



**SRM VALLIAMMAI ENGINEERING COLLEGE**

**(An Autonomous Institution)**

**S.R.M NAGAR KATTANKULATHUR - 603 203**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**NEWS LETTER July\_September 2022**



1. A Six-day Faculty Development Programme on ‘Key Concepts of Manufacturing Technology, Dynamics of Machines and E – Vehicles’ was conducted from 28<sup>th</sup> June 2022 to 07<sup>th</sup> July 2022. The following were the resource persons: Dr. T. Venugopal, Associate Prof, Mechanical Engineering, VIT, Chennai, Dr. S. Kathiresan, Professor, Mechanical Engineering, Prince Shri Venkateshwara Padmavathy Engineering College and Dr. V. Dhinakaran, Prof & Head, Dean (R&D), Chennai Institute of Technology. The following topics were discussed: Basic Concepts of moulds, patterns, types of patterns, allowances, furnaces, special casting processes, governors and its types, controlling force curves, Gyroscopic effect, Gyroscopic stabilization, Force Analysis, Balancing, Free Vibration and Forced Vibration, Electric vehicle layout, specifications, system components, Electronic control system, performance of electric vehicles – traction motor and Thermal Management of batteries for electric vehicles: challenges and current perspective.

2. A Guest Lecture on ‘Futuristic Development in Autonomous Vehicle’ was conducted through online mode on 30<sup>th</sup> July 2022. The resource person Mr.M.Poovarasana., Technical Leader-ADAS, ZF WABCO Private Limited, delivered the lecture on the following topics: ADAS : The circle of safety, Key to autonomous vehicle projects, Levels of autonomous-SAE, ADAS technologies, Forward and rear collision warning system (FCW & RSW), Autonomous emergency braking, Adaptive cruise control, ADAS features in automobile industry, Blind spot information system and lane change assist and Cross traffic alert (CTA).

3. A Guest Lecture on ‘Industrial Automation 4.0’ was conducted through offline mode on 17<sup>th</sup> September 2022. The resource person Mr.Saravanakumar Sachidanadham, Assistant Manager, Royal Enfield-Eicher motor, delivered the expert lecture on the following topics: Industrial Revolutions, 4D Printing, 3D Scanning, Cyber physical systems, Cloud computing Business integration management and Digital communication for smart manufacturing , Block Chain, Supply Chain Management, Augmented Reality, IoT, Drone, Artificial Intelligence.

4. The workshop on ‘AUTOCAD Software’ was conducted on 29<sup>th</sup> September 2022. The trainers from CADD Centre delivered the guest lecture on the following topics: Smart Dimensions, Fully Defined Sketch and Blocks, Wire frame & Transformation tools, Geometry Creation & Modifications, Layer & Object Properties, Cutting, Stamping, Folding & Unfolding, Isometric Views

#### **Staff Publications & Activities**

1.Suresh Pungaiah S, ‘Importance of Hardening Effect and Its Analysis on Diametrical Fractured Ends of Tensile Testing of Al and Steel’ Hindawi, Advances in Material Science and Engineering, Volume 2022, Article ID 8579749, Pages: 1 to 10. July 2022.

2.Mr.G.Rajesh, Assistant Professor, has filed a patent entitled ‘Design and Development of Regenerative Electrical Bicycle Weight Lifting Electro Magnetic Coil Braking System’

3.Mr.P.Ramu, Assistant Professor attended at two day Faculty Develop Programme on ‘Industry 4-0’ from 19<sup>th</sup> September 2022 to 20<sup>th</sup> September 2022 under TNSDC - Naan Mudhalvan Scheme at Anna University.

4. Mr.R.Ramkumar, Assistant Professor attended a Faculty Development Programme on 'Electric Vehicles' on 8<sup>th</sup> September 2022 under TNSDC - Naan Mudhalvan Scheme at Anna University.
5. Manikandan K P, Kishore J, Mohanraj A, Nandha Kumar R and Naveenraj A B, 'Formability effect of process parameters on forming process in a single point incremental forming process in Al7075' International Journal of Advance Research and Innovative Ideas in Education, Volume 2022, Article ID 23954396, Pages: 1 to 6. August 2022.
6. Rajashriram C and Dr.S.Thirugnanam, 'A Study on Byssinosis in Small Scale Industry' International Journal of Modern Developments in Engineering and Science Volume 1, Article ID 2583-3138, Issue 10.
7. Srinivasan R, Thirugnanam S, Paramasivam K M and Muthuramalingam T 'Effect of Age-Hardening Temperature on Mechanical and Wear Behavior of Furnace-Cooled Al7075-Tungsten Carbide Composite' Materials (Basel), 2022 Aug 3;15(15):5344. doi:0.3390/ma15155344.

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**Students Activities:**

1. Kamallesh P, Sachin Raj E and Naren Pandi S IV Mech participated in NEXAVERSE'2k22 National level Techfest at Sri Sairam engineering college on 21<sup>st</sup> September 2022 and won the third place in the event 'Shark Tank'.
- 2.Mohanalakshmi M and Manoj M, students of III Mech Sec 1 participated in TORQ 2022- a National Level Technical Symposium at Loyala-ICAM College of Engineering and Technology and won the first place in the event 'Truss Building'.
3. Kirthiga J, Srinivasan A and Sathyaprakash S IV Mech participated in a work shop on 'Diversity of Mechanical Engineering with Solid Works' conducted by CADD CENTRE, Tambaram on 24<sup>th</sup> July 2022.
- 4.Naren Pandi S, Yogesh S, Sathya Prakash S, Prashanna R K, Naveethakrishnan N and Vinoth B IV Mech Sec 2 participated in an online Technical Session on 'Solid Works and 3D Printing' e-Yantra, a Ministry of Education project based at IIT Bombay.

Staff In charge

HoD /Mech