



Celebrating 50 Years of Excellence

## January 2021 Newsletter

# Symbiosis Institute of Technology, Pune

## Electronics and Telecommunication Engineering Department

### Department Vision:

To emerge as a leading source for Electronics and Telecommunication engineering, fostering globally proficient engineers to meet the demands of evolving industry and society.

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### Department Mission:

- **M1:** Foster collaboration with industry to facilitate the acquisition of cutting-edge technologies and contribute to the generation of up-to-date knowledge, enhancing employability and sustainability.
  - **M2:** Encourage innovation, research, and development, creating an environment conducive to higher education, entrepreneurship, and lifelong learning.
  - **M3:** Cultivate leadership qualities infused with social and ethical values, providing a platform for their development.
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### Program Educational Objectives (PEOs):

- **PEO1:** Graduates will possess a strong foundation in science and engineering fundamentals, along with analytical skills to effectively solve real-world problems.
- **PEO2:** Graduates will gain technical proficiency in Electronics and Telecommunication fields and scale new heights in profession through lifelong learning.
- **PEO3:** Graduates will embrace professionalism, ethical conduct at all levels and constantly evolve in a multidisciplinary approach leading towards sustainability.
- **PEO4:** Graduates will leverage their engineering knowledge, effective communication skills, leadership qualities, and teamwork spirit to serve society and contribute positively to their community.

### Guest lectures organized:

- The guest speaker **Mr Amey Uday Chingale**, Director at MavenTech has delivered a comprehensive lecture on Role of Renewable Energy (Solar PV and Wind) in development of Smart Cities on 3<sup>rd</sup> March 2021 for the benefit of B. Tech students.
- The guest speaker **Vikramsinh Kadam**, Co-Founder & CEO at Deep Brain Labs has delivered a comprehensive lecture on Applications of AI on 11<sup>th</sup> March 2021 for the benefit of M. Tech students.
- The guest speaker **Mr. Pranav Lad**, Customer Success Engineer working at Mathwork, India has delivered a comprehensive lecture on MATLAB & Simulink on 23<sup>rd</sup> March 2021 for the benefit of B. Tech students.

### Value added course:

- A value added course on **“Introduction to Printed Circuit Board (PCB) Design software”** has been introduced for the benefit of B. tech students. The objective of this course is to provide knowledge on PCB on single side copper layer and online hands-on practice session on steps to build PCB design using software. The course consists of 30 hours of theory and practical sessions. The coordinators for the event were Dr. Paresh Nasikkar.

### Student achievements:

- **Neeraj T** of E&TC department has participated in National virtual design challenge organized on 28<sup>th</sup> March 2021 by Fraternity of Mechanical and Automotive Engineers (FMAE) and have won the first prize.
- **Garvitraj Pandey** of E&TC department has participated in Open Source Contributor competition organized between 8<sup>th</sup> March 2021 to 30<sup>th</sup> May 2021 by Girlsript Summer of Code and have won the competition.
- **Pinakci Kathotia** of E&TC department has participated in Toycathon 2021 organized on 25<sup>th</sup> January 2021 by All India Council for Technical Education (AICTE).
- **Tanya Singh** of E&TC department has participated in Graphic Design Internship organized between 12<sup>th</sup> May 2021 to 11<sup>th</sup> July 2021 by The Fine Fabrics.
- **Garvitraj Pandey** of E&TC department has participated in Hacker rank JAVA Exam organized on 20<sup>th</sup> February 2021 HackerRank and have won the first prize.

### Department publications:

- Javed Sayyad, Paresh Nasikkar, Abhaya Pal Singh and Stepan Ozana, Capacitive Load-Based Smart OTF for High Power Rated SPV Module, *Energies*, 2021, 14(3), 788.
- Sayyad, Javed and Nasikkar, Paresh, Design and Development of Low Cost, Portable, On-Field I-V Curve Tracer Based on Capacitor Loading for High Power Rated Solar Photovoltaic Modules, *IEEE Access*, 2021, 3078532.
- Bhati, Anil; Srivastava, Mansi; Aggarwal, Nitesh; Singh, Hardik; Sayyad, Javed; and Nasikkar, Paresh, Solar Photovoltaic panels utilization to extract clean and green energy for utility application using PVsyst software: A Bibliometric Review, *Library Philosophy and Practice (e-journal)*, 2021, 5719.
- Malik, Viplove; Pavagadhi, Poojan; Pandey, Aman Kumar; Vyas, Saharsh; Sayyad, Javed; and Nasikkar, Paresh, A Bibliometric Review of characterization of outdoor solar PV panel for shading and validation by PV emulator, *Library Philosophy and Practice (e-journal)*, 2021, 5741.
- Shilpa Hudnurkar and Neela Rayavarapy, Bibliometric Review of Monsoon Rainfall Prediction Models: With Special Reference to Use of Artificial Intelligence in Rainfall. *Library Philosophy and Practice (e-journal)* 2021, 5256.
- Aditya Kekre, Ashutosh Desai, Ashwin Sujit, Dhruv Dewett and Shilpa Hudnurkar, Scientific Mapping of Research on Digital Pulmonary Function Test: A Bibliometric Analysis. *Library Philosophy and Practice (e-journal)*, 2021, 5845.
- Vidur Sood, Manobhav Mehta, Vedansh Mishra, Akash Upadhyay, Shilpa Hudnurkar, Shilpa Gite and Neela Rayavarapu, A Bibliometric Survey on the Use of Long Short-Term Memory Networks for Multivariate Time Series Forecasting, *Library Philosophy and Practice (e-journal)*, 2021, 5720.
- Ujwala Kshirsagar, Ayushi Kamboj Ms., Phase locked loop using VLSI Technology: A Bibliometric Survey and Future Research Directions, *Library Philosophy and Practice (e-journal)*, Winter 1-31-2021.
- Ujwala Kshirsagar, Mrinal Bachute, Fabrication of 100nm Nano Pillars on Silicon (2021), *Journal of Nanostructures*, ISSN 2251-7871 DOI 10.22052/JNS.2021.240440.2197.
- Ujwala Kshirsagar, Mrinal Bachute, Low-Cost Health Monitoring Pedometer Using IOT (2021), *Springer Nature*, ISSN: 2190-3018 *Smart Innovation, Systems and Technologies*,
- Priti Shahane, Ujwala Kshirsagar, Performance efficient NoC router Implementation on FPGA (2021), *Springer Conference Proceeding*, ISSN: 2367-3370 *Lecture Notes in Networks and Systems*.
- Saffrine Kingsly, Malathi Kanagasabai, Gulam Nabi Alsath Mohammed, Manimekalai Thirunavukkarasu, Sangeetha Subbaraj, Sandeep Kumar Palaniswamy, Sridhar Bilvam and Indhumathi Kulandhaisamy, Bandwidth reconfigurable microwave filter using stepped impedance c-shaped resonator, *Microwave and Optical Technology Letters*, 2021, 63, 432-436.
- Saffrine Kingsly, Malathi Kanagasabai, M. Gulam Nabi Alsath, Sangeetha Subbaraj, Sandeep Kumar Palaniswamy and Bhuvaneshwari B, Switchable Resonator Based Reconfigurable Bandpass / Bandstop Microstrip Filter, *International Journal of Electronics*, 2021.
- Glenson Toney and Cherry Bhargava, Adaptive Headlamps in Automobile: A Review on the Models, Detection Techniques, and Mathematical Models, *IEEE Access*, 2021, 9, 87462-87474.

## **Few Titbits by our students**

- Having a connected kitchen could save the food and beverage industry as much as 15% annually.
- Today, there are 2468 bot tasks approved to carry out maintenance jobs on more than 52 million English Wikipedia pages.
- Tobacco tars settled on the systems are considered harmful. Hence, Apple can deny servicing the product even if they are in warranty if they believe that the product has come in contact with tobacco smoke.
- A jiffy is an actual measurement of time, referring to the length of one cycle of the computer's system clock – about 10 milliseconds. When used in physics, it stands for the amount of time that it takes light to travel one centimeter.