



NEWSLETTER

MExpress



Department of Mechanical Engineering, KUMARAGURU COLLEGE OF TECHNOLOGY

Vision: To facilitate mechanical engineering education, research and services that contributes to the advancement of scientific knowledge leading to social development.**Mission:** The Department is committed to provide quality education and training with emphasis on engineering fundamentals and applications to the students to be competent professionals with ethics. The department executes research and provides engineering services for sustainable development of society.

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Editors: Dr. C. Velmurugan, Mr. B. N. Sreeharan**Associate Editors:** Mr. J. K. Mukilan, Mr. K. Arun, Mr. Rallish**Industrial Visits**

- Third year Mechanical 'B' students visited M/s. SPB ALLOYS, Telungupalayam, Coimbatore 641 - 697 on 10.04.2018.



Dr. S. Balasubramanian, ASP/ME and Mr. S. B. Nithayananth, AP (SRG)/ME accompanied the students.

- 36 students of Third Year Mechanical 'B' section, visited HMT Machine Tools Limited, Bangalore on 23.04.2018.



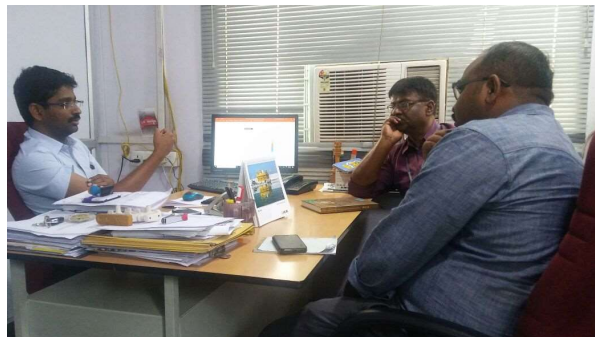
Mr. S. B. Nithayananth, AP (SRG)/ME and Mr. P. D. Devan, AP/ME accompanied the students.

- Around 8 faculty members from the department visited M/s. AMMARUN FOUNDRIES, Coimbatore on 17.04.2018.



Faculty list

1. Dr. V. R. Muruganantham, ASP/ME
2. Dr. A. P. Arun, AP-II/ME
3. Mr. K. Krishnamoorthy, AP-II/ME
4. Mr. M. Ramesh Kumar, AP/ME
5. Mr. R. S. Mohan Kumar, AP/ME
6. Mr. V. R. Navaneeth, AP/ME
7. Mr. S. Prabhu (Jr), AP/ME
8. Mr. S. Subbiah, AP/ME



- Dr. Arvind Singh, Professor/ME, visited IISc, Bangalore for discussion on research collaboration. Visited the Centre for Excellence in Hypersonics, at the Department of Aerospace Engineering, Indian Institute of Science (IISc), Bangalore from 19 to 21 April 2018. During the visit, discussed with IISc Professors on the project Shock Waves interaction with Light Materials and conducted initial experiments on Aluminium/Magnesium alloys.

Paper Publications

- Dr. Arvind Singh, Professor/ME published paper titled “Metallic Glasses as Potential Reinforcements in Al and Mg Matrices: A Review” (In Collaboration with NUS, Singapore) in the Journal “Technologies” Vol. No. 6, Issue No. 2, Pages 1-17.
- Dr. M. Balaji, ASP/ME published a paper titled “FUZZY TOPSIS APPROACH IN ISM FOR SUPPLY CHAIN” in the Global Journal of Pure and Applied Mathematics. Vol. No. 13, Issue No. 6, Pages 61-72.

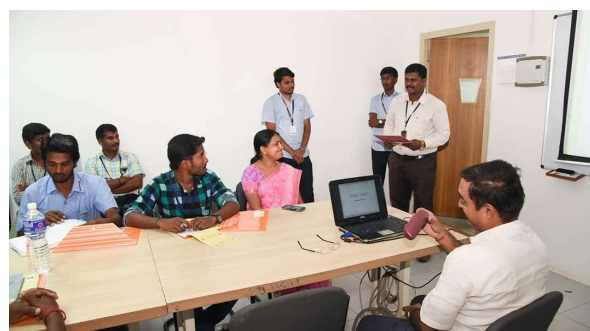
Book Publications

Dr. Arvind Singh, Professor/ME co-authored few chapters in few books as detailed below.

- Chapter “Lithographic Fabrication of Polymer Structures for MEMS Tribology” in the Handbook of Polymer Tribology, published by World Scientific and Imperial College Press London, UK. Page No. 529. It is a Collaboration with IIT Delhi and Ulsan National Institute, South Korea.
- Chapter, “An Overview of Viable Unconventional Processing Methods for Advanced Materials” in the book titled ‘Manufacturing Techniques for Materials – Engine’, published by CRC Press and Taylor & Francis Inc. Florida, USA. Pages 245-300.
- Another Chapter, “Overview of Pulsed Electron Beam Treatment of Light Metals: Advances & Applications”, Manufacturing Techniques for Materials - Engineering & Engineered published by CRC Press and Taylor & Francis Inc., Florida, USA. Pages 327-366.

Programmes Organized

- A training programme on “Mistake proofing and prevention of errors” was organized by the department in association with CPC, Coimbatore on 23.04.2018. Mr. Swaminathan, Executive Trainee, CPC, Coimbatore conducted the training programme. Engineers from various industries in and around Coimbatore participated in the training programme





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

- A guest lecture on “Piping Engineering” was organized in the department. Mr. Sivakumar V, Alumni (2013 batch), Engineer from M/s. Saipem India Projects Private Ltd delivered the lecture on 13.04.2018.



Mr. B. N. Sreeharan, AP (II)/ME, Mr. V. R. Navaneeth, AP/ME and Mr. K. Manikanda Prasath, AP/ME coordinated the guest lecture.



Consultancy

- Mr. B. Jeeva, AP/ME offered a consultancy to Mr. Sivaganesh, final year student of Akshaya College of Engineering and Technology, Coimbatore in the Determination of calorific value of oil using Bomb Calorimeter.
- Mr. Jeeva also offered another consultancy to Mr. K. Karthick Kumar, ME Energy Engineering Student, KCT in Biogas composition measurement.

Papers Reviewed

- Dr. Arvind Singh, Professor/ME reviewed a paper titled “EVALUATION OF FIBRE MECHANICAL PROPERTIES OF LUFFA SPECIES IN KADUNA STATE, NIGERIA” to be published in International Science & Technology Journal of Namibia
- Dr. N. Sangeetha, Sr. ASP/ME reviewed a paper in “Response Surface Design Optimisation of Power Tiller Rotavator Blade Using FEA Technique” to be published in the International Journal of Agricultural Science and Technology.

Students Achievement

- Mr. Selva Kumar E and Mr. Venkateshwaran S, students of third year Mechanical Engineering along with Dr. R. Kannan and Ms. Selvambikai M, faculty of Science & Humanities, presented a paper titled, "Structured Mechanical and Magnetic Analysis of Electroplated Ni Fe Ag Soft Magnetic Thin Films" in the National Conference 'ICMR' conducted during 20.04.2018 and 21.04.2018.

- Mr. Babin T, final year student and Mr. Sudalaiyandi Durkesh, third year student of Mechanical Engineering Department along with Dr. R. Manivel, Professor/ME, presented paper at International Conference, ACS College of Engineering, Bengaluru, 19.04.2018 and 20.04.2018.
- Mr. Selva Kumar E and Mr. Venkateshwaran. S of Third Year Mechanical Engineering were shortlisted to attend the interview at Rutag, ICSR, IIT Madras.
- Mr. Santhosh. S, Mr. Sivasankar. M, III year Mechanical Engineering students along with IT department students developed an android mobile application for employers working in textile industries under NIFT, Tiruppur.
- Mr. B. Vignesh, II-year student of the department participated in the Kabadi tournament as detailed below.

S. No.	Venue	Position
1.	SKCET, Coimbatore	Winner
2.	NGM, Pollachi	Runner
3.	HICET, Coimbatore	Third
4.	KIT, Coimbatore	Participation

IoT in Mechanical Engineering

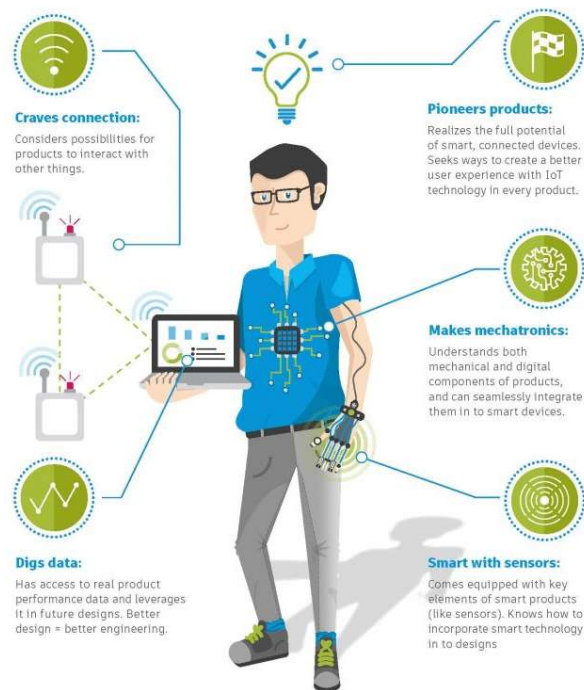
Next time you look at the night sky, consider an additional constellation: The Internet of Things (IoT). It's predicted that over 200 billion products will be connected to the Internet by 2020 – a number approximately equal to the amount of stars in the galaxy. This growing network of smart, connected products is generating a lot of buzz around the Internet of Things, IoT, and Industry 4.0. While these might feel like over-hyped terms, they present real opportunities for engineers to design better products.

Imagine designing a steamroller that is sent to hundreds of locations around the world and used under different conditions to complete a variety of tasks. Sensors on each machine generate data about its individual performance and reveal insights about how various factors relate to its productivity and efficiency. In other words, you can see exactly how your design performs in hundreds of real-world situations, and apply product insights to future designs.

Access to valuable insights is only one way mechanical engineers can benefit from IoT. But in order to experience the advantages of the Internet of Things, engineers need to know how to design smart, connected products. This means adopting a new set of skills and preparing for changes in the way products are designed, made, and used.

THE SMART PRODUCT MECHANICAL ENGINEER

IoT is inevitably changing how engineers design products. While the mechanical engineer of the future needs the same foundation of technical skills and savvy for creative problem-solving as always, additional characteristics will soon be necessary.



Mechanical Engineers and IoT

Picking up new skills doesn't just help engineers design smarter products. It also makes them more marketable in their field. Mechanical engineers who understand IoT and proactively seek ways to incorporate it into their products will gain a broader perspective on what they design and how it is used – a valuable trait for any team.

There's no doubt that products are getting smarter. The question is... are you?

To learn more download eBook:

<http://www.autodesk.com/industry/manufacturing/resources/mechanical-engineer/iot-internet-of-things-essentials-for-engineers>

- Courtesy: B. N. Sreeharan, AP – II/ME

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