



**SRM VALLIAMMAI ENGINEERING COLLEGE**

**(An Autonomous Institution)**

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

**DEPARTMENT OF MECHANICAL ENGINEERING**

**NEWS LETTER Jan \_ March 2022**



1. A Personality Development Programme titled 'Gear up your health & Cheer up your life' was conducted on 19<sup>th</sup> January 2022. The objective of the programme was to develop positive energy among the faculty members and to make them realize about their potential with self-analysis. The resource person Dr.Komala James, Professor & Head- ECE, SRM Valliammai Engineering College delivered the session on the following topics: Vibrant music of positive thinking, causes of stress, need for stress management, advantages of stress free life, importance of health and happiness, good food habit, breathing exercise, brain detox, brain exercise, need for positive thinking and happiness of life. All the teaching faculty and non-teaching staff actively participated in the programme.

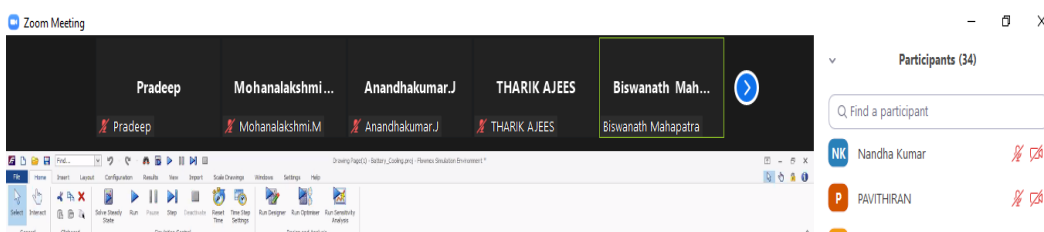
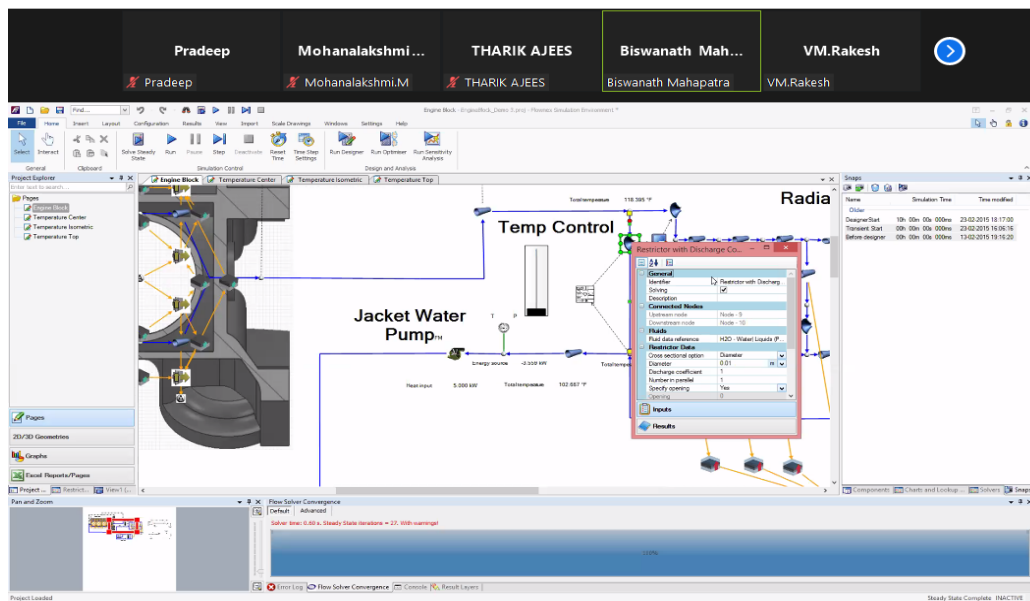
**BENEFITS OF POSITIVE THINKING**

- Longer life span
- Lower chance of having a heart attack
- Better physical health
- Greater resistance to illness
- Lower blood pressure
- Better stress management
- Better pain tolerance

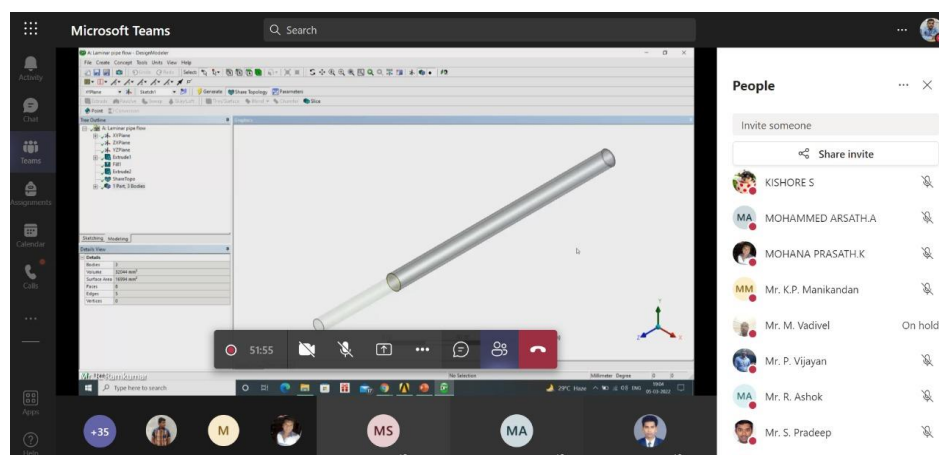
The slide also includes a video inset showing a woman wearing a face mask, likely Dr. Komala James, speaking during the programme. Below the video is a decorative image of a basket of daisies with smiley faces on their petals.

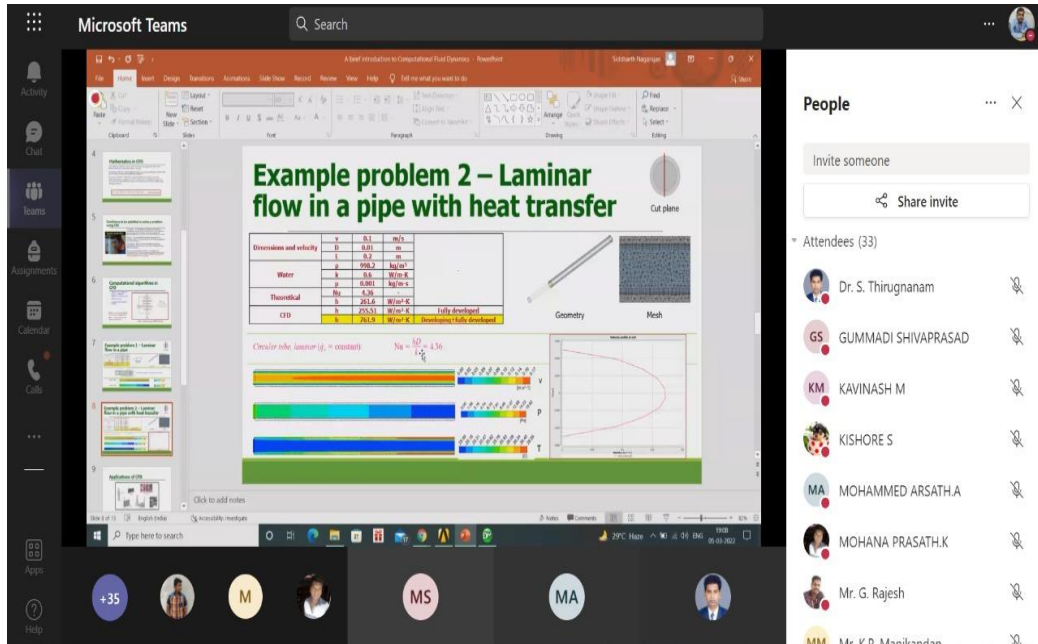


2. A virtual industrial visit to DHIO Research & Engineering Pvt Ltd, Bangalore was conducted on online mode on 25<sup>th</sup> January 2022. The virtual walk through was guided by Mr. Vijayakumar, Technical Head, DHIO Research & Engineering Pvt Ltd., Bangalore have explained the technical concepts of Thermal flow simulation & analysis. The virtual walk covered the following topics: 1D thermal flow simulation, Sub system to complete system Analysis, Component level combined process flow, Heat transfer Modelling, Simulation of Multi Domain & Multiphase Fluids, System Level and Subsystem level simulation. A total 49 of students participated in the virtual industrial visit.

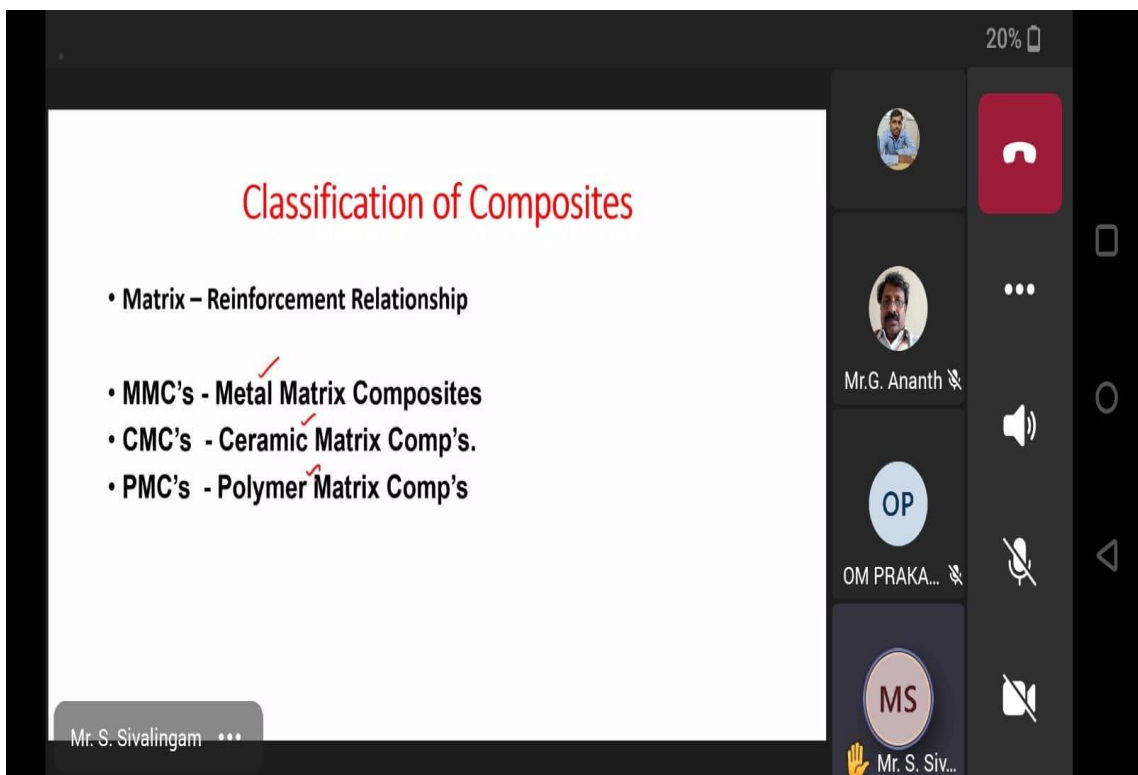


3. A Guest Lecture on ‘Applications of CFD in fire safety engineering’ was conducted through online mode on 5<sup>th</sup> March 2022. The resource person Mr.M.Sundara Venkatesh, CFD Engineer (R & D) , Bajaj Auto ltd, Chennai delivered a lecture on the following topics: Basics of Fluid mechanics and heat transfer, Basic Equations for CFD like Haigen-Poiseuille's equation and Navier-stokes equation, Mathematical modelling in computational fluid dynamics, Finite element modelling of flow through duct and nozzles, Essential and non-essential boundary conditions required to solve a problem using CFD, Computational algorithms in CFD, How to use the Ansys FLUENT, Heat transfer problem using CFD, Laminar flow in a pipe, Comparison and Validation of Results, Fire triangle and safety, Applications of CFD in fire safety. A total of 43 members participated in the guest lecture.

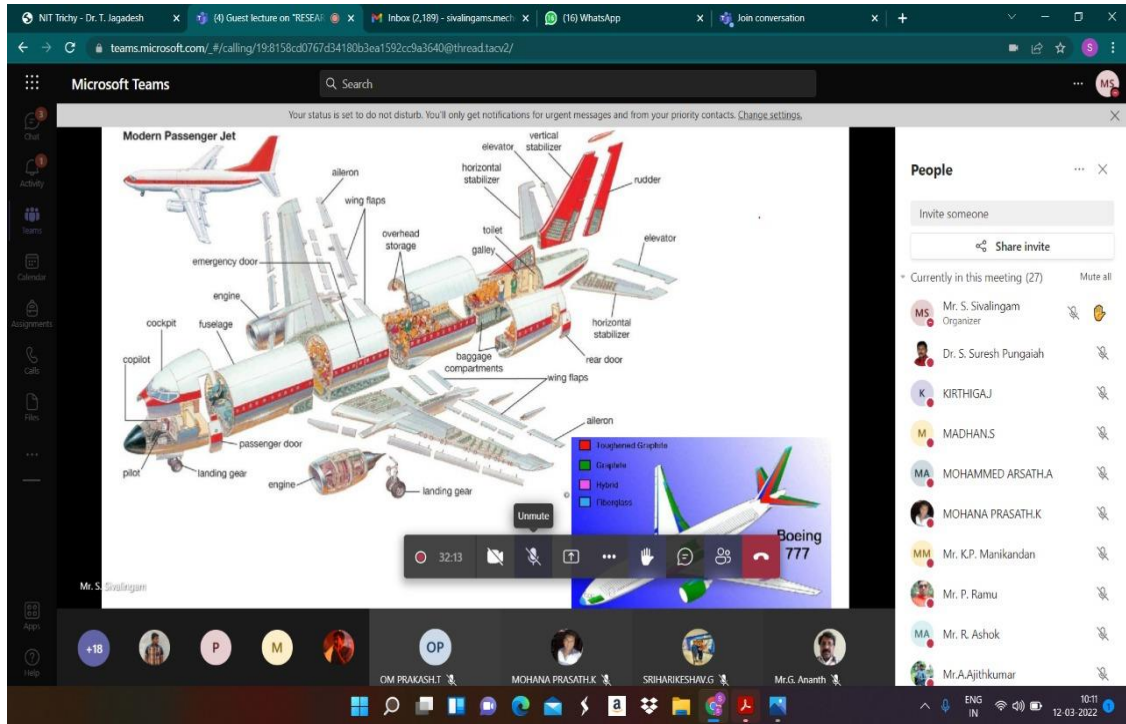




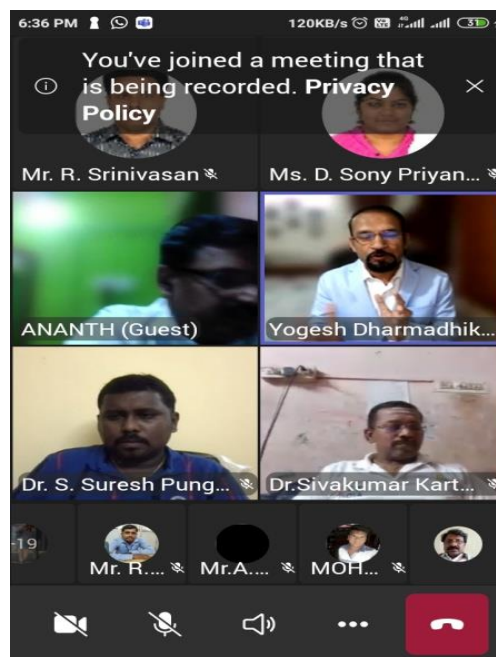
4. A guest lecture on ‘Research Challenges in Manufacturing of Composite Materials’ was conducted on online mode on 12<sup>th</sup> March 2022. The resource person Dr.T.Jagadesh, Assistant Professor, National Institute Technology, Tiruchirappalli, delivered a lecture on the following topics: Composite materials, History of composite development, Periodic table of the elements, Classification of Composite, Types of composite materials, Conventional manufacturing of composite, Additive manufacturing, Stereo lithography, Fused deposition Modelling, Selective laser sintering, Machining, Cutting mechanism, Wettability. A total of 57 members registered out of which 35 members participated in the guest lecture.





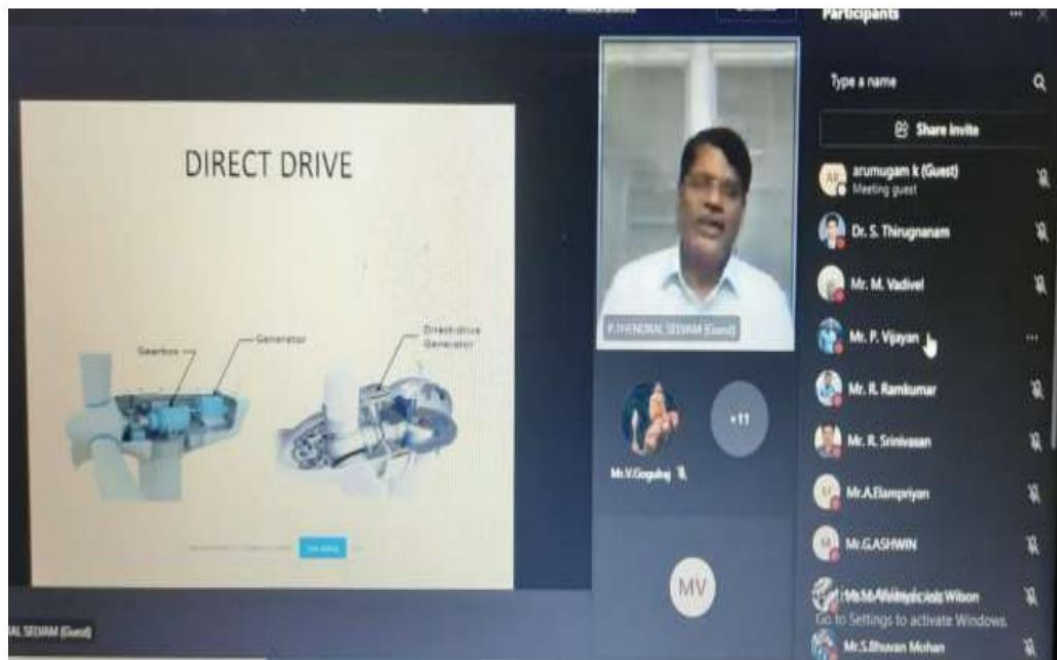


5. A National Conference titled ‘Emerging Trends in Mechanical Engineering-2022’ (ETME’22), was conducted on 16<sup>th</sup> March 2022. The chief guest Mr.Yogesh Dharmadhikari, Senior Program Manager, Mercedes-Benz Research and Development India, Bangalore, delivered the inaugural key note address on Innovation, how innovative the students’ minds have to be. He also reiterated how innovative people should handle their 3H viz Heart, Head And Hands. Students and faculty from various colleges presented papers in the conference on Design, Thermal, Manufacturing, CAD/CAM/CAE.



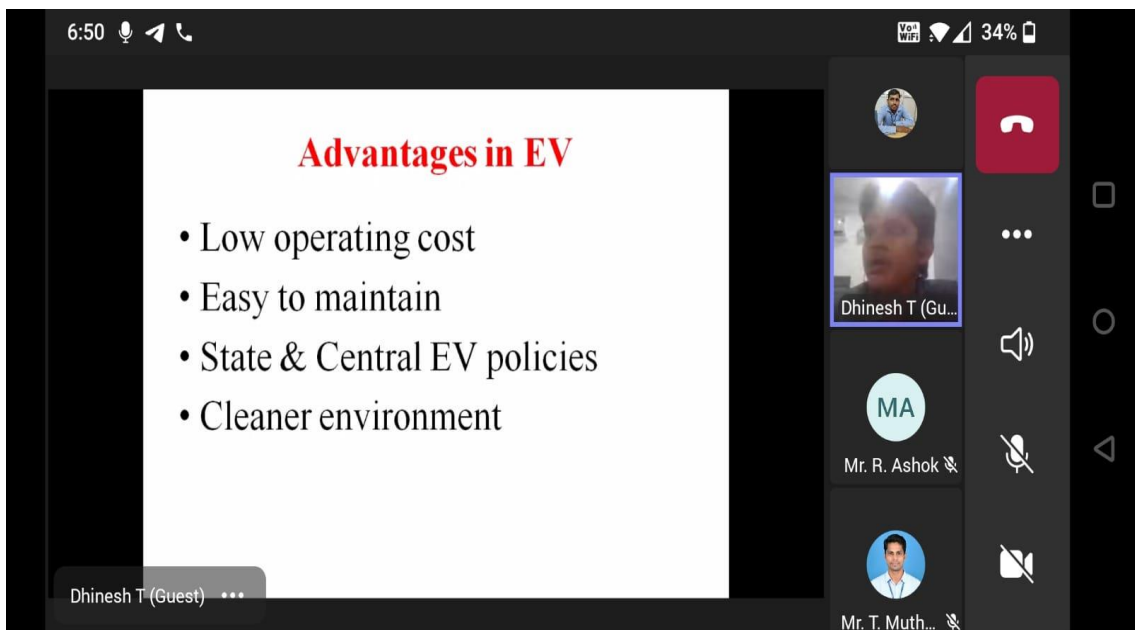
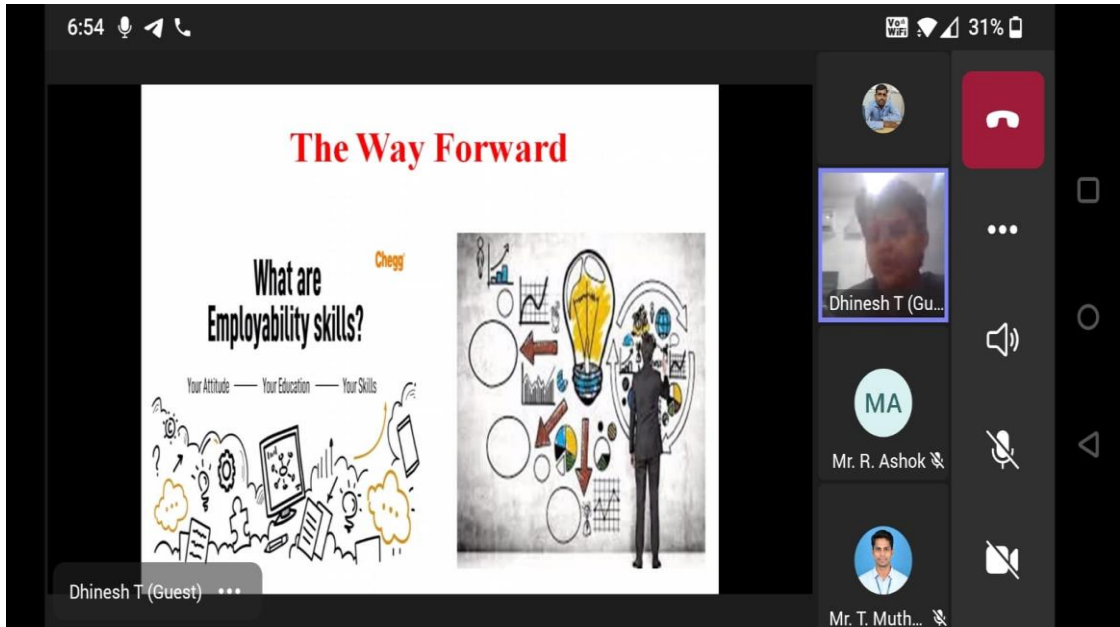
6. A Guest Lecture on ‘Wind Energy Recent Advances and Future Direction’ was conducted through online mode on 22<sup>nd</sup> March 2022. The resource person

Mr.P.Thendral Selvam M.E., (Ph.D.), CEO of Hi-Tec Industrial Fan and Systems, delivered the guest lecture on the following topics: Basics of Renewable Energy, Basic of governing equation for wind blade design, Onshore and off shore wind turbine models., Structure of the wind turbine erected in various parts of the world, Material used in the wind turbine for producing blades of the turbines, Research avenues in the field of Wind energy, Curved Blade Air Flow and Performance of the turbines, Variable-Speed Wind Turbine Generator. About 36 members participated in the guest lecture.



7. A special Lecture on ‘E mobility in India, Challenges, Technologies and market Opportunities for Indian youth’ was conducted on online mode on 24<sup>th</sup> March 2022. The resource person Mr.T.Dhinesh, Assistant Engineer in M AUTO Electric mobility PVT Ltd, delivered the lecture on the following topics: E vehicle – Governmental policies, Types of E vehicles, Challenges in E vehicles, Power train system,

Advantage over fuel vehicles, Battery Management system, Current market demands, Multi discipline nature of E vehicles, Job opportunities, business opportunities, A total of 32 members participated in the guest lecture.



### Staff Publications:

1. Ravinutala Ajay.H, PG Scholar, Mr.S.Pradeep, Assistant Professor (O.G) published a paper titled 'Hazard Identification And Riskassessment In Boiler', in International Journal of Current Engineering And Scientific Research (IJCESR), ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-9, ISSUE-3, 2022
2. I.Dinaharan, T. Muthu Krishnan and R. Palanivel, published a paper titled 'An assessment of microstructure and tensile behavior of magnetically impelled arc butt welded AISI 409 ferritic stainless steel tubes', in the Journal of Materials Engineering and Performance, ( Impact factor-1.86 ).

3. Mr.K.Mohana Prasath, A.Mohammed Arsath , P.Premanand , R.Ravichandran and Mr.R.Sirinivasan Assistant Professor (Sr.G) presented a paper on ‘Design and fabrication of mini refrigerator with thermoelectric cooling’ in National Conference on ‘Emerging Trends in Mechanical Engineering-2022’ (ETME’22) on 16<sup>th</sup> March 2022.
4. Mr.R.Sakthi Subash, Mr.K.Sangamithran, Mr.S.Rubesh, Mr.P.Sasikumar and Mr.R.Ashok Assistant Professor (Sr.G) presented a paper on ‘Resource recovery as alternative fuel from harmful waste’ in the National Conference on ‘Emerging Trends in Mechanical Engineering-2022’ (ETME’22) on 16<sup>th</sup> March 2022.
5. Mr.A.Ramaneesh and Mr.M.Vadivel Assistant Professor (O.G), presented a paper on ‘Processing techniques of functionally graded materials - an overview’ in the National Conference on ‘Emerging Trends in Mechanical Engineering-2022’ (ETME’22) on 16<sup>th</sup> March 2022
6. Mr.A.Z.Shaklin Musthaq, Mr.S.Shruthick and Mr.G.Rajesh Assistant Professor (O.G) presented a paper on ‘Design and development of electro magnetic brake using electrical bicycle’ in the National Conference on ‘Emerging Trends in Mechanical Engineering-2022’ (ETME’22) on 16<sup>th</sup> March 2022 and secured First position in this event.
7. Mr.R.Ramkumar Assistant Professor (O.G) and Mrs.D.Sony Priyanka Assistant Professor (O.G) completed all 8 modules in NITTR

Staff Incharge

HoD/Mech