

DEPARTMENT OF MECHANICAL ENGINEERING
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR

## From HOD's Desk



I am delighted to bring you the latest issue of the Mechanical Department Newsletter Momentum. Despite the pandemic COVID-19 condition, the faculty, staff, and students achieved excellent outcomes, as shown in this Newsletter. In these critical times, our major priority is to ensure the institute's safe and secure operation. I personally and on behalf of the department congratulate the Newsletter team on gathering and disseminating the institute's key outcomes. You will see as you go through the pages that the Department had a particularly successful period during the pandemic. I would really like to thank all of my colleagues for their persistent work to keep the department moving forward at a steady pace.

Dr. Pratheesh K

## Vision

To be a center of excellence in Mechanical Engineering by creating innovative and socially responsible technocrats to meet the global challenges.

## Mission

- 1. To provide qualitative technical knowledge in the domain of Mechanical Engineering to compete in the global scenario.
- 2. To nurture socially committed mechanical engineers through value based education.
- 3. To enhance the research ability of knowledge seekers for the changing needs of society.

## **Department Summary**

The Mechanical Engineering department started in the year 2004, offers both undergraduate (B.Tech.) and postgraduate (M.Tech.) programmes. The annual intake of the B. Tech. programme is 90 students and that of the M. Tech. is 18. The department provides its students an environment that stimulates their intellectual growth and personality development. Infrastructure facilities are excellent with well-equipped labs, classrooms and libraries.



- Webinar on "Recent Trends in Heat Transfer" by Dr. Tiara A M, Assistant Professor, CUSAT on 14 January, 2021.
- Webinar on "Advanced Engineering Materials by Dr. Akhil S Karun, CSIR Thiruvananthapuram on 20 January, 2021.
- Webinar on "Automotive Competitions "by M/s D-Sim Consultants. Kottayam on 21 January, 2021.
- Webinar on "Materials for Energy Storage" Dr. Sujith R., BITS Pilani, Hyderabad on 27 January, 2021.
- Talk on "Basics of Research Publishing" by Dr. Anna S Kynadi, Senior Editor, Wiley, UK on 21 April, 2021.
- Webinar on "What industry needs from Engineering Graduates!!!" in association with Conceptia Konnect. The speaker was Mr. Vinay S, Manager, Education and Training, on 30 April, 2021.
- Institutions of Engineers, India Students' Chapter is started and 79 students joined the chapter.







- Devan Sarath (S2 ME B) coordinated a webinar on "Benefits and Scope of Robotics and Automation" organised by IEEE Photonics Student Chapter on 28 June, 2021.
- Devan Sarath (S2 ME B) attended 7 day bootcamp on "Python & Data Analytics" by Shape AI in collaboration with Birla Institute of Technology, Mesra.
- Justin K Kurian (S4 ME B) has completed internship on "Industrial Automation" at Industrus Tech.
- Justin K Kurian (S4 ME B) has completed online internship on "Additive Manufacturing &Production systems" by Alphasys 3D Printing Solutions.
- Ajith K G N (S4 ME A) participated in workshop on "CAD Softwares" organised by CADD Centre Training Services Pvt Ltd.
- Aswin Abraham (S6 ME A) has undergone 2 weeks Internship training on "Industrial Based Application Design and Development" conducted by National Small Industries Corporation Limited.

## **PROGRAM EDUCATIONAL OBJECTIVES**

**DOMAIN KNOWLEDGE:** Graduates will be able to solve the contemporary issues and challenges in mechanical engineering by applying their strong base in Mathematics, Science and Engineering.

**LIFELONG LEARNING:** Graduates shall have a passion to engage in lifelong learning process through self study, continuing education and professional studies in engineering.

**CREATIVE SKILLSET:** Graduates will become an effective innovator, to address social, technical and business challenges by enhancing their technical competencies, communication skill and team spirit.

## **PROGRAM SPECIFIC OBJECTIVES**

**PSO 1:** Able to identify, formulate design and analyze the contemporary challenges and engineering problems in the realm of Design, Industrial and Thermal sciences, utilizing latest technology.

**PSO 2:**Able to provide solutions by incorporating innovative ideas on product design and development to conquer the challenges in core mechanical sectors, business and other related fields.



## MERCEDES BENZ

The Mercedes Benz three pointed star logo can be traced back to 1870, when Gottlieb Daimler sent his wife a postcard with the star on it. It was his desire to see the three pointed star on top of all of their factories, indicating their triumph over "land, sea, and air."

# NTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING

## TRANSCENDING BOUNDARIES

SPEAKERS

MANGALAM
COLLEGE OF ENGINEERING

Inspire Imbibe Innovate









Prof. Satyandra K. Gupta

chanical Engineering & Computer Science ssociate Chair, Aerospace and Mechanica

Smith International Professor of

rersity of Southern California

Viterbi School of Engineering Engineering Department

## DEPARTMENT OF MECHANICAL ENGINEERING

## MANGALAM COLLEGE OF ENGINEERING

APJ Abdul Kalam Kerala Technological University ( KTU ) Approved by AICTE and Affiliated to ETTUMANOOR, KOTTAYAM, KERALA

Associate Professor versity of Johannesburg (Boomfontein Campu Prof. Kapil Gupta

## MATERIALS RESEARCH SOCIETY OF INDIA ( MRSI ) TRIVANDRUM CHAPTER







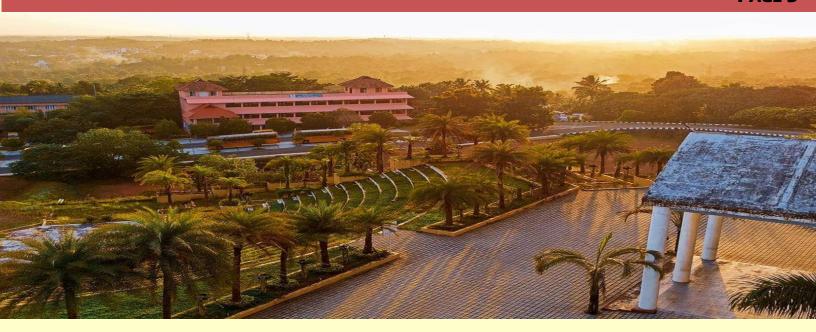


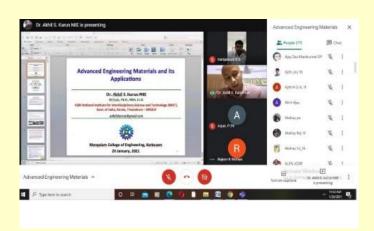




Dr. Manoj Gupta
Associate Professor
National University of Singapore

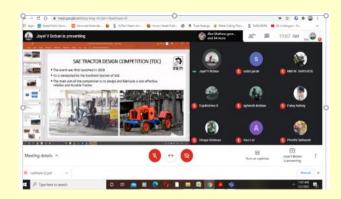














- Famy Antony (S4 ME B) has completed online internship on "Additive Manufacturing &Production systems" by Alphasys 3D Printing Solutions.
- Alan Monichan (S6 ME A) has completed a course on "Autodesk Certified Professional:AutoCAD for Design and Drafting Exam prep" by Autodesk.
- Alan Monichan (S6 ME A) has completed a course on " Introduction to Machine Learning" by Duke University.
- Alan Monichan (S6 ME A) has completed a course on "Digital Manufacturing & Design" by University at Buffalo, The State University of NewYork.
- Alan Monichan (S6 ME A) has completed a course on " Introduction to Cloud Identity" by Google Cloud.
- Preethi Satheesh (S2 ME A) has attended a workshop on "UI/UX Design" organized by IEEE photonics Society Student Chapter on 15,16 June,2021
- Anujith S (S2 ME A) has attended a workshop on "VLAB-An e-Learning platform for electronic circuits design & simulations" organized by IEEE photonics Society Student Chapter on 15,16 June,2021
- Yaseen Mohammed (S8 ME B) has published a paper entitled "Design and Fabrication of Foldable E-cycle with Self Rechargable Battery" in International Research Journal of Engineering and Technology.

## **Upcoming Events**

International Conference on Advances in Mechanical Engineering:
Transcending Boundaries (ICAMET-2021) in association with Materials
Research Society of India (MRSI),
Trivandrum Chapter on 22,23 July,
2021

## **Chief Guests:**

Dr. Sabu Thomas , Vice Chancellor, MG University

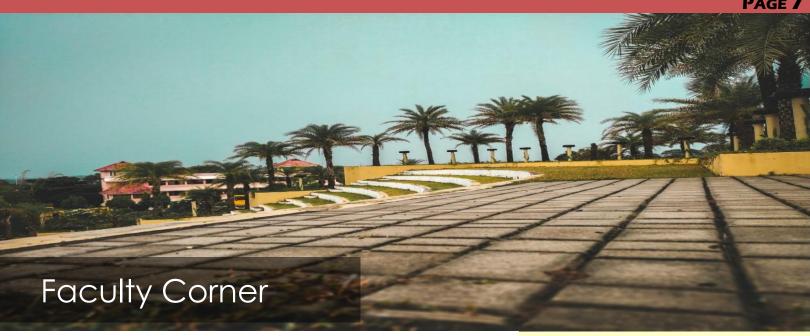
Dr. T. P. D Rajan Senior Principal Scientist, CSIR-NIIST, Thiruvananthapuram

## **Keynote Speakers:**

Prof. Satyandra K. Gupta Smith International Professor of Mechanical Engineering & Computer Science

Prof. Kapil Gupta University of Johannesburg

Dr. Manoj Gupta National University of Singapore



## **Publications**

- Dr. Sreekumar V, Comparison of Mechanical and wear properties between LM6, LM6/B4C and LM6/B4C/Gr aluminium metal matrix composites', Materials Today Proceedings, (2021) Vol. 43 (6), pp. 3916-3921. Scopus Indexed
- Dr. Sreekumar V, "Fabrication and analysis of LM13/B4C/Gr hybrid metal matrix composites", Materials Today Proceedings, (2021) Vol. 47, pp. 5276-5280. Scopus Indexed

## FDP's and Workshops

- Sammon Korah attended 5 day ATAL FDP on "Electric Vehicles" from 18 January, 2021.
- Benphil C Mathew attended 5 day ATAL FDP on "Electric Vehicles" from 18 January, 2021.
- Rajeev K Mohan attended 5 day ATAL FDP on "Electric Vehicles" from 18 January, 2021.
- Praveen H attended 5 day ATAL FDP on "Robotics" from 11 January, 2021.
- Aneesh K. S attended 5 day ATAL FDP on "Life Skills Management" from 12 June, 2021.
- Dr. Vaishak S attended 5 day ATAL FDP on "Green Technology & Sustainability Engineering" from 04 January, 2021.
- Dr. Vaishak S attended 5 day ATAL FDP on "Sustainability Engineering" from 22 February, 2021.
- Dr. Libin P Oommen attended 5 day ATAL FDP on "Fuel Cell Technology" from 21 June, 2021.



Dr. Libin P OOmmen



Dr. Vaisakh S

**Congratulations on** the Doctrol Award



- Dr. Libin P Oommen attended 5 day ATAL FDP on "Academic leadership and management of technical Institution" from 21 June, 2021.
- Dr. Libin P Oommen attended one day workshop on "Air Pollution and Health Hazards" on 31 March,2021
- Dr. Libin P Oommen attended 5 day ATAL FDP on "Online teaching and Learning technologies" from 04 January, 2021.
- Dr. Praveen Wilson attended 5 day ATAL FDP on "3D Printing and Design" from 02 January, 2021.
- Abin Babu attended 5 day ATAL FDP on "Sustainability Engineering" from 22 February, 2021.
- Albert Mathew attended 5 day FDP on "Recent Development of Biopolymer and Sustainable Composites for Engineering Applications" from 15 March, 2021.
- Ajithkumar K T attended 5 day ATAL FDP on "Computational Fluid Dynamics" from 04 January, 2021.
- Ajithkumar K T attended 4 Week Swayam NPTEL Course on "Effective Engineering Teaching in Practice" from 21 March, 2021.
- Santhu Varghese Thomas took membership in International Association of Engineers-IAENG (Membership No:276650)
- Santhu Varghese Thomas took membership in Institution of Engineers, India, IEI (Membership No:M1720877)



Dear Leneesh N Gopal, Thank you for being a bright ray of hope and filling our student's life with passion! We applaud your honourable service.

Wish you all the best

## **Editorial**

Dr. Pratheesh K Rajeeve K Mohan Santhu Varghese Thomas Joseph Babu (Assistant Editor) Sreelakshmi S Nakul Suresh Jayashanker Pillai

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