



PH.D VIVA-VOCE COMPLETED

1. R.Nithyaprakash, Research Scholar, Department of Mechatronics Engineering defended his thesis entitled “Experimental and computational wear studies of silicon nitride against ceramic and metallic biomaterials for human hip prosthesis” on 07.01.2022 under the guidance of Dr.S.Shankar / MTS.
2. M.S.Kamalesh, Research Scholar, Department of Electrical and Electronics Engineering defended his thesis entitled “Design of a non-linear boomerang trajectory based sliding mode controller for ripple reduction and mitigation of circulating current in DC microgrid” on 07.01.2022 under the guidance of Dr.N.Senthilnathan / EEE.
3. R.D.Gomathi, Research Scholar, Department of Electrical and Electronics Engineering defended his thesis entitled “An experimental study to assess the effectiveness of tasks on the writing skills of entry-level engineering students” on 21.01.2022.

R&D PROJECTS SACTIONED (2021-2022)

1. Dr.S.Albert Alexander / EEE, Dr.S.Shankar / MTS, Dr.M.Srinivasan / EEE and Mr.D.Sarathkumar / EEE received research grant of Rs. 28,65,200/- for the project entitled “Design and development of solar photovoltaic assisted micro-grid architecture with improved performance parameters intended for rural areas” under DST- TMD-WCE scheme on 03.06.2021, Ref. No.DST/TMD/CERI/RES/2020/32/(G).
2. Dr.V.Chitra Devi / FT, Mr.S.Mothil / Chemical and Mr.R.Sathish Raam / Chemical received research grant of Rs. 1,07,09,518/- for the project entitled “Design and development of continuous high pressure screw reactor for Alkali catalyzed hydrothermal co-liquefaction of plastic wastes with lignocellulosic biomass” under DST-TDT-WMT scheme on 01.07.2021, Ref. No. DST/TDT/WMT/Plastic Waste/2021/08[G].
3. Dr.G.S.Rampradheep / Civil received travel grant of Rs.2,00,000/- for the project “Grant for study tour of ATAL tunnel under the AICTE youth undertaking visit

for acquiring knowledge (Yuvak) scheme” with students under AICTE scheme on 19.08.2021, Ref. No. STDC-AICTE-ST-AT/266/2020-2021/37.

4. Dr.S.Shankar / MTS, Dr.S.Albert Alexander / EEE, Dr.R.Naveenkumar / Mechanical received research grant of Rs.18,00,000/- for the project entitled “Investigation of cotton dust exposure and indoor air quality on the pulmonary health among the textile workers of Tamilnadu” under ICMR Adhoc R&D Project scheme on 22.12.2021, Ref No 5/8-4/30/Env/2020-NCD-II.
5. Dr.V.K.Gobinath / MTS received research grant of Rs.18,30,000/- for the project entitled “Development of long term sustainable 3D printed gahnite - glass cover sheet to attain efficient polycrystalline solar cell performance” under SERB TARE scheme on 21.12.2021, Ref. No. TAR/2021/000173.
6. Dr.A.Mohankumar / Mechanical received research grant of Rs.18,30,000/- for the project entitled “Study of Self-powered one piece wearable Tribo-Electric Nano Generator with different contact modes” under SERB TARE scheme on 04.01.2022, Ref. No.TAR/2021/000235.

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2. Saji Raveendran, P., Murugan, P.C., Darwin, T., Glivin, G., and Dwivedi, G., (2022). Energy Analysis of R1234yf/R134a as Replacement of R134a in a Domestic Refrigerator. *Advancement in Materials, Manufacturing and Energy Engineering*, Vol.2, pp.495-502, Springer, Singapore.
3. Karupannasamy, D.K., Kailas, S.V., Shankar, S., and Sasikumar, K.S.K., (2022). A Predictive Model for Galling Phenomenon and Its Applicability for Deep Drawing Processes. *Journal of Tribology*, Vol.144(1), p.011705.
4. Shankar, S., Nithyaprakash, R., Abbas, G., Kumar, R. N., Pramanik, A., Basak, A. K., & Prakash, C. (2022). Tribological behavior of zirconia-toughened alumina (ZTA) against Ti6Al4V under different bio-lubricants in hip prosthesis using experimental and finite element concepts. *Materials Letters*, Vol.307, pp.131107.
5. Basak, A., Pramanik, A., Prakash, C., Shankar, S., and Debnath, S., (2022). Understanding the Micro-Mechanical Behaviour of Recast Layer Formed during WEDM of Titanium Alloy. *Metals*, Vol.12(2), pp.188.
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