



PH.D VIVA-VOCE COMPLETED

1. S.Vijayanand, Research Scholar, Department of Civil Engineering defended his thesis entitled “Axial capacity assessment and nonlinear behaviour of cold-formed steel built-up columns” on 19.07.2021.
2. R.Mouleeshwararabhu, Research Scholar, Department of EIE defended his thesis entitled “Certain investigations on detection of seizure from EEG signal using computational techniques” on 22.07.2021 under the guidance of Dr.N.Kasthuri / ECE.
3. R.Rajkumar, Research Scholar, Department of EIE defended his thesis entitled “An investigation on the performance of grid integrated multifunctional inverter using intelligent control techniques” on 23.07.2021 under the guidance of Dr.U.S.Ragupathy / EIE.
4. J.Revathi, Research Scholar, Department of Mathematics defended her thesis entitled “A theoretical investigation on different types of intuitionistic fuzzy filter in lattice implication algebra” on 26.07.2021 under the guidance of Dr.C.Duraisamy / Mathematics.
5. S.Anitha, Research Scholar, Department of IT defended her thesis entitled “Certain investigations on secure routing schemes for replica node detection in wireless sensor networks” on 29.07.2021 under the guidance of Dr.P.Jayanthi/CSE.

R&D PROJECTS SACTIONED (2021-2022)

1. Dr.S.Albert Alexander / EEE, Dr.S.Shankar / MTS, Dr.M.Srinivasan / EEE, 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, 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].

REFERRED JOURNAL PUBLICATIONS

1. SukumarPonnusamy., Ravi Samikannu., Sampath Kumar Venkatachary., SharmilaSukumar and Rohini Ravi., (2021). Computer aided innovation method for detection and classification of cervical cancer using ANFIS classifier. *Journal of ambient intelligence and Humanized computing*, Vol.12(6), pp.6231-6240.
2. Velumani, M., and Nirmalkumar, K., (2021).Effect of copper slag on mechanical and durability aspects for different strength concretes. *International Journal of Cement Wapno Beton*, Vol.26(2), pp.156-166.
3. Sangeetha, R.K., Arumugam, K., Karthika, T.,Manikandan, A.T., and Karthi, S., (2021).Assessment of Cauvery River Water Quality using Water Quality Index in Bhavani - Kokkarayanpettai, Erode Zone. *Indian Journal of Environment Protection*, Vol.41(6), pp.693-697.
4. Gukendran, R., Sambathkumar, M., Sasikumar, K.S.K., Ponappa, K., and Gopal, S., (2021). Investigation of dry sliding wear behavior of Al 7075–(SiC/TiC) hybrid metal matrix composites. *Surface Review Letters*, Vol.28(7), p.2150065.
5. Ariful Islam, YasinMolla, Thuhin Kumar Dey, Mamun Jamal, Rajasekar Rathanasamy, and Md. Elias Uddin. (2021). Latex reinforced waste buffing dust-jeans cotton composites and its characterization. *Journal of Polymer Research*, Vol.28(8), pp.1-8.
6. Rajasekar Rathanasamy, Sumanta Sahoo, Joong Hee Lee, Ashok Kumar Das, Mahalakshmi Somasundaram, Sathish Kumar Palaniappan., and Santhosh Sivaraj., (2021). Carbon-based Multi-layered Films for Electronic Application: A Review. *Journal of Electronic Materials*, Vol.50(4), pp.1845 - 1892.
7. Gobinath,V.K., Rajasekar, R., Moganapriya, C., Manju Sri, A., Raja, G., SathishKumar,P., and Jaganathan,S.K., (2021). Surface engineering of zinc sulphide film for augmenting the performance of polycrystalline silicon solar cells. *Chalcogenide Letters*, Vol.18(7), pp.375-384.
8. Yuan, C.G., Pramanik, A., Basak, A.K., Prakash, C., and Shankar, S., (2021). Drilling of titanium alloy (Ti6Al4V) – a review. *Machining Science and Technology*, Vol.25(4), pp.637-702.
9. Govindan, S., Boopathi, M., Venkatesh, A.P., Maridurai, T., Sathish, T., and Balakrishnan, E., (2021). Statistical analysis of electrodeposited nickel coating to S275JR grade mild steel. *Materials Today: Proceedings*, Vol.46(9), pp.4159-4164.
10. Sabarimuthu, M., and Senthilnathan, N., (2021). Development of fast and hybrid charger for lithium ion batteries in light weight electric vehicles. *International Transactions on Electrical Energy Systems*, Vol.31(7), pp.1-25.
11. Sophia Jasmine, G., and Sheela, A., (2021). Penmanship and signal acknowledgment utilizing inertial pen. *Materials Today: Proceedings*, Vol.45(9), pp.8110-8114.
12. Senthilkumar, M., Suresh, K.P., GunaSekar, T., and Pazhanimuthu, C., (2021). Efficient Battery Monitoring System for E-Vehicles. *7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, pp.833-836.

13. Gunasekar, T., Aarthi, V., Bharanidharan, K.L., Ashwin, S., Venkat, V., and Mohanasundaram, T., (2021). GSM Based Fault Detection in Three Phase Power Distribution System. *7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, pp.384-388.
14. Firos, A., Joshi VinayakBhalachandra., SidagoudaPatil., Emmanuel Babu Pukkunnen., Lakshmi Devadas., and Sabarimuthu, M., (2021). Permanent Magnet Synchronous Generator Based Wind Energy Conversion System with Power Management System using V/F Technique. *International Journal of Aquatic Science*, Vol.12(2), pp.2372 - 2382.
15. Yuvarani, P., Vijayachitra, S., Ranganayaki, V., Sathish Kumar, S., Srujan Raju, K., Sivachitra, M., and Komalnu Raghavan, I., (2021). Industrial Waste Water Recycling using Nanographene Oxide Filters. *Advances in Materials Science and Engineering*, Vol. 2021, Article ID 4528949.
16. Kannan, K., Sivaranjani, P., Sathish Kumar, S., Nalini, M., Balaji, V. R., and Sanjeevi, P., (2021). SPAHN novel approach for PL-AG gateway discovery for internet connectivity. *Peer-to-Peer Networking and Applications*, Vol.14, pp.2275-2284.
17. Senthilkumar, K., Balambigai, S., Hemalatha, K., Chandrasekaran, A., Suganthi, V., Yuvasri, M., and Shreelogesh. D., (2021). Chemically Treated Activated Carbon for Supercapacitor Electrode Derived from Starch of Solanum Tuberosum. *Journal of New Materials for Electrochemical Systems*, Vol.24(2), pp.78-83.
18. Sasikala, S., Gomathi, S., Geetha, V. and Murali, L., (2021). A Proposed Framework for Cloud-aware Multimodal Big Data Analysis toward Optimal Resource Allocation. *The Computer Journal*, Vol.64(6), pp.880-894.
19. Deepa, G., Suresh Kumar, V., Hari Baskar, C., Hari Prakathish, T. and Deepak Kumar J., (2021). Domestic - Monitoring System for the Elderly using Deep Learning. *Turkish online Journal of Qualitative Inquiry*, Vol.12(3), pp.5237-5248.
20. Nagaraju, V., Abhishek, S., Raja Sarath Kumar, B., Balambigai, S., and Sakthisudhan, K., (2021). Diagnosed image of breast cancer by antenna MVDR beam forming algorithm with composites. *Materials Today: Proceedings*, Vol.46(9), pp.4207-4211.
21. Thirunavukkarasu, R.R., and Meeradevi, T., (2021). ECG denoising using Kaiser Bessel window filter. *7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, pp. 668-671.
22. Thirunavukkarasu, R.R., and Meeradevi, T., (2021). Customization in Home Automation using IoT. *7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, pp. 1062-1067.
23. Thirunavukkarasu, R.R., and Meeradevi, T., (2021). Smart irrigation and crop production using Arduino. *7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, pp. 639-643.
24. Vijayalakshmi, K., Kanimozhiselvi, C.S., and Sapna, B., (2021). Novel tri-band series fed microstrip antenna array for THz MIMO communications. *Optical and Quantum Electronics*, Vol.53(7), pp.1-13.
25. Krishnamoorthy, N., Prasad, L.N., Kumar, C.P., Subedi, B., Abraha, H.B. and Sathishkumar, V.E., (2021). Rice leaf diseases prediction using deep neural networks with transfer learning. *Environmental Research*, Vol.198, pp.1-12.
26. Gothai, E., Natesan, P., Rajalaxmi, R.R., Sakti, S., Sasi, S., and Soundararajan, P., (2021). Air Pollution and Temperature in the Prediction of Covid-19. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Vol.12(3), pp.3939- 3953.
27. Sasipriyaa, N., Natesan, P., Venu, K., Mohamed Riya, S., Karthikeyan, B., and KavinMukil, E., (2021). Handwritten Ancient Tamil Character Recognition using Generative Adversarial Network (Gan). *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Vol.12(3), pp.1849 - 1857.
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29. Dhanaraj, R.K., Lalitha, K., Anitha, S., Khaitan, S., Gupta, P., and Goyal, M.K., (2021). Hybrid and dynamic clustering based data aggregation and routing for wireless sensor networks. *Journal of Intelligent & Fuzzy Systems*, Vol.40(6), pp.10751-10765.
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31. Shanmugam, P., (2021). Hydrodenitrogenation of 2-Methyl Quinoline - Effect of steric hindrance in liquid phase catalytic hydrogenation. *Revista de Chimie*, Vol.72(3), pp.50-70.
32. Periasamy Manikandan, A.S., and Baskar, R., (2021). Studies on thermophysical property variations of graphene nanoparticle suspended ethylene glycol/water. *Chemical Industry & Chemical Engineering Quarterly*, Vol.27(2), pp.177-187.
33. Kamatam Hari Prasad., Karupiah Deva Arun Kumar., Paolo Mele., Arulanandam Jegatha Christy., Kugalur Venkidusamy Gunavathy., Sultan Alomairy., and Mohammed Sultan Al-Buriahi., (2021). Structural, Magnetic and gas sensing activity of pure and Cr doped In₂O₃ thin films grown by pulsed laser deposition. *Coatings*, Vol.11(5), p.11050588.
34. Anbuselvan, D., Nilavazhagan, S., Santhanam, A., Chidhambaram, N., Gunavathy, K.V., Tansir Ahamad., and Saad M. Alshehri., (2021). Room temperature ferromagnetic behavior of nickel-doped zinc oxide dilute magnetic semiconductor for spintronics applications. *Physica E: Low-dimensional systems and nanostructures*, Vol.129, p.114665.
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37. Karthikeyan, M., and Vijayachitra,S., (2021). A Novel Experimental Study and Analysis of Electrocoagulation Process for Textile Wastewater Treatment using Various Sensors with Integration of IoT Monitoring System. *Journal of New Materials for Electrochemical Systems*, Vol.24(2), pp.95-102.
38. Kalaiselvi, S., Mohana, R.S., and Prabakaran, P., (2021). Resource Optimization and Dynamic Workload Prediction Strategy for Large Scale Cloud Environment. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, Vol.12(3), pp.2951-2964.
39. GokilaBrindhya, P., Om Prakash, S., and Yaswanth, M., (2021). Optimizing the Hyperparameters of CNN in predicting the presence of Retinal Disease with OCT image dataset. *International Journal of Engineering Research in Computer Science and Engineering*, Vol.8(7), pp.2394-2320.

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