

Research Activities

- A patent application "Fatigue and Creep Behavior of Abaca-Sisal Natural fiber-reinforced Polymeric Composites" by **Dr. G.B. Bhaskar** was published on 20/10/2023.
- A patent "Design and fabrication of a UV Curing System for Direct Ink Write 3D Printers", by **Dr. V. Mugendiran** has been published on 17/11/2023, and it is under evaluation.
- **Dr. E. Pavithra** submitted a research paper based on the project work by **K. Jaithra, T. Mithuna, Parthasarathi Roy** (7/8 Mechanical Engineering) titled "Innovative Design and Fabrication of Jal-Bot With Advanced Rocker Bogie Mechanism and Gyroscopic Principles." to the 2<sup>nd</sup> International Conference on Sustainable Technologies and Advances in Automation, Aerospace and Robotics (STAAAR-2023) organised by VIT Bhopal in association with South East Technological University (SETU), Ireland. **Dr. C. Arun Prakash** and **Dr. P. Ganesh** are the co-authors of the paper.
- **Dr. E. Pavithra** is working with Metallic Bellows (I) Private Limited for a consultancy work. Initial drawing was received from the industry and the prototype design was cross-verified. The spring was designed and the analysis is under progress.
- **Dr. E. Pavithra** and **Dr. C. Arun Prakash** are working with Dr. Kavitha, AU-KBC for a consultancy work of designing an equipment for enzyme slurry preparation.
- **Dr.S. Sathish** published one Book chapter entitled "Chapter 10 Charging Infrastructure for EVs" in the book The Future of Road Transportation: Electrification and Automation published by CRC Press; DOI: <https://doi.org/10.1201/9781003354901>.
- **Dr. S. Sathish** is selected as a Review Editor on the Editorial Board of Polymeric and Composite Materials (specialty section of Frontiers in Materials).
- **Mr. A. Visagan** communicated the comments to the paper submitted in "Transaction of Farneta" for the paper titled "Multi-Objective Optimization On Single Point Incremental Forming Of Stainless Steel 316L Using Grey Relational Analysis Coupled With Principal Component Analysis". Current status - Accepted for Publication.
- **Mr. A. Visagan** submitted a paper titled "Studies on process optimization of surface properties and forming time for the single point incremental forming of AISI 316L sheets" in Part E: Journal of Process Mechanical Engineering. Current status - in Review.

- Faculty members of Department of Production technology acted as a committee member in Interview Board for January 2023 Ph.D. admission.

### Academic Activities

- **Dr. S. Vijayakumar** arranged Industrial Visit to Mahendira Proving Track on 07.11.2023 for PG Mechatronics and Manufacturing Engineering and accompanied by **Dr. V. Mugendiran** and **Dr. S. Sathish**.
- **Dr. S. Vijayakumar** and **Mr. K. Tamilarasan** arranged one Guest lecture on "Introduction to Interferometry" to 5/8 Mechanical and Production Engineering students on 21.11.2023. Dr. M. Omkumar, Professor and Head, Department of Manufacturing Engineering, CEG campus, Anna University, delivered the lecture.
- Class committee Meeting for 7/8 Production Engineering was held on 3/11/2023 at 10.10 am in the HoD cabin.
- Class committee Meeting for 7/8 Mechanical Engineering was held on 6/11/2023 at 11.30 am in the HoD cabin.
- Class committee Meeting for 5/8 Production Engineering was held on 7/11/2023 at 10.00 am in the HoD cabin.
- Class committee Meeting for 5/8 Mechanical Engineering was held on 7/11/2023 at 03.00 pm in the HoD cabin.
- Class committee Meeting for 1/4 PG Mechatronics and Manufacturing Engineering was held on 28/11/2023 at 10.10 am in the HoD cabin.
- The project works of 7/8 Mechanical Engineering students were displayed in the department library on 21-11-2023 from 10.30 am to 4.30 pm for evaluation by all staff members.

### Departmental Activities

- **Dr. S. Vijayakumar** and **Dr. S. Sathish** was involved in the following RIPE 2024 conference works: Initiation of bank account opening for the conference; Follow-up for website creation; Initiation for book publication
- **Dr. S. Vijayakumar** initiated the service of autocollimator and completed the service on 11-11-2023, 3.00 PM
- **Dr N. Srirangarajalu** and **Mr. N. Arunagiri** were involved in the service and maintenance of ABB robot in Advanced Welding Lab on 15-11-2023 and 16-11-2023. A session on "Fundamentals of ABB Robot programming" was arranged. The session was attended by 22 students and 5 staff members
- **Dr. E. Pavithra** obtained consent from various expert members to act as advisors for RIPE 2024
- **Dr. C. Arun Prakash** registered the Department of Production Technology for ELCOT Purchase



- **Dr. C. Arun Prakash** as Department Alumni coordinator approved Alumni in CARCA portal
- **Mr. R. Mathiyazhagan** assisted **Dr. P. Karthikeyan** and **Dr. C. Arun Prakash** in preparing requirements for Electrical Drives and Actuators laboratory
- **Mr. A. Visagan** is preparing the department magazine for NBA
- **Mr. K. Tamilarasan** recommended 20 books for central library and initiated purchase of 29 books for department library at cost of Rs. 45,446/-
- **Mr. N. Arunagiri** supervised utilization of Ball Milling by students of the Department of Aerospace Engineering
- **Mr. K. Muthukumaran** supervised the installation of Vickers Hardness Machine ( Model: VM 50, Max. Capacity: 50 kgf, at Material Testing Lab, for Rs. 2,12,000/-.
- **Mr. K. Muthukumaran** assisted creation of timetable slot in SEMS for 1/4 PG Manufacturing & Mechatronics, schedule for Nov/Dec 2023 examination and submission of PG exam claim for April/May 2023 examination

### Other Activities

- **Dr. S. Vijayakumar** was the member of Anti Ragging Monitoring Squad - 01.11.2023
- **Dr. S. Vijayakumar** was involved in Chief superintendent preparatory work for Nov/Dec 2023 semester exams. **Dr. G. Kumaresan** and **Dr. V. Mugendiran** are appointed as the Additional Chief Superintendent.
- **Dr. S. Vijayakumar** attended BOS meeting as a Anna University Nominee - Department of Robotics and Automation, Eswari Engineering College -16.11.2023
- **Dr. S. Vijayakumar, Dr. G. Kumaresan, Dr. E. Pavithra, Dr. C. Arun Prakash and Dr. S. Sathish** are members of 17 SDG Sub Committees
- **Dr. S. Vijayakumar, Dr. G. Kumaresan, Dr. E. Pavithra, Dr. C. Arun Prakash and Dr. S. Sathish** are attending MOOC 8 module course.
- **Dr. G. Kumaresan** was involved in the following NSS activities: Inauguration of NSS for first year volunteers on 8-11-2023; On-campus cleaning drive on 22-11-2023; Communal Harmony Campaign Week from 19-11-2023 to 25-11-2023; Walkathon on 25-11-2023; Empowerment in Action-My journey with NSS camp on 29-11-2023
- **Dr. G. Kumaresan and Dr. C. Arun Prakash** participated in the G20 University connect seminar on 15-11-2023.
- **Dr. E. Pavithra** attended review meeting conducted by Planning and Development for proposed MOU with Metallic Bellows (I) Private Limited
- **Dr. C. Arun Prakash** attended Alumni coordinators meeting at CEG campus on 17-11-2023 at 3.00 PM. The director CARCA introduced the salient features of the alumni portal.
- **Dr. C. Arun Prakash** was involved in ACS duty for May/June 2023 semester exams. All exams were completed and the documents were handed over to the DCOE office.
- **Mr. R. Mathiyazhagan** initiated the procedure to resolve earthing related issue for CMM in Testing and Calibration lab and Electrical Drives and Actuators lab
- **Mr. A. Visagan** and **Mr. K. Muthukumaran** attended Six Days Online Faculty Development Program on "Recent Advancements in Materials, Manufacturing and

Technology from 30-10-2023 to 04-11-2023 at Swarnadha college of Engineering and Technology, Dept. of Mechanical Engineering, Andhra Pradesh.

- **Mr. A. Visagan** and **Mr. K. Muthukumaran** attended an online One week FDP on "Driving Industrial Excellence with Modern Mechanical Engineering Innovations" organised by Dept. of Mechanical Engineering, Saveetha Engineering College from 20-11-2023 to 25-11-2023.
- **Dr. M. Manoj** attended ATAL FDP on "Digital Transformation for Smart Factory" conducted by Anna University, Chennai from 30-10-2023 to 03-11-2023.
- **Mr. K. Tamilarasan** completed NPTEL course on Accreditation Based Education. He secured 90% in the examination with Elite (Gold) certification.
- **Mrs. U. Vishnuja** and **Dr. E. Pavithra** participated in the walkathon organised by NSS unit of MIT, Prevention of Sexual Harassment Cell and Centre for Empowerment of Women on the occasion of International Day For the Elimination of Violence against Women
- **5/8 Production Engineering** students won Special Category Prize in the drone competition AeroTHON 2023 organised by SAE India on 18-11-2023.
- **Ms.P.Kanisha** (3/8 Production Engineering) had successfully participated in the South Zone NSS Pre-Republic Day Parade Camp 2023 held at Cauvery College for Women (Autonomous), Tiruchirappalli, Tamil Nadu from 30-10-2023 to 08.11.2023.

[Events of November 2023, reported in December 2023]

