



SRM VALLIAMMAI ENGINEERING COLLEGE

(An Autonomous Institution)

S.R.M NAGAR KATTANKULATHUR - 603 203

DEPARTMENT OF MECHANICAL ENGINEERING

NEWS LETTER April_June 2020



1. An online Faculty Development Programme on "**Concepts of Thermodynamics, Fluid Mechanics and Dynamics for Mechanical Engineers**" conducted from 11.05.20 to 15.05.20. The External experts were handled the sessions in the following topics: 1) **Dr.Thundil Karuppa Raj**, Professor & Head, Department of Mechanical Engineering, VIT Chennai, on "Introduction to Thermodynamics & Computational Fluid Dynamics" 2) **Dr. N. Sekara Pandian**, Associate Professor, Department of Mechanical Engineering, VIT Chennai, on "Thermodynamics Systems" . 3) **Dr P. Sivamurugan** , Professor, Mechanical Engineering, Vel Tech R&D Institute of Science and Technology, on "Introduction to Thermodynamics Cycle" 4) **Mr.C.Senthamarai Kannan**, Assistant Professor, Mechanical Engineering, Sri Venkateswara College of Engineering, on "Vibration Analysis and Control" 5) **Dr.C.Velmurugan** Professor & Head, Mechanical Engineering, KCET, "Balancing of Rotating Masses". Internal faculty were delivered lectures in the following topics: 1) **Mr.K.Arumugam**, Assistant Professor(Sr.G) on " Mechanism for control dynamics of machinery", 2) **Ms.N.Nithya**, Assistant Professor(Sr.G) on " Fluid properties and flow characteristics, and Fluid kinematics" , 3) **Mr.K.Vijayendiran**, Assistant Professor(Sr.G) on "IC Engines".

Specific Volume(v)

- It is defined as the volume of a fluid occupied by a unit mass or volume per unit mass of fluid.

$$\text{Specific volume} = \frac{\text{Volume of fluid}}{\text{Mass of fluid}} = \frac{1}{\frac{\text{Mass of fluid}}{\text{Volume of fluid}}} = \frac{1}{\rho}$$

It is expressed as m³/kg.

FDP on “Concepts of Thermodynamics, Fluid Mechanics and Dynamics for Mechanical

The Second Law of Thermodynamics: Clausius Statement

“It is impossible to construct a device that operates in a cycle and produces no effect other than the transfer of heat from a lower-temperature body to a higher-temperature body”

Equivalence of the Two Statements:

Any device that violates the Kelvin-Planck statement also violates the Clausius statement

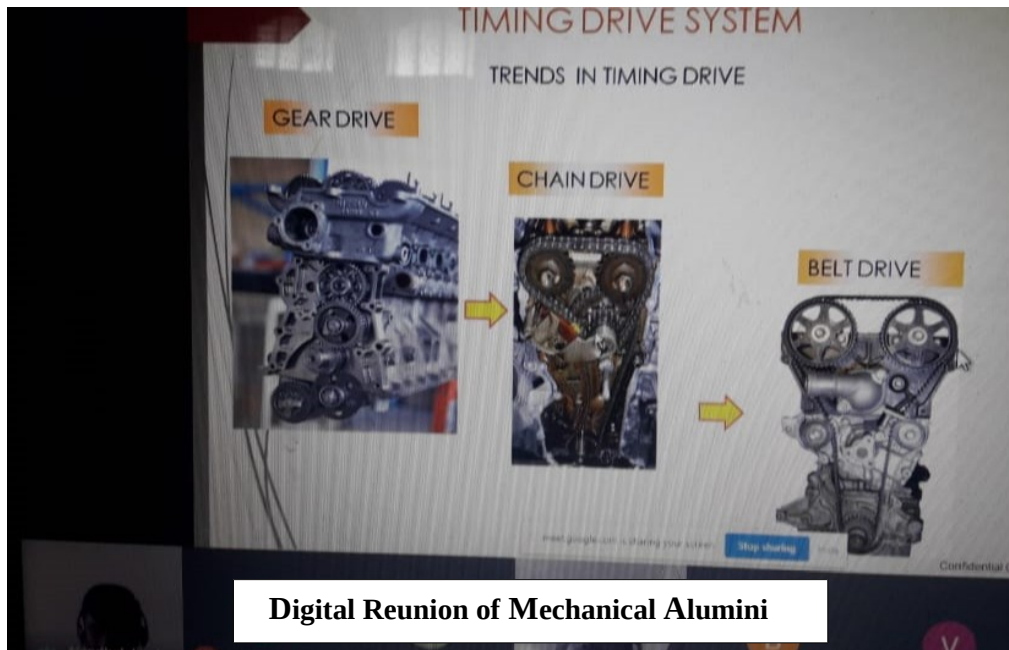
FDP on “Concepts of Thermodynamics, Fluid Mechanics and Dynamics for

- An online programme for the 11th and 12th students on the titled “What Next?” on 5.6.2020. The sessions were handled by **Dr.Kulasekharan Narasingamurthi**, Valeo India Private Ltd., on “Future automotive industry”, **Dr.B.Sankaran**, Presidency College, on "Career guidance", **Mr.R.Dhanasekaran**,

Pioneer Wincon, on Scope of Mechanical Engineers, **Dr.S.Thirugnanam**, SRM VEC on “Why Engineering?”, **Mr.M.Iniyan Thirumurugan** (Alumni) Zoho Corporation. 45 students were registered from the various schools from Tamilnadu.

3. A “**Digital Reunion of Mechanical Alumini**” program was conducted on 13.06.2020 through google meet platform. 64 Alumni were registered. An expert talk was given by **Mr.N.D.Nandhalal**, Team Lead, **Renault Nissan Technology Business Center India Pvt Ltd, Mahindra world city**, in the topic “Automotive Industrial Scenario for Mechanical Engineers – Post Covid 19”. The following points were delivered by expert: Industries need to accept changes, Personnel Mobility, Different challenges in automotive industry, Different challenges in automotive industry, Advancements in the automobile engine components.

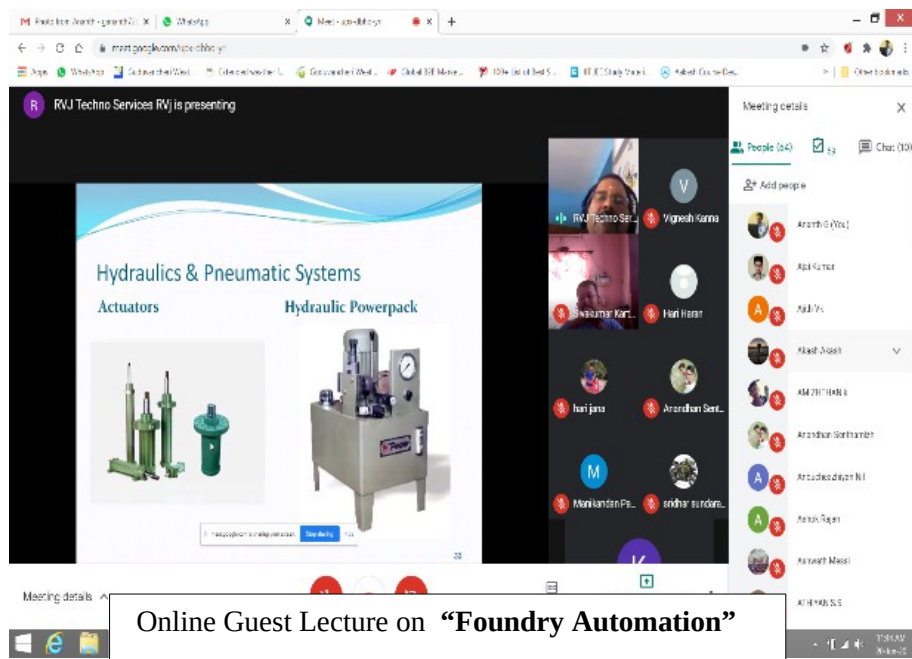
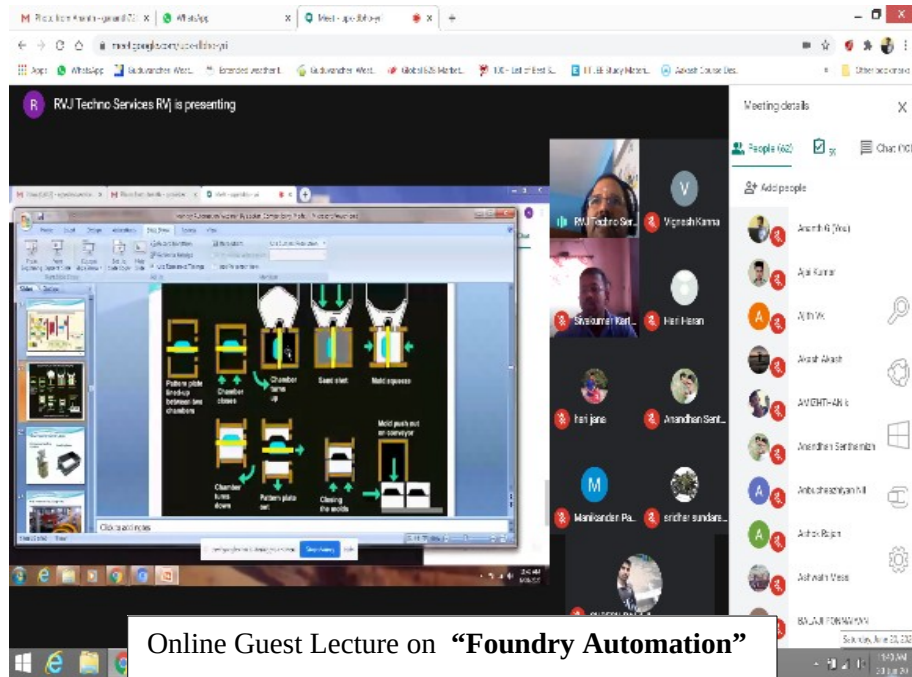




4. An one day skill development programme on **“Design and Fabrication of Foot Operated Sanitizer Dispenser”** was held on 17/06/2020. In this programme 20 Non-teaching staff participated from various Departments. The following topics were discussed: Importance of Sanitizer and soap usage, Importance of foot operated sanitizer dispenser, Design and components employed in the sanitizer, fabrication of Sanitizer dispenser components and assembly



5. An online guest lecture on “**Foundry Automation**” conducted on 20.06.20. for our students. The chief guest **Mr.S.Sekar**, CEO, RVJ Techno Services discussed the following topics: Basics of Foundry, Conventional Foundry activities, Various Conventional Components, Various products Manufactured using Foundry, Transition from Conventional to Modern Foundry, Various Modern Components, Foundry Automation, Recent Hardware and Software, Job opportunities for the Mechanical Engineering Students.



Staff’s Participation:

1. Dr.G.Anbuezhayan, Assistant Professor (Sr.G), published paper on “Influence of microstructure and mechanical properties of TiC reinforce magnesium nano composite” Materials Today: Proceedings 27 (2020) 1530–1534.
2. Dr.G.Anbuezhayan, Assistant Professor (Sr.G), published paper on “Synthesis of B4C and BN reinforced Al7075 hybrid composites using stir casting method” Journal of Materials Research and Technology, 2020;9(3):6297–6304