

# **NEWSLETTER**

Mechanical Engineering Department

October – December 2023

## **About the Department**

The Department of Mechanical Engineering was established in the year 1998. The course offers a deep insight into the discipline and enables promising engineers to acquire skills required to succeed both individually as well as in Industry. Keeping in view of the technological advancement, the department is fortified by the most qualified and experienced faculty. The department is well equipped with modern laboratories.

The Department has obtained UGC-Autonomous Status in the year 2014 and is running the programmes successfully meeting all the requirements. The College Academic Council, Board of Studies of the department strive to provide quality education and most advanced curriculum and syllabus to make the students industry ready and excel in the contemporary business world.

The B.Tech. Programme under Department of Mechanical Engineering was accredited by the National Board of Accreditation (NBA) of All India Council for Technical Education (AICTE).

#### Vision

"To be a Centre of Excellence in the field of Mechanical Engineering to generate Quality Human Resource who can contribute constructively to the Technological and Socio-economic Development of the Nation."

#### **Missions**

- i) To provide globally competent Mechanical Engineers through Experienced and Committed Faculty.
- ii) To nurture graduates with scientific temperament, rational thinking and Humanistic approach for excelling in their Career.
- iii) To promote Excellence in teaching and research through collaborative activities.



#### Goals

- To maintain a high standard of mechanical engineering education through outstanding teaching innovative curriculum and research training that reflect the changing needs of society.
- To attract highly motivated students with enthusiasm, attitude and interest in Mechanical Engineering.
- To pursue excellence in research and technology transfer.
- To increase the public awareness of departmental activities and the Mechanical Engineering profession.

#### **Editorial Board:**

**Advisor:** Dr. S. Baskaran, HOD, ME Dept.

Editor: Dr. Dhrubajit Sarma, Assistant Professor

Member: Mr. Naveen P., BTech-IV student

Md. Azmathullah. K, BTech-III student Mr. Phaneendra T., BTech-II student

### A. Faculty Development Program Attended

- 1. Mr. Pujari Rajesh attended a faculty development programme on "Inculcating Universal Human Values in Technical Education" from 5th to 7th October 2023, organized by MITS Madanapalle.
- 2. Dr. Rupshree Ozah attended a faculty development programme on "Engineering Research Application of AI, Machine Learning, and IoT using MATLAB" from 20th to 24th November 2023, organized by MITS Madanapalle.
- 3. Dr. S. Baskaran attended a faculty development programme on "Empowering Educators: AI in Robotics and Automation for the Digital Era" from 4th to 8th December 2023, organized by Sri Krishna College of Engineering and Technology.
- 4. Mr. Ajith G. Joshi attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 5. Dr. Dhrubajit Sarma attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 6. Dr. Rupshree Ozah attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 7. Mr. Raghavendra H. attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 8. Mr. Pujari Rajesh attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 9. Mr. Jagannath Pattar attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 10. Dr. R. Prithvirajan attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 11. Dr. D. Arun Kumar attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.
- 12. Mr. Reddi Lakshman Surapasetty attended a faculty development programme on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" from 11th to 16th December 2023, organized by Dept. of ME, MITS Madanapalle.

#### **B.** Papers Published

- 1. Dr. Potta Sivaiah published a journal article titled "Artificial Intelligence Model for Machinability Investigations on Drilling of AA6061" in SAE International in November 2023.
- 2. Dr. M. Lakshmana Rao published a journal article titled "Optimization of Transportation Cost through Data Science" in Industrial Engineering Journal in November 2023.
- 3. Mr. Ajith G. Joshi published a journal article titled "Comparative Performance Analysis of Gr and MoS2 Solid Lubricants" in Journal of The Institution of Engineers (India): Series D on 7th December 2023.
- 4. Dr. Satyajit Pattanayak published a journal article titled "Performance, Emission, Combustion, and Sustainability Analyses of EGR Incorporated CI Engine" in Thermal Science and Engineering Progress on 7th December 2023.
- 5. Dr. Baskaran Selvam published a journal article titled "Tool Wear and Surface Morphology Measurements in Sustainable Milling of AI6082 Hybrid Metal Matrix Composite" in Journal of Material Research and Technology on 13th November 2023.
- 6. **Dr. Anantha Raman Lakshmipathi** published a journal article titled "AI-based Prognostic Analysis of NOx Emission from Industrial Diesel Engine" in IEEE-Explorer in December 2023.
- 7. **Dr. L. Anantha Raman** published a book titled "Thermodynamics Field Formulation and Turbulent Modeling" by Cosmas Scientific Publications, ISBN 978-81-962332-7-3.

# C. Events Organized

- 1. A Webinar on "An Overview of Anaerobic Digestion Process for Biogas Production" was conducted on 12th October 2023 by Dr. Anantha Raman L and Dr. Dhrubajit Sarma.
- 2. A One-day National Level Student Workshop on "Industrial Project Ideas on Emerging Technologies of 3D Printing, CNC Machining & Robotics" was conducted on 18th October 2023 by Mr. Jagannath Pattar and Mr. Raghavendra H.
- 3. An Awareness Program on "Road Safety" was conducted on 20th October 2023 by Dr. S. Baskaran and Dr. Anantha Raman L.
- 4. A Webinar on "Machine Learning for Mechanical Engineers" was conducted on 15th November 2023 by Mr. G. Kumar and Dr. Arun Kumar D.
- 5. A One Day Innovation Competition "Ideathon'23" was conducted on 23rd November 2023 by Mr. Ajith Gopal Joshi.
- **6.** An Entrepreneurship Development Programme on "Entrepreneurship and Innovation as Career Opportunity" was conducted on 29th November 2023 by Mr. Ajith Gopal Joshi and Dr. Dhrubajit Sarma.

- 7. A Six-Day AICTE-ATAL Sponsored FDP on "Sustainable Machining for Tomorrow: Machine Learning Based Approach" was conducted from 11th to 16th December 2023 by Dr. S. Baskaran and Dr. Dhrubajit Sarma.
- 8. A Guest Lecture on "Recent Trends in Mechanical Engineering" was conducted on 11th December 2023 by Mr. Muthu Laxmanan.
- 9. A Guest Lecture on "Sustainable Engineering" was conducted on 11th December 2023 by Mr. Muthu Laxmanan.
- 10. A Faculty Interaction Program with Dr. Manas Das, IIT Guwahati, was conducted on 13th December 2023 by **Dr. Rupshree Ozah** and **Dr. Dhrubajit Sarma**.
- 11. A Faculty Development Workshop on "Research Proposal Writing" was conducted on 14th December 2023 by **Dr. Rupshree Ozah** and **Dr. Dhrubajit Sarma**.

## D. Workshop

1. Dr. KV Nagesha participated in the event "Design Thinking and 3D Printing" in 6<sup>th</sup> October 2023 organized by CIT Bangalore.

#### E. Achievements

- 1. Dr. P. Sivaiah was listed in the Top 2% Indian Scientist List announced by Stanford University for 2023-24.
- 2. **Dr. C. Yuvaraj** received the University Principal Award on 13th December 2023.

# F. Conferences Attended by Faculty Members

- 1. Dr. M. Lakshman Rao attended the 2023 Global Conference on Information Technologies and Communications from 1st to 3rd December 2023, organized by Reva University.
- 2. Dr. S. Baskaran attended the 2nd International Conference on Water Energy & Environment (WEECON 2023) from 29th to 30th December 2023, organized by ISET Research India.
- 3. **Dr. Anantha Raman L** attended the 2nd International Conference on Water Energy & Environment (WEECON 2023) from 29th to 30th December 2023, organized by ISET Research India.

- 4. **Mr. Muthu Lakshmanan** attended the 2nd International Conference on Water Energy & Environment (WEECON 2023) from 29th to 30th December 2023, organized by ISET Research India.
- 5. Mr. S. Manoj Kumar attended the 2nd International Conference on Water Energy & Environment (WEECON 2023) from 29th to 30th December 2023, organized by ISET Research India.

#### G. Reviewer in Peer Reviewed Journals

- 1. Dr. Manish Sharma reviewed a manuscript for Australian Journal of Mechanical Engineering on 15th December 2023.
- 2. Mr. Ajith G. Joshi reviewed a manuscript for Journal of The Institution of Engineers (India): Series D (IEID) on 3rd October 2023.
- 3. **Dr. Baskaran S.** reviewed manuscripts for Institute of Physics during 2022-23.
- 4. Mr. Ajith G. Joshi reviewed a manuscript for International Journal of Integrated Engineering on 27th December 2023.