



# MANIPAL INSTITUTE OF TECHNOLOGY MANIPAL

A constituent unit of MAHE, Manipal

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

# NEWS SPARK

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A Half-yearly E-newsletter of the Department of Electrical and Electronics Engineering

### MESSAGE FROM EDITOR

#### Warm Greetings!

COVID-19 virus has disrupted our lives in more ways than we can imagine. This is an unprecedented and challenging time for everyone. But I am hopeful that with grit and resilience we shall be able to find creative solutions to the problems posed by the pandemic.

I appreciate all the students, faculty and other staff members of the department for adjusting to the new norms and actively participating in the educational and research-related activities amidst the pandemic.

Hopefully, this pandemic will get over soon and we shall get back to normal.

Wishing you all a great academic year ahead.

- **Dr. Chandrika B. K**

#### Chairperson

Dr. C. S. Adiga

#### Editor

Dr. Chandrika B. K

#### Editorial Team

- Ms. Sowmya R
- Mr. Satyakam
- Mr. Vipin V
- Mr. Anandh N
- Mr. Rohith Kumar

### DEPARTMENT ACTIVITIES

#### INAUGURATION OF EEE DEPARTMENT OFFICE

The department office has shifted from Academic Block-1 ground floor to the first floor. It was inaugurated by Dr. Srikanth Rao (Director, MIT Manipal), Dr. B. H. V. Pai (Joint director, MIT Manipal) and Dr. Chandrashekara S. Adiga (HOD, EEE department) on 20<sup>th</sup> March 2020. Prior to inauguration, pooja was offered to the almighty by Mr. Sooryanarayana Adiga.



**Mr. Shantharam Samanth**, Deputy Engineer (Lab), retired on 31<sup>st</sup> March 2020 after serving the department for 39 years. During his long association with the department, he was wholeheartedly involved in all department activities. His immense interest in tutoring students in electrical machinery laboratory is commendable. Also, he has taught several batches of vocational course students in Electrical wiring stream. Before joining the department, he has served in the telephone department and workshop. The department of EEE wishes him a happy and healthy retired life.

#### ACADEMIC AUDIT

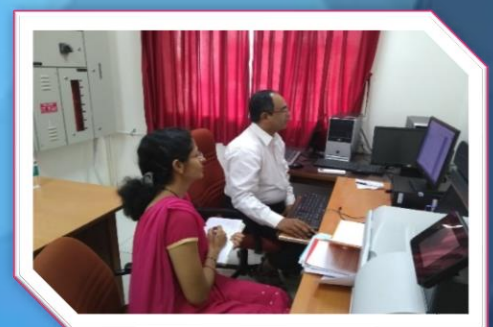
✦ Dr. Narendranath Udupa, Managing Director, MEClick & Energy Consultant, Bengaluru, visited the department for academic audit on the course structure and syllabus on 10<sup>th</sup> & 11<sup>th</sup> February 2020.

✦ Dr. Laxminidhi, Professor and Head, Department of ECE, NITK, Surathkal, visited the department for academic audit on the course structure and syllabus on 21<sup>st</sup> & 22<sup>nd</sup> February 2020.

✦ Dr. Jora M. Gonda, Associate Professor, Department of EEE, NITK, Surathkal, visited the department for academic audit on the course structure and syllabus on 28<sup>th</sup> February 2020.



Academic audit by Dr. Narendranath Udupa



Academic audit by Dr. Jora M. Gonda

## GUEST LECTURES

- Dr Udaya Kumar, Professor, Department of Electrical Engineering, Indian Institute of Science, Bangalore has visited the department on 22nd February 2020 and delivered a guest talk on "Omnipresence and Applications of Electromagnetism".



Guest talk by Dr. Udaya Kumar

- The department organized a guest lecture on "Payments as an Industry" by Priyanka Sarkar, Manager Product Delivery, Mastercard, Asia Pacific on 20th January 2020.



Guest talk by Priyanka Sarkar

## CAREER GUIDANCE FOR UG STUDENTS

- The department organized a guest lecture on "Semiconductor Technologies – Knowledge requirement for an engineer" by Kushal Kamal, an Alumni of the dept on 20<sup>th</sup> January 2020



Guest talk by Kushal Kamal

## STUDENT ACTIVITIES

IE E & E Students Chapter organized a Solar rooftop visit of AB-5 building of the institute on 16<sup>th</sup> January 2020 for 2<sup>nd</sup> year E & E students. The students and faculty members observed the modules connected in series and parallel to

make up the panels and discussed panel efficiency in varying test conditions. Also, they have seen the 2500kVA, 11kV/415V step-down transformers and diesel generators present in the MIT powerhouse.



IE E & E Students Chapter organized a field trip to Sharavathi Generating station (KPCL) on 29th February 2020 for 2<sup>nd</sup> and 3<sup>rd</sup> year E & E students. The students and faculty members witnessed the Sharavathi Generating Station with its 10 Units has an installed capacity of 1035 MW and the Linganamakki Dam power house with 2 units has an installed capacity of 55 MW. To further tap the potential of the Sharavathi river, KPCL has installed at the Gerusoppa Dam Project, four generating units of 60 MW each, totaling to 240 MW.



## FACULTY ACHIEVEMENTS



**Dr. H. V. Gururaj Rao** has been awarded a doctoral degree by Visvesvaraya Technological University, for the thesis titled "Deyection and Classification of Faults in Power System Incorporating facts Devices for Stability Enhancement ". The research work was carried out under the guidance of under the guidance of Dr. Nagesh Prabhu, NMAMIT, Nitte.



**Dr. R. C. Mala** has been awarded a doctoral degree by Visvesvaraya Technological University, for her thesis titled "Analysis and Control of Bifurcations in Power System with FACTS Controllers". The research work was carried out under the guidance of under the supervision of Dr. Nagesh Prabhu, NMAMIT, Nitte.





**Dr. Bindu S.** has been awarded a doctoral degree by MAHE, Manipal, for her thesis titled "Characterisation of Three Phase Squirrel Cage Induction Motor Faults Through Asymmetric Machine Modelling" under the guidance of Dr. Vinod V. Thomas.

## FACULTY PUBLICATIONS

The faculty members have published 17 research papers in various SCOPUS and Web of Science indexed journals and presented 8 research papers in various international conferences from January to June 2020

## BOOK CHAPTERS

The faculty members have published 5 book chapters with reputed publishers from January to June 2020.

## STUDENT ACHIEVEMENTS

### FIRST PLACE IN TAPMI QOTB 2020

Ashwin Thakur (EEE) and Rahul Vishal Mishra (CSE) have won first place in the Manipal edition of the TAPMI 'Quiz on The Beach' competition held on 19th January 2020. They also represented the institute in the grand finale of 17th edition of the flagship quizzing event.

### MIT STUDENTS BAG SECOND PRIZE AT CODE19 ONLINE HACKATHON AGAINST COVID-19

A student team comprising of Jithin Sunny (EEE), Rohan Rout (EEE), Megha Baid (CSE), Shivangi Shukla (CSE), Rakshit Naidu (CSE), and Joel Jogy George (E&C) secured the second prize of \$5000 in the Code19 Hackathon

conducted by Silicon-Valley based Motwani Jadeja Foundation and HackerEarth. The team's solution, 'Televital', enables remote monitoring of vitals and will make hospital admissions more efficient, reducing the burden on medical staff and equipment.

## STUDENT PUBLICATIONS

- ✚ Sudheendra H R, M.Tech in power electronics and drives presented a paper titled "Latest Trends in PMU Placement Techniques", at International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control organized by GLA University, held at Mathura in February, 2020.
- ✚ Vickey Vardwaj and Vishakha, M.Tech in power electronics and drives presented a paper titled "Various Methods Used for Battery Balancing in Electric Vehicles: A Comprehensive Review", at International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control organized by GLA University, held at Mathura in February, 2020.
- ✚ Vishakha and Vickey Vardwaj, M.Tech in power electronics and drives presented a paper titled "Review of Optimization Techniques for Hybrid Wind PV-ESS System", at International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control organized by GLA University, held at Mathura in February, 2020.
- ✚ Kota Uday, BTech in electrical and electronics engineering presented a paper titled "Automatic sensing and switching the water pump: A new approach", at International Conference on intelligent computing and control systems, held at Vaigai college of engineering, Madurai in May, 2020.

