Message from the HoD
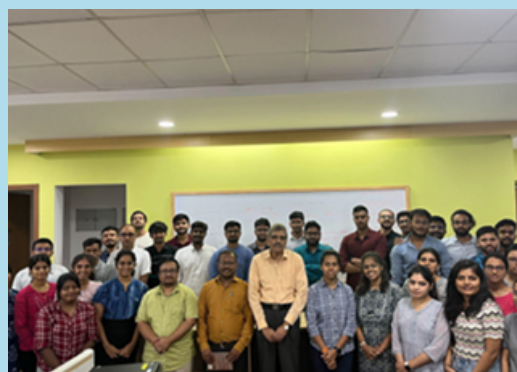
It is a matter of immense pleasure that the department of Electronics and Communication Engineering has come up with Volume 6, Issue 1 of the newsletter for the year 2024. I take this occasion to congratulate all my staff, students, and faculty in meeting academic and research targets of the department for this year. This year, our both UG (ECE) and two PG programs (MTech DEC and Microelectronics) received accreditation from IET, United Kingdom. The department has also established academic and research collaborations with industries. I trust that this issue of the newsletter covers all the events and activities of students, faculty, staff. With an extensive and treasured record of successes in academics, our ECE department continues to grow with pride and good reputation. I applaud the editorial team and all the members of the department of ECE.

Dr. Kumara shama

Department Activities

Cadence EDA Workshop

Three-days hands-on workshop on Cadence EDA tool was organized by the department from 16th to 18th August 2023 and is held in PG Lab, ECE department, MIT, Manipal. The resource person Mr. Navaneethakrishnan Veerachamy, from Entuple Technologies Pvt. Ltd, Bangalore, gave elaborate theory and hands-on sessions in physical mode. The topics covered in workshop include EDA tools and design flow, hands-on session on Genus, Innovus, and Virtuoso.

Latex Workshop

Department of Electronics and Communication in association with IEEE SPS Chapter of IEEE SBM, Manipal has organized a workshop "Hands-On Latex" on 9th November 2023. The resource person Dr. Vikas R Bhat, Assistant Professor, Department of Biomedical Engineering has conducted the sessions and gave practical details on document formatting, figures and graphics handling, bibliography and citation writing.

Academic Audit

Department has undergone academic audit for UG program by Dr. M.S. Bhat, Professor, Department of ECE, NITK, Surathkal on 06th October 2023.

Academic audit for PG program has been carried-out by Dr. Laxminidhi T, Professor, Department of ECE, NITK, Surathkal on 07th October 2023.

Award of 5G Use-case Lab

In "India Mobile Congress 2023" held on 27th October 2023, the Honourable prime minister of India has declared recipients of "5G use-case labs". Manipal Institute of Technology is one of the recipients of the prestigious award and the department of ECE has privilege of putting forward the proposal for the 5G lab.

Technical Publications

Faculty members and students of the department have published 39 technical articles in various reputed Scopus indexed journals during the period from July to December 2023. Also, there are 22 conference paper presentations and 4 book chapter publications by the department faculty and students in this period.

Alumni Visit

Mr. Chandrakanth Shenoy of 1998-2002 batch, B.Tech. ECE visited the department on 20th July 2023.

Mr. Chandrakanth Shenoy is presently working as Telephony Program Manager at Standford Health Care, San Francisco, CA, USA. He has addressed the newly joined ECE department students during orientation program held at ECE Department Foyer, MIT on 20th July 2023.

Talk by Dr. B. Satyanarayana

Department of Electronics and Communication Engineering has organized a technical talk on "Exciting modern physics experiments: Challenging detector and instrumentation technologies" by Dr. B. Satyanarayana, Scientific Officer (H) and the Coordinator of India-based Neutrino Observatory Project, Department of High Energy Physics, TIFR. The talk has been organized on 5th December 2023 at Hampi Hall, Academic Block-2, MIT, Manipal. Dr. Satyanarayana is a visiting Professor at the Applied Science Department of the American College, Madurai and was an AICTE-INAE Distinguished visiting Professor at the Symbiosis Institute of Technology, Pune. His areas of interest include 'Detectors and Instrumentation for high energy and nuclear physics experiments'.

The talk is aimed to introduce some of the world's largest science projects in operation or under construction and highlight the Indian technology contributions for these. The challenging opportunities for the young engineers have been particularly emphasised.

Talk by Mr. Lax Madapaty

Guest talk and interactive session by **Mr. Lax Madapaty**.

A guest talk and an interactive session held in the department on 12th October 2024 by Mr. Lax Madapaty, a marketing executive at JP Morgan Chase and alumnus of MIT, Manipal, Department of ECE, graduated in 1992. Mr. Madapaty did his MS in Electronics from Rutgers and worked in Bell laboratories, pursued MBA from North-western University-Kellogg School of Management. Mr. Madapaty has more than 30 years of experience in marketing industry with various roles at Microsoft, Google, and Tech start-ups.

Talk by Dr. Suryansh Dongre

Online Talk by **Dr. Suryansh Dongre** on 01st August 2023.

Talk by Dr. Suryansh Dongre, Research Associate at Physical Research Laboratory, Department of Space, government of India, Ahmadabad, India. Presentation given on the topic "Device Fabrication and Characterization of Quantum Dot Photodetectors" on 01st August 2023 at 10AM in online mode.

Talk by Mr. S Rajesh

Office of Student Welfare and Department of Electronics and Communication Engineering jointly organized guest talk entitled "Unleash the Potential of True 5G in the Digital Era" on the transformative potential of 5G. The talk has been delivered by Mr. S Rajesh from State Business Head, Jio Karnataka on 13th Sept 2023 at Library Auditorium, MIT.

Faculty Achievements

Dr. Om Prakash Kumar has successfully defended his doctoral thesis entitled "Modelling of Ultrawideband with Reconfigurable Band Notch Characteristics" for the award of PhD degree by the Manipal Academy of Higher Education on 27th December 2023. The research work has been guided by Dr. Promod Kumar, Professor, Department of Electronics and Communication Engineering, MIT, Manipal and Co-guided by Dr. Tanweer Ali, Associate Professor, Department of Electronics and Communication Engineering, MIT, Manipal.

International Recognition

Dr. Tanweer Ali has been recognized as scientists ranked in top 2 percentile by c-score in his sub-field and it is a testament to his exceptional skill. The rank list has been released by Elsevier data repository on 4th October 2023. The impact made by him is not only within the MAHE community but also in the broader academic world.

Best Paper Award

Ms Divya B, Assistant Professor-senior scale, Department of ECE has been honoured with the Best Paper Presenter Award for the research titled "Deep Spatial U-Net for Efficient and Reliable Automatic Segmentation of Cardiac Structures" at the Interdisciplinary Conference on healthcare and Technical Research (ICHTR-2023). The conference was organized by MAHE-SRF and held at the Manipal Academy of Higher Education (MAHE), Bengaluru campus on November 6th and 7th, 2023.

PhD Awards

Dr. Shashikumar G S has successfully defended his doctoral thesis entitled "Machine Learning Approach for Classification of Human Emotions based on Valance-Arousal Model and Electroencephalogram" for the award of PhD degree by the Manipal Academy of Higher Education on 04th September 2023. The research work has been guided by Dr. Niranjana Sampathila, Additional Professor, Department of Biomedical Engineering, MIT, Manipal.

Dr. Muralikrishna H has successfully defended his doctoral thesis entitled "Improving the Robustness of Spoken Language Identification Systems to Real-world Conditions" for the award of PhD degree by the School of Computing and electrical Engineering at Indian Institute of Mandi, on 8th September 2023. The research work was guided by Dr. Dileep A D, Associate Professor, School of Computing and Electrical Engineering, IIT Mandi.

Student Achievements

Mr. Ashutosh Jha, studying in 5th semester B.Tech. in the Department of Electronics and Communication Engineering, has bagged the First Prize during July 2023 for the best project in Intel Unnati Industrial Training- Summer 2023. Ashutosh received a Cash Award of Rs.30,000/-. He worked on the project titled "Conquering Fashion MNIST with CNNs using Computer Vision". He worked under the mentorship of Dr. Anu Shaju Areeckal, Department of Electronics and Communication Engineering. The Intel Unnati Industrial Training- Summer 2023 is a National level training program, with about 2000 student participants working on the real-time projects on AI.