

NEWSLETTER

MEXPICII



Department of Mechanical Engineering, KUMARAGURU COLLEGE OF TECHNOLOGY

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Editors: Dr. C. Velmurugan, Mr. B. N. Sreeharan Associate Editors: Mr. P. Kapil, Mr. K. Arun,

Events Organized

 A Guest lecture on "Product Design and Development" was arranged by the department on 01.03.2019



Mr. Kanagaraj Rangappan, Design Manager, Continental Engineering, Bangalore delivered the guest lecture. Mr. M. A. Vinayagamoorthi AP (II)/ME, and Dr. S. Balasubramanian ASP/ME coordinated the lecture.

 Another guest lecture on "GATE Awareness Programme - I" was organized by the department on 05.03.2019.



Mr. Gowri Shankar, Manager, M/s. ACE Engineering Academy, Coimbatore delivered the guest lecture. Mr. S. Suresh, AP/ME, Mr. S. Prabhu (Jr.), AP/ME, and Dr. N. Sangeetha Sr. ASP/ME coordinated the event.

One more guest lecture on "Government Exams Awareness" was organized in association with M/s. Career Zone, Coimbatore by the department on 08.03.2019. Mr. S. Suresh, AP/ME, Mr. K. Manikanda Prasath, AP/ME, and Dr. N. Sangeetha Sr. ASP/ME coordinated the event.



 Department organized a Hands-on Workshop on "VISUAL CFD" on 09.03.2019. Mr. Venkateshwaran C P, Founder and CEO, Parkati Technologies, Bangalore handled the workshop.



Mr. B. N. Sreeharan, AP/ME, Mr. T. Karuppusamy, AP/ME, Mr. S. Ramanathan, AP/ME and Mr. K. Ragunathan, Senior Technical Associate coordinated the event.

 Short term Course on "Advanced Machining Solutions" was conducted by the department along with KCIRI and SECO, on 02.03.2019 and 16.03.2019.



Mr. V. Sudhakar, Assistant Technical Manager, M/s. SECO Tools India (P) Ltd., Coimbatore handled the sessions.



Mr. M. A. Vinayagamoorthi AP (II)/ME, Dr. S. Balasubramanian ASP/ME and Mr. R. S. Mohan Kumar, AP/ME coordinated the event.



 Under KCT-CPC Student forum, department organized a Training programme on "Supply Chain Management", on 16.03.2019.



Mr. Sivakumar Rangasamy Executive Trainer, CPC trained the participants.



Mr. R. S. Mohan Kumar, AP/ME and Mr. M. A. Vinayagamoorthi AP (II)/ME coordinated the event.

 Our new KCT – CADD Centre was formally inaugurated by Mr. S. Krishnamurthy, Vice President (IR & Special Projects), M/s. Brakes India Limited, Chennai on 23.03.2019.



He also delivered a guest lecture to our students on "Special Projects - Automotive Industry".



 Dr. A. P. Arun, AP (II)/ME, and Dr. S. Thirumurugaveerakumar, AP (III)/ME coordinated the event.

Social Responsibilities

Dr. M. Balaji, ASP/ME, Dr. AP. Arun, AP II/ME, Mr. David Anson. V (II ME Indl Engg), Mr. Pon Karthikeyan. S (I ME Indl Engg), Mr. Vikram Vetrivel. S (I ME Indl Engg) and Mr. Dinesh Kumar. K (I ME Indl Engg) participated in a Social Immersion Program (SIP) organized by PG forum, KCT at Palamalai Government school, Perianaickenpalayam on 14.03.2019.



 Mr. B. Jeeva, participated in the Dinamalar Vazhikatti Expo in Puducherry from 28.03.2019 to 30.03.2019.



FDP participations

- Dr. S. Sivakumar, AP (III)/ME, Mr. S. Ramanathan, AP (II)/ME and Mr. P. Pradeep, AP/ME participated in High Intense Hands on Training Programme On "CFD Using Siemens Application Software" between 05.03.2019 and 09.03.2019 conducted by TLC, Coimbatore Institute of Technology, Coimbatore.
- Dr. P. Sathyabalan, Prof./ME and Dr. S. Balasubramanian, ASP/ME participated in a short-term course on "Advanced Scanning Electron Microscopy and Microanalysis" conducted by Indian Institute of Technology Kanpur during March 11-15, 2019.
- Dr. P. S. Samuel Ratna Kumar, AP/ME, Mr. S. Rajesh, AP/ME, Mr. P. Karthi, AP/ME and Mr. S. Suresh, AP/ME participated in the AICTE QIP Sponsored One Week Short Term Course on "Design, Manufacturing and Analysis of Implants with Bio Materials and its Characterization" organized by the Department of Mechanical Engineering, Thiagarajar College of Engineering, Madurai during 11th to 17th March 2019.







 Mr. S. Sivakumar, AP (II)/ME participated in a Faculty Development Programme on "Smart Nano-materials: Fundamentals to Applications (SNFA - 2019) between 25-29 March 2019 organized by The School of Materials Science and Engineering, National Institute of Technology Calicut.



 Mr. B. N. Sreeharan, AP (II)/ME participated in a two-day colloquium on Grant Proposal Writing organized by TLC, Coimbatore Institute of Technology, Coimbatore on 30.03.2019.

Guest Lectures Delivered

 Dr. M. Balaji, ASP/ME participated and delivered a motivational talk at Palamalai Middle School, Perinanaickenpalayam during the Social Immersion Program organized by PG forum of KCT.



 Dr. P. K. Giridharan, Prof./ME chaired and delivered a key note address in the International Conference on Mechanical And Building Sciences 'ICMBS 2019' conducted by SNS College of Technology on 27.03.2019. Dr. N. Sangeetha, Sr. ASP/ME Chaired as External Expert For Pre Synopsis Doctoral Committee Meeting conducted at Karunya University, Coimbatore on 26.03.2019.

Paper Presentation

Dr. S. Thirumurugaveerakumar, AP (III)/ME presented a technical paper titled "Design of helmet for improved thermal comfort for use in two wheeled powered vehicles" in the International Conference on Mechanical and Building Sciences – ICMBS 2019 conducted by SNS College of Technology, Coimbatore on 27.03.2019.

Industry Institute Interaction

 Mechanical Engineering Association (MEA) as a part of building Industrial Institute Relationship, a team from MEA visited the following industries in Coimbatore.



- 1. Aanandha Fabrications Pvt Ltd
- 2. Hi-Tech Industries
- 3. Super Machine Works Pvt Ltd
- 4. Bharathi Industries
- 5. Surfine Tools
- 6. Sri Akshara Hytech
- 7. Indoshell Casting
- 8. Vishnu Heat Treatment
- 9. Hydroprokav Pumps
- 10. KGK group of industries
- 11. Saravamangala Engineers India (P) Ltd
- 12. Janatics
- 13. Foundary casting.
- 14. Susin Groups
- 15. Doiter Castings
- 16. Chandru Medical Equipment
- 17. Arcturus Casting
- 18. Flowcon Engineer India Private Limited



Team from MEA consists of



Dr. V. R. Muruganantham, ASP/ME, Staff Coordinator, MEA, Mr. Gokul Prasad, Mr. Arun, Mr. D. Aswath.

- Department renewed the College level MoU between COINDIA and KCT on 06.03.2019 for 3 years. Dr. R. Manivel, Prof./ME and Dr. V. R. Muruganantham, ASP/ME coordinated the renewal process.
- MoU was signed between the department and M/s. Praveen Kumar Metals, Coimbatore on 08.03.2019 and with M/s. Wind Power India, Coimbatore on 11.03.2019. Dr. A. P. Arun, AP (II)/ME, Mr. R. S. Mohan Kumar, AP/ME and Dr. V. R. Muruganantham, ASP/ME coordinated the MoU signing event.



 One more MoU was signed between the department and M/s. M/s Vland's Best Hub, Coimbatore on 25.03.2019. Dr. S. Thirumurugaveerakumar, AP (III)/ME coordinated the event.



• III 'C' students went for an industrial visit to M/s. Gomathi Engineering Services, Kunnathur, Tirupur on 08.03.2019.



Mr. M. A. Vinayagamoorthi AP (II)/ME, and Dr. S. Balasubramanian ASP/ME coordinated the visit.

Students Participations

- Following students from 2nd Year had participated and got first place in football 5's tournament in the KCT ground held at Kumaraguru college of Technology, Coimbatore during the period of 12th March 2019 to 14th March 2019.
 - Mr. Nitin D.
 - Mr. Naveen S,
 - Mr. Adithya Vijayan M,
 - Mr. Pavin sankar P V,
 - Mr. Dhayalan G,
 - Mr. Sakthi Balaji K







 The Cluster of Mechanical and Fashion Technology called "TEAM MAURYAS" participated and won the overall championship in the Kumaraguru Intra College Sports Fest called "KALAM 2K19" and the "TEAM MAURYAS" and took a back full of 101 medals.



- Mr. Siddharth M from 3rd year Mechanical participated and got first place in Battle of Bands in "DHRUVA'19" at Karpagam College of Engineering, Coimbatore on 13th March 2019.
- Ms. Rushethra P N from 2nd year B presented a Paper in "IGNITRO 2K19" at Kongu Engineering College on 7th March 2019.
- Mr. Dinesh Kumar N from 3rd year participated and became the runners in cricket in "KALAM 2K19" held at Kumaraguru college of Technology, Coimbatore during the period of 2nd March 2019 – 3rd March 2019.





Department of Mechanical Engineering

INSTITUTE VISION

The vision of the college is to become a technical university of International Standards through continuous improvement.

INSTITUTE MISSION

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

DEPARTMENT VISION

To emerge as a center that imparts quality higher education through its program in the domain of Mechanical Engineering to meet the changing needs of the society.

DEPARTMENT MISSION

Bring about supremacy in curricular and co-curricular sustained activities with competent faculty through teaching and research, that generates technically capable mechanical engineering professionals to serve the society with delight and gratification.

PROGRAMME OUTCOMES (POS)

- **1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **6.** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- **7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **12. Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- **PEO 1**: Graduates will take up careers in manufacturing and design related sectors.
- PEO 2 : Graduates will be involved in the execution of mechanical engineering projects.
- **PEO 3**: Graduates will take up educational programmes in mastering Mechanical Engineering Science and Management.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

- 1. Apply the fundamentals of science and mathematics to solve complex problems in the field of design and thermal sciences.
- 2. Apply the concepts of production planning and industrial engineering techniques in the field of manufacturing engineering.