



**KONGU ENGINEERING COLLEGE**

**CAMPUS R&D NEWS**



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### PH.D VIVA-VOCE COMPLETED

1. Dr.A.Muthukumar, Research Scholar, Department of Mechatronics Engineering defended his thesis entitled “Bus body manufacturing system via FMEA and fuzzy logic controller” on 21.12.2022 under the guidance of Dr.K.Krishnamurthy / MTS.

### R&D PROJECTS SACTIONED (2022-2023)

1. Mr.M.S.Kamalesh / EEE received research grant of Rs.17,39,024/- for the project entitled “Design of a paddle based auxiliary charging circuit for E-bikes in left-out situation” under SERB-SIRE scheme on 23.08.2022, Ref. SIR/2022/000778.
2. Dr.R.Parameshwaran/MTS, Dr.S.M.Senthil/Mechanical and Dr.S.Praveenkumar /MTS received research grant of Rs.1,27,84,315/- for the project entitled “Development of intelligent powder-based 3D metal printer with integrated post-processing unit and industry 4.0 features” under DST-TDT-AMT scheme on 04.10.2022, Ref. DST/TDT/AMT/2021/013(G).
3. Dr.A.Santhoshkumar / Mechanical received research grant of Rs.18,30,000/- for the project entitled “Effective conversion of medical and municipal plastic wastes into value added products through integrated thermo-chemical reactors and its kinematic study and life cycle assessment” under SERB-TARE scheme on 24.11.2022, Ref. TAR/2022/000608.
4. Dr.S.V.Kogilavani/AI, Dr.S.Malliga/CSE, Dr.C.S.Kanimozhiselvi/AI, and Ms.P.Jayadharshini/AI, received research grant of Rs.19,66,880/- for the project entitled “Study and development of a tool for Alzheimer's dementia detection from impulsive emotions, speech and language using transfer learning based deep neural network techniques” under ICMR-DHR scheme on 01.02.2023, Ref. F.No.R.11012/03/2023-GIA/HR.

### REFERRED JOURNAL PUBLICATIONS

1. Prahatheswaran, V., and Chandrasekaran, P., (2022). Experimental study on use of light weight aggregate incorporated in SCC with limecrete. *European Journal of Environmental and Civil Engineering*, Vol.26, No.16, pp.8541-8560.
2. Muthupandy Varuthaiya., Chandrasekaran P., Vivek Sivakumar., and Ganeshan Pushpanathan., (2022). Concrete with sisal fibered geopolymer: A behavioral study. *Journal of Ceramic Processing Research*, Vol.23(6), pp.912-919.
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4. Santhosh Kumar, K., Muralimohan, N., Kulanthaivel, P., and Sathiskumar, S., (2022). Spatial Analysis of Ground water and their treatment with Low-Cost Ceramic membrane. *Journal of Ceramic Processing Research*, Vol.23(6), pp.892-901.
5. Janani, S., Rampradheep, G.S., Kulanthaivel, P., and Murugan, P.C., (2022). Eco-Efficient Concrete: A sustainable reutilization of Ceramic Tile Waste Powder (CTWP) as a partial replacement for cementitious material in a recycled fine aggregate concrete. *Journal of Ceramic Processing Research*, Vol.23(6), pp.884-891.
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7. Saranyan, B., Sambathkumar, M., and Sreeharan, B.N., (2022). An investigation on selection and validation of suitable material to a steering knuckle of quad bike. *AIP Conference Proceedings*, Vol.2446(1), p.110003.
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9. Thangamuthu, M., and Tamilvanan, A., (2022). Decision support system for tool condition monitoring in milling process using artificial neural network. *Journal of Engineering Research*, Vol.10(4B), pp.142-155.
10. Senthil, S.M., Bhuvanesh Kumar, M., and Dennison, M.S., (2022). A Contemporary Review on Friction Stir Welding of Circular Pipe Joints and the Influence of Fixtures on This Process. *Advances in Materials Science and Engineering*, Vol.2022, Article ID: 1311292.

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13. Hari, B.S., Shrivathsan, V., Tamilselvan, S., and Sathiyam, S.C., (2022). Automatic rainwater collecting duct. *IOP Conference Series: Earth and Environmental Science*, Vol.1100(1), p.012024.
14. Senthilkumar, S., Bharanitharan, K.J., and Selvakumar, P., (2022). Study the effects of heated wall profile and superheat on bubble evolution in film boiling using a VOF-CSF phase change model. *AIP Conference Proceedings*, Vol.2516(1), p.410002.
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16. Chellamuthu, S., Chandira Sekaran, E., Sivakumar, A., and Palanisamy, A.R., (2022). Fault Detection in Electrical Equipment by Infrared Thermography Images using Spiking Neural Network through Hybrid Feature Selection. *Journal of Circuits, Systems and Computers*, Vol.32(8), p.2350139.
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