technical and Higher Educational Institutions and Interpretation of Requirements of NBA Accreditation".

COVID Awareness Sessions

The medical team of NITT carried out informative COVID awareness campaigns for frontline workers. The outreach activity focused on adaptation to the new lifestyle, the importance of protective gear, social distancing, disinfection protocols and safety at work.

Standard Operating Procedure

A Do's and Dont's scheme to be followed by all essential workers of the NITT community was set up to ensure the elimination of the virus on the campus premises. Staff and other contract employees were permitted to work from home.

Accolades in Global Hackathon The mask developed in NITT was recognized in Top 30 by Hack the Crisis in India, a hackathon organized by the Government of India. It further won 7th and 10th place in Global Hackathon. It also achieved Top 9 Finalist of MHRD-SAMADHAN among 2000 candidates with government and private industries expressin their interest in the product.

Optimal Usage of Resources

The disruptive economic impact of pandemic led to limitations in fun allocations from MHRD. It was thus decided to utilize the funds under categories that do not fall under the section like civil modifications, repairs, extension works and arranging for online softwares/resources. Project proposals, Research and Awareness among faculty on COVID-19

NITT submitted proposals on the prevention, detection and modeling of the nature of the pandemic in the early phase of the pandemic. The proposals submitted to MHRD included PPE care, Testing Kit, Sanitization, Surveillance, Robotics, and Data analytics. It accounted for the maximum number of submissions among several institutes.

Project Proposals

A cost-effective reusable antiviral, antibacterial and antifungal mask was developed and recognized as one of the best nine ideas related to COVID-19 by MHRD in 2020. It received several honors on the national and international stage.

FDPs and STTPs

The institute continues to submit proposals and many FDPs and Short term courses are happening which focus on preparing the faculty for facing the challenges by the new education normal.

NITT Benevolent Fund

Facing a genuinely unprecedented situation and with lockdown measures being put in place, a committee was constituted and initiated for fundraising to protect the people whose livelihood has been shattered by the pandemic. The committee meets periodically to review the situation and sponsors assistance to the people around the NITT campus.

The responses as a scientific community

Academic Activities

Post the New Normal being established, institute resumed all the academic activities in online mode. Conferences, Regular classes, Research activities, even convocation continued in NITT as faculties and students successfully and quickly adapted to the online education system.

STUDENTS

IEEE ONLINE WORKSHOP ON CLOUD COMPUTING AND BIG DATA

IEEE Student Branch and IEEE Computer Society Chapter in association with Robosol – For a Cause organized five-day online workshop on Cloud Computing and Big Data during 17th – 21st May 2021. With five sessions organised, the workshop received an enthusiastic participation of 45 individuals.

Mr. Vivek Yadav, Senior Researcher & Developer, Robosol – For a Cause, attended as the speaker for the first session and highlighted the need for the workshop on cloud computing, especially in today's digital era. The architecture of various cloud computing services and their elementary functions was discussed in the first session.

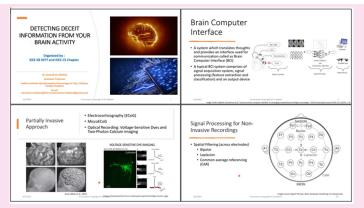
The second session witnessed engaging discussions on the evolution of Big Data alongside Amazon EMR. Colaboratory or Colab – an application used to write and execute Python Codes was introduced and taught. The two consecutive sessions that followed dealt with exploring AWS management Console and exhibiting its billing and cost management services. The final session elucidated Scaling techniques followed by a demonstration of additional configuration settings.

Dr. M. P. Selvan, Counsellor, IEEE SB NITT, addressed the participants in the valedictory ceremony held in the last session. He assured the IEEE committee's will to continue hosting such workshops in relevance to the rapidly changing technological scenario.

INTERNATIONAL YOGA DAY



IEEE STUDENT BRANCH – TECHNICAL TALK BY DR. ANNUSHREE BABLANI



The IEEE Student Branch of NIT-Tiruchirappalli in association with the IEEE Computer Society chapter organized a technical talk via WebEx Meetings on "Detecting Deceit Information from your Brain Activity" by Dr. Annushree Bablani, Assistant Professor, IIIT Sri City, Chittoor, Andhra Pradesh.

Dr. Bablani covered several relevant topics like brain computer interface and its applications, invasive & noninvasive methods for brain signal acquisition, signal processing, scope for classification and regression, deceit information test, and EEG data classification. The session was attended by UG & PG students, PhD scholars and faculties from all over the country.

On the Occasion of International Yoga Day, the Department of Physical Education under the section of Office of Dean Students Welfare organized a workshop on Yoga – A tool to manumit the sufferings on 19th June 2021. The objective of the workshop was to enlighten the knowledge of Yoga and methods to achieve mental, physical and spiritual health through Yogic exercise.

Dr Selvalakshmi, HOD (I/C) Department of Yoga Tamil Nadu Sports University helped organize the workshop in an online setting. The event was held in accordance to theme of "Be with Yoga Be at Home" as precedented by the Ministry of Ayush and saw an engaging participation of students and faculty.

Over 700 students collectively performed different asanas and highlighted its benefits.

ACTIVITIES OF STUDENTS' TECH-COUNCIL

On the occasion of the Pride Month, the Technical Council, along with the Students' Council and all the Technomanagerial clubs of NIT-T took public undertaking to against discrimination on the basis of their Gender Identity or Sexual Orientation, and to create a safe, supportive and inclusive student community.

The Technical Council, in association with the Students' Council and the Ph.D Scholars began an initiative to educate and guide the UG and PG students on the basics of going about with research, through the Ph.D Scholars' personal experiences.

TAMIL MANDRAM – NITTILAM 2021

NITTilam, Tamil Mandram's bi-annual magazine which aims to engage the students diversely with poetry, a wide variety of articles covering Tamil literature, technology and cinema, stories, crosswords, reviews and much more. NITTilam 2021 magazine was released in the presence of Poet Vivek Bharathi on 31st May 2021. Along with the works of the members of Tamil Mandram, the magazine accommodated 8 writeups from our college students as well.

With regard to online presence, a total of 14 posts and 2 riddles were published in Tamil Mandram's social media handles during May-June. Along with these, the first part of the interview with Actor Abdool lee was uploaded on our Youtube channel on 26th June

Tamil Mandram has also created its own blog, so readers can enjoy intriguing topics. The blog allows room for creative freedom with no restrictions such as word limits or images.

https://tamilmandram.home.blog/

தேசிய தொழில்நுட்பக் கழக<mark>ம், இருச்சி</mark> 1.1 தமிழ் மன்றம் வழங்கும் 苗胡用前 2021 இதழ் வெளியீட்டு விழா ŝ ளியிடுபவ कतीकां तीकिकं प्रायमी நாள் m 31/05/2021 (島ங்கள்) நோம் காலை 11-12 தளம் Zoom கமிழமுகம் பருக அன்<mark>போடு</mark> வா<mark>வேற்கிறே</mark>

ANIMAL WELFARE CLUB





Whether distributing waste food from mess to dogs, providing medicines to the animals in need, or just observing birds and squirrels, animal lovers were always present on our campus, few in every batch but strong enough to cover the whole campus.

Things changed when the pandemic hit and only a few individuals were present on campus. As a result, there was a severe food shortage for almost all the animals on campus. Animal lovers who stayed back on campus tried their best to meet the food shortage with mess waste food and the supplies received from Blue Cross Trichy. Being confined to their hostels and inside the campus, people joined the initiative as they were now closer to nature and made new friends with the animals of the campus.

Finally, this year, efforts of setting up an official club for Animals Welfare Club were materialized. Now, the club has various members from UG and PG students to even PhD Scholars. Club members often prepared food for the animals on their own with 2K market providing necessary supplies such as egg and rice. In addition, club members also bought fresh supplies of medicine and first aid to help maintain the wellbeing of canines.

AKSHARA - ENVIRONMENT DAY

A literature-based event where participants had to submit a poem/content/blog on topics related to the environment was conducted by Akshara as part of the environment day celebration. 20 people participated and top 2 winners were selected. The winners' contents were posted in social media handles.

NITTSAC ACTIVITIES

Synapse Webinar #2 - Career in Sports with Harish Balachandran

NITTSAC in association with Sports Council organized the second webinar from the Synapse series on the theme 'Career opportunities in Sports' featuring Mr. Harish Balachandran, an alumnus of the 2008 batch of the Department of Electrical and Electronics Engineering.

Mr. Balachandran is also the founder of HarrysFMS, a brand that aims to help people build long-term eating and training habits to take control of their health and fitness journey. He is a Certified Physical Trainer from the National Academy of Sports Medicine (NASM - CPT) who guides people in their fitness journeys that using flexible and sustainable practises.

He quotes, "Fitness, training, and nutrition should be pursued joyfully as a life-long journey for physical, mental and social well-being." The motive of the webinar was to help students find opportunities and careers in the fields of sports and fitness. The webinar was streamed live on YouTube on May 1st.

ZeNITTh Alumni Spotlight

ZeNITTh – 'Know your Alumni Series' is a weekly series of blog posts intended to recognize our esteemed Alumni in various capacities. In this spring break, we at NITTSAC recognised the established journeys of 5 Alumni members.

- Vivek Ravishankar : Co-Founder & CEO of HackerRank (CS'08), YAA 2016
- Dr. KR Sridhar : CEO & Co-Founder of Bloom Energy (Mech'82), DAA 2008
- Anantha Radhakrishnan : MD & CEO Infosys BPM (Mech'88), DAA 2019
- Dr. Venkatesh Prasad : Senior Technical Leader Corporate Strategy Ford Motors (ECE'80), DAA 2016
- Dr. Palanivel Thiagarajan : Minister of Finance and Human Resources Management, Tamil Nadu (Chemical' 87).

Head over to our institute's official pages across LinkedIn, Facebook and Instagram to read their inspirational narratives.

INTERNSHIP DRIVE

NITTSAC continued to organize one of its well-known initiatives where alumnus working in prestigious positions of various companies and start-ups help establish internship opportunities. With the help of our resourceful alumni community, we were able to bring opportunities for our students from 5+ companies like Shiroi Energy, FXGETACTIVE, NTU Singapore, etc. They hope to bring in a lot more endeavours to benefit our students in these trying times.

WIN-NITT MENTORSHIP CONNECT

Women Inclusivity Network of NIT Trichy are organising a 3month mentorship program for female students of NIT Trichy to seek assistance in taking significant decisions regarding their career. They are reaching out to female alumni who are passionate about sharing their knowledge and experiences with their juniors. It is believed that their mentorship has the potential to guide young minds in the right direction.

50 UNIQUE PHYSICS PROBLEMS - S. NISHANTH VIKRAMAN

S. Nishant Vikraman, a second-year undergraduate from the Department of Mechanical Engineering authored '50 Unique Physics Problems' - a book of physics problems based on advanced high school level physics courses. The book is available exclusively on Amazon stores as an e-book. The illustrations and cover page of the book is designed by fellow students: Manasa Muthukumar , Rohit Chari , Rithika S , and Yuvaraja T. We take immense pride in the concerted efforts of all the students and wish to see more such endeavours.

50 UNIQUE

PHYSICS PROBLEMS

ALUMNI



DR. PALANIVEL THIYAGARAJAN

PTR Palanivel Thiagarajan, the MLA who had graduated from REC Tiruchirappalli in 1987 with a degree in Chemical Engineering, is now set to become the new Minister of Finance and Human Resources Tamil Nadu. With an education from multiple universities and exposure to industry in his period with Lehman Brothers and Standard Chartered Bank, Palanivel Thiagarajan is distinctly worthy of this new stage in his career. We wish him the best in his new role, and expect to see him continue his long list of achievements.

MR. T V NARENDRAN

Mr T V Narendran, an alumnus of 1986 batch from the Department of Mechanical Engineering has been elected as the President of Confederation of Indian Industry (CII) for 2021-22. He is currently the CEO and Managing Director of Tata Steel and has a plethora of experience supplemented by his active engagement with CII at the state and national level.

NIT Tiruchirappalli takes immense pride in his achievement and wishes him well for his success and for the conducive development of the country.



ACHIEVEMENTS



MR. SREE KUMAR NAIR

Sree Kumar Nair, our alumnus of 1986 batch from the Department of Electronics & Communication Engineering has been promoted to the higher ranks of a Vice Admiral of the Indian Navy. On promotion to the rank of Vice Admiral in June 2021, the technical officer has taken over as the Director General Naval Projects (DNGP) at Vishakhapatnam. Vice Admiral Sree Kumar Nair has also been awarded with the Distinguished Alumnus for Excellence in Public Administration in 2019. NIT Tiruchirappalli takes immense pride in his accomplishment and wishes him success in all his endeavours.

DR. JAYASREE SETH

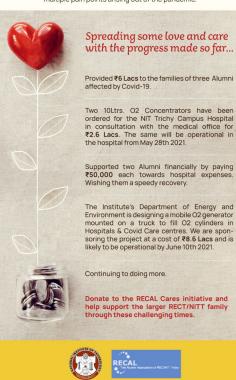
Jayshree Seth, an alumnus of Chemical Department from the batch of 1989; currently Scientist at 3M and also the company's first-ever Chief Science Advocate recently featured in a docuseries on females in the field of STEM. The DAA recipient with 72 patents to her name is an inspiration on breaking stereotypes, defying gender inequity and revolutionizing the next-gen of women STEM leaders.

NIT Tiruchirappalli is elated on her success and with the establishment of Women Inclusivity Network earlier this year, we hope to see many more young women realize their passion in STEM.



RECAL CARES

RECAL CARES is an initiative launched by RECAL, The Alumni Association of REC/NIT Trichy, to address multiple pain points arising out of the pandemic.



COVID CALL CENTRE

NITT Entrepreneurs group set up a COVID helpline to offer support to those in need. The service is open for critical COVID cases, including NITT alumni, their families and friends. All cases were referred by NIT Tiruchirappalli alumni through a Google form.

In addition, City Champions (NITT alumni volunteers) from various cities volunteered to help update valid information and augment the data available with the Call Centre and to assist on a case-to-case basis.

RECAL CARES

RECAL CARES is an initiative launched by RECAL, The Alumni Association of REC/NIT Trichy, to address multiple pain-points arising out of the pandemic. As a rapid response, RECAL is started with three specific initiatives:

1) Critical-care support of ₹50,000 for hospitalization of an un/under-insured alumnus based on recommendation from the batch.

2) Ex-gratia up to ₹2,00,000 for the deceased needy alumnus s.t maximum 25% of the batch's own contribution to the deceased alumnus

3) Campus Infrastructure-support: Oxygen concentrators, Funding Oxygen generation plant for NIT hospital, Need based support for impacted students with their tuitionfees, Campus neighbourhood support, Emergency requirements of our college staff.



Tested +ve? We are here to help Save PRECIOUS time in searching for resources*

We gather your requirement(s)
We check with multiple vendors
Once we confirm the availability, we provide you access to resources

We help reduce your resource hunting calls and save time

An initiative by NITT Entrepreneurs 180+ Families helped so far (across India) * Like ICU beds, Medicines, 02 cylinders / concentrators etc

SEND YOUR REQUEST BY FILLING THIS SHORT FORM (NO CALLS): https://bit.ly/2T4ABdf 96 864 50 748





COVID ASSISTANCE

RECAL has provided the Institute Hospital with four 10 L oxygen concentrators and they will be put to use for the campus residents and neighbourhood. Upholding the motto of 'Mission to Serve', RECAL Cares has so far serviced 130+ requests from 20 cities across 7 states and has also launched initiatives to financially support alumni, staff and students affected by the pandemic.

For any COVID+ patient PAN India (24 x 7 support)

With the generous funding by alumni from around the world, RECAL is collaborating with the Department of Energy & Environment for the development and fabrication of a mobile O2 Generator. NIT-Tiruchirappalli is proud of RECAL's services in these trying times and thanks them for their unyielding assistance. Mr. B. N. Manohar, an alumnus of ECE Department 1977 batch and CEO of Stempeutics: an Indian stem cell company, tied up with the global consortium of stem cell companies for supplying clinical-grade Mesenchymal Stem Cells (MSCs), a potent drug used for making and repairing skeletal tissues for end-stage coronavirus patients. Admiral Superintendent Sreekumar Nair, an alumnus of ECE Department 1986 batch and his team from Naval Dockyard Visakhapatnam, designed an innovative "portable multi-feed oxygen manifold (MOM)" using a six-way radial header fitted to a single cylinder. It is being used to cater to the oxygen supply demands for hospital facilities.

Mr. RB Ramesh, an alumnus of Mechanical Department 1991 batch, founder of The New Trust Life in Chennai, has initiated providing groceries to daily wage artisans, civil workers, migrant laborers, tribals and people with leprosy. Water affected bottles and biscuits are also being provided to police personnel in the district of Chengalpet, Tamil Nadu.

Mr. S.K. Ramesh, an alumnus of ECE Department 1981 batch, currently Director of the AIMS2 program at CSU Northridge, with help from a faculty member from the program helped manufacture PPE for responders and front-line workers in Los Angeles.

Ms. Sapna Behar, an alumnus of EEE Department 1990 batch, currently Director and Founder of IcarusNova, partnered with Life Signals to design and prototype Biosensor Based Wireless Patches meant for the continuous monitoring of patients undergoing quarantine. It is also being fast-tracked for launch in the US markets. Mr. Surya Sankar, an alumnus of EEE Department 2010 batch, working as the VP of Engineering-Software Division Printo group of companies, used their production units to prepare safety equipment like face gears, masks and gloves. This equipment is packed in safety kits and sold at nominal costs to governmental and non-governmental organizations.

Ms. Archana Hari, an alumnus of Production Department 2003 batch, initiated fund collection among the community of Zone 13 to contribute to the street workers protecting the region of Adyar and nearby Chennai.

A Few Early Initiatives by Alumni (2020)

Mr. Madhumohan Sreeram, an alumnus of Chemical Department 1982 batch, currently the Chief Innovation Officer of Dulsco designed a system for mass disinfection of the community at large as a measure to combat and arrest the spread of COVID -19 for the municipality of Dubai.

K.R Sridhar, an alumnus of Mechanical Department 1982 batch, founder of Bloom Energy in California, had taken the call on refurbishing around 1000 broken ventilators and has supported the medical system by partnering with Stanford Health Care.

Mr. Richard Sekar, an alumnus of Production Department 1983 batch, contributed to a report on building Make Shift Tent Hospital with 20 beds in 4 hours at the cost of about \$4200 or roughly ₹3 Lakhs. He has also mobilized the local community to stitch facial masks and has donated 370+ facial cloth masks to hospitals in the Bay Area, US.

This is only a fraction of the numerous initiatives undertaken by our alumni in 2020 that has been recorded so far. Further contributions have been made and other humanitarian initiatives have been undertaken subsequently. They will be duly published in coming issues of the newsletter as and when we receive more information.

ALUMNICAST SERIES

DR. MADHUMITHA RAM

As a part of the RECAL Positivity Series, an interactive session was organised with Dr Madhumitha Ram, a specialist in infectious diseases at the Capstone Clinic. The event was held on May 22nd over Zoom encouraging a dialogue on infection prevention and precautionary measures against COVID-19.



MR. SEETHA NARAYANAN

RECAL Cares – Positivity Series, held another interactive session with Mr. Seetha Narayanan, Senior Principal Scientist at Adobe along with Dr. Mini Shaji Thomas

Mr. Seetha Narayana, an alumnus of the 1984 batch, is the largest donor to the RECAL CARES initiative with a generous contribution of USD 25000. Mr. Seetha came forward to match the contributions made by our USA Alumni from May 21st to May 31st subject to a maximum of US 25,000, increasing his total contribution to USD 50,000.

The event was held on May 30th over Zoom opening a dialogue on the beginning and evolution of Adobe Photoshop and the spirit of extending support to our Alma Mater. The discussion was moderated by Mr. Raja Renganathan, President, USA Chapter and Mr. Ravi Viswanathan, CEO, TVS Supply Chain Solutions.

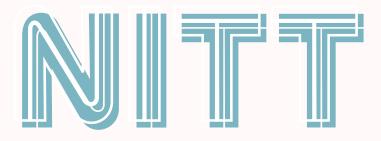
MS.VIJAYA KALYAN

In the midst of these stressful times, proper exercise is vital for the equilibrium of the body and mind. Our breath connects the body to our mind and holds the answer to a stress-free and positive life. Mrs. Vijaya Kalyan, an internationally certified yoga teacher and alumni of 1989 CSE batch organized - 'Pranayam for Lung Health' on 16 May 2021, 5 PM IST. The session included a Q&A discussion for intriguing minds.



Feedback: newsletter@nitt.edu

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