



PH.D VIVA-VOCE COMPLETED

1. S.Gomathi, Research Scholar, Department of Electronics and Communication Engineering defended her thesis entitled Certain investigations on efficient VLSI architectures for various adaptive filters for noise cancellation application on 26.11.2020 under the guidance of Dr.G.Murugesan / ECE.
2. S.Karthick, Research Scholar, Department of English defended his thesis entitled An observation of exquisite vedantic philosophy of naturalism, mysticism and immortal aspects in Sri Aurobindo's select poems on 04.11.2020.

R&D PROJECTS SACTIONED (2020-2021)

1. Dr.R.Baskar, Food Technology, Dr.C.Maheswari, Mechatronics Engineering and Dr.T.Manikandan, Chemistry received research grant of Rs.10,11,137/- for the project entitled Developing electrical discharge non-thermal plasma (EDNP) based treatment process to achieve environmental compatibility in selected process industry wastewater remediation under AICTE RPS scheme on 20.03.2020, Ref.No.8-208/RIFD/RPS (POLICY-1)/2018-19
2. Dr.B.Meenakshipriya, Dr.R.Parameshwaran and A.Balaji of Mechatronics Engineering received grant of Rs.16,57,016/- for the project entitled Modernization of robotics and machine vision laboratory for artificial intelligence and deep learning applications with robot operating system (ROS) platform from AICTE-MODROB scheme on 16.05.2020, Ref.No.84-68/RIFD/MODROB /Rural/Policy-1/2019-20
3. Dr.V.Chitra Devi, Dr.R.Baskar, and R.Sorna Prema of Food Technology received grant of Rs.10,57,016/- for the project entitled Modernization of food analysis and quality control laboratory from AICTE-MODROB scheme on 16.05.2020, Ref.No.8-208/RIFD/RPS (POLICY-1)/ 2018-19
4. Dr.S.Vijayachitra, Dr.U.S.Ragupathy, Dr.M.Ponnibala, Dr.S.J.Suji Prasad and C.Aravind of Electronics and Instrumentation Engineering received grant of Rs. 11,96,667/- for the project entitled Development of intelligent automation systems with integration of wireless sensor networks and internet of things (Industry 4.0) from AICTE-MODROB scheme on 16.05.2020, Ref. 84-69/RIFD/MODROB/Rural/Policy-1/2019-20.
5. Dr.C.Maheswari, Mechatronics Engineering received research grant of Rs.2,50,000/- for mentoring the industry project entitled Prototyping for measuring hardness indentation of casted components through machine vision

system from EDII under IVP scheme on 27.07.2020, Ref.No. Lr.No.2270/EDII/JD/2018

6. Dr.R.Selvakarthy, Electronics and Instrumentation Engineering and Dr.P.Shanmugam, Chemical Engineering received research grant of Rs.2,43,000/- for mentoring the industry project entitled Waterless dyeing machine from EDII under IVP scheme on 27.07.2020, Ref.No. Lr.No.2270/EDII/JD/2018
7. Dr.M.Karthick, Dr.S.Usha and P.Karthikeyan of Electrical and Electronics Engineering received research grant of Rs.18,66,667/- for the project entitled An investigation into the maneuvering performance of Proton Exchange Membrane (PEM) fuel cell for its recoverable degradation of electrical behavior under extreme humidification and membrane hydration conditions from AICTE under RPS scheme on 14.08.2020, Ref. No.8-55/FDC/PRS(POLICY-1)/2019-20.
8. R.P.Karthick of Electronics and Communication Engineering received research grant of Rs.2,65,000/- for mentoring the industry project entitled Intelligent assistive device for people with vision impairment from EDII under IVP scheme on 29.08.2020, Ref.No. Lr.No.2270/EDII/JD/2018
9. Dr.N.Senthilnathan and P.Sethupathi of Electrical and Electronics Engineering received research grant of Rs.6,79,000/- for the project entitled Design and development of novel submersible line start permanent magnet assisted synchronous reluctance motor for agricultural water pumping from DST under TDT scheme on 30.09.2020, Ref.No.DST/TDT/AGRO35/2020 (G).
10. Dr.K.Gomathi of Mechatronics Engineering received research grant of Rs.2,50,000/- for mentoring the industry project entitled Design and fabrication of PVC conduit pipe bending machine from EDII under IVP scheme on 17.11.2020, Ref. No. Lr.No.2270/EDII/JD/2018.

REFERRED JOURNAL PUBLICATIONS

1. Krithiga, P., Saranya. V., Swetha, B., and Suresh Ragul, S., (2020). Assessment of Greenhouse Gas Emission from Solid Waste- Erode City, *AIP conference Proceedings*, Vol.2281, pp.0200141.
2. Sangeetha, R.K., Karthi, S., Mounisbalaji, K.S., Praveenraj, K.S., and Raganath, M., (2020) Experimental Study on Partial Replacement of Cement with Rice Husk Ash in Paver Blocks, *AIP Conference Proceedings*, Vol.2259, pp.0200191.
3. Milind Shivaji Rohokale., Gujar Anantkumar Jotiram., Nasim Hasan., Ajay Sukumaran., and Shafali Jain., (2020). Finding the performance and emission characteristics of a nanoparticles added castor oil biodiesel blends in a CI engine. *European Journal of Molecular & Clinical Medicine*. Vol.7(2), pp.3313-3323.
4. Saji Raveendran, P., and Joseph Sekhar, S., (2020). Experimental studies on the performance improvement of household refrigerator connected to domestic water system with a water-cooled condenser in tropical regions. *Applied Thermal Engineering*. Vol.179, pp.115-684.
5. Naresh Kumar, A., Kishore, P.S., Brahma Raju, K., Ashok, B., Vignesh, R., Jeevanantham, A.K., Nanthagopal, K., and Tamilvanan, A., (2020). Decanol

- proportional effect prediction model as additive in palm biodiesel using ANN and RSM technique for diesel engine. *Energy*. Vol.213, pp.119-072.
6. Hariharan, V., Rajeshkumar, G., and Ibrahim Sheriff, K.A., (2020). Fault diagnosis of unbalanced multirotor systems. *Springer Lecture Notes in Mechanical Engineering*. Proceedings of ICIME 2020. pp.387-396.
 7. Sathishranganathan, C., Rajasekar, R., Harikrishna Kumar, M., Prakash Maran, J., Sathish Kumar, P., and Samir Kumar, Pal., (2020). Reactive compatibilization effect of graphene oxide reinforced butyl rubber nano composites. *Polímeros*. Vol.30(3), pp.1-6.
 8. Deepandurai, K., Arun Prasath, P., Ajith kumar, P., Deepak, M., (2020). Offshore integrated renewable power system. *IOP conference series: Materials science and Engineering*. Vol.955, pp.012074.
 9. Manikandan, S., and Deepandurai, K., (2020). Fabrication and characterization of AA7075 reinforced with TiCp composites. *Solid State Technology*. Vol.63(6), pp. 6289-6300.
 10. Prakash, R., Meenakshipriya, B., Vijayan, S., and Kumaravelan, R. (2020). Performance Evaluation of a Solar PV/T Water Heater Integrated with Inorganic Salt Based Energy Storage Medium, *Journal of New Materials for Electrochemical Systems*, Vol.23(3), pp.213-220.
 11. Shankar, S., Nithyaprakash, R., Santhosh, B.R., Ali Kaya Gur, and Alokesh Pramanik. (2020). Experimental and submodeling technique to investigate the wear of silicon nitride against Ti6Al4V alloy with bio-lubricants for various gait activities, *Tribology International*, Vol.151, Article ID.106529, pp.1-10.
 12. Thomas Rerald, C.J., Somasundaram, P., Yuvaraj Shanmugham., Velliangiri, M., and Arturas Jukna., (2020). Certain analysis of a solid rocket motor (SRM) with modified pentagonal grain configuration, *Solid State Technology*, Vol.63(6), pp.9637 - 9651.
 13. Thomas Rerald, C.J., Somasundaram, P., Yuvaraj Shanmugham., Karthikeyan Kandhasamy., (2020). Computational analysis of mixture (LPG/Air) Formation in a dual fuel diesel engine, *Solid State Technology*. Vol. 63(6), pp.9652 - 9658.
 14. Srinivasan, M., Sampath Kumar, V., Ravi, S., Narasimha Rao, D., and Ragupathy, U.S., (2020). Economics and impact of recycling solar waste materials on the environment and health care, *Environment Technology & Innovation*, Vol.20, Article ID:101130, pp.1-14.
 15. Amit Kumar Podder., Sayemul Islam., Manoj Kumar., Aneesh A chand., Pulivarthi Nageswararao., Kushal Prasad., and Logeswaran, T., (2020). Systematic categorization of optimization strategies for virtual power plants, *Energies*, Vol.13(23), pp.1-46.
 16. Kamalesh, M.S., Senthilnathan, N., and Bharatiraja, C., (2020). Design of a novel boomerang trajectory for sliding mode controller, *International Journal of Control, Automation and Systems*, Vol.18, pp.2917-2928.
 17. Mrunalini Thanaraj., Rajasekar Rathanasamy., and Prakash Maran Jeganathan., (2020). Assessment of drug flow rate in skin cancer therapy for enhancing the drug delivery system. *Anais da Academia Brasileira de Ciências*, Vol.92(3), Article ID: e20180985.
 18. Kalaiselvi, T.C., Santhosh Kumar, D., Subhashre, K.S. and Siddharth, S.M. (2020). Classification of Leukemia Using Convolution Neural Network, *European Journal of Molecular & Clinical Medicine*, Vol.7(4), pp.2515-8260.
 19. Kavinkumar, K., Prasad Jones Christydass, S., Asha, S., Akila, P., Mohan, B., Praveen Kittu. and Priyadharshini, S., (2020). C shaped optical patch antenna with cross-shaped stub for Quad-band THz operation, *Solid State Technology*, Vol.63(6), pp.4589-4596.
 20. Arulmurugan, A., Murugesan, G. and Vivek, B. (2020). Thermal-aware Test Data Compression for System-on-Chip Based on Modified Bitmask Based Methods, *Journal of Electronic Testing*, Vol.36(5), pp.577-590.
 21. Geetha, V., Anbumani, V., Murugesan, G., and Gomathi, S., (2020). Hybrid Optimal Algorithm-based 2D Discrete Wavelet Transform for Image Compression using Fractional KCA, *Multimedia Systems* (Springer), Vol.6(26), pp.687-702.
 22. Maheswaran, S., Murugesan, G., Prakash Duraisamy., Vivek, B., Selvapriya, S., Vinith, S., and Vasantharajan, V., (2020). Unmanned Ground Vehicle for Surveillance, *International Conference on Computing and Networking Technology (ICCNT)*, IIT, Kharagpur, IEEE 49239.
 23. Rajalaxmi, R.R., Sruthi, K., and Santhoshkumar, S., (2020). Bat Algorithm with CNN Parameter Tuning for Lung Nodule False Positive Reduction, *International Conference on Computational Intelligence in Data Science*, pp.131-142.
 24. Rajeshkannan, and C., Kogilavani, S.V., (2020). Analysis of Environmental Flood prediction using Sophisticated Machine Learning Algorithm with Implementation in Social Media, *Journal of Environmental Protection and Ecology*. Vol.21(5), pp.1837-1849.
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 26. Sagana, C., Sangeetha, M., Manjula Devi, R., Harshavarthini, S., Gokul, K., and Kavin, M. (2020). Detection and Classification of Crop Disease using Three-channel CNN with ResNet Architecture. *Solid State Technology*, Vol.63(3), pp. 5134-5139.
 27. Devi Priya, R., Sivaraj, R., Anitha, N. and Devisurya, V., (2020). Forward feature extraction from imbalanced microarray datasets using wrapper based incremental genetic algorithm. *International Journal of Bio-Inspired Computation*, Vol.16(3), pp.171-180.
 28. Dhanapal, R., Sentamilselvan, K., Mahendran, S., and Selvapandian, D., (2020). Effective Face Recognition System using Hybrid Principal Component Analysis for Real-Time Application, *Solid State Technology*, Vol.63(3), pp.5155-5161.
 29. Anitha, S., Jayanthi, P., and Thangarajan, R., (2020). Detection of Replica Node Attack Based on Exponential Moving Average Model in Wireless Sensor Networks. *Wireless Personal Communications*, Vol.115(2), pp.1651-1666.
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31. Anandamurugan Selvaraj., Jeeva Selvaraj., Sivabalakrishnan Maruthaiappan., Gokulnath Chandra Babu., and Priyan Malarvizhi Kumar., (2020). L1 norm based pedestrian detection using video analytics technique, *Computational Intelligence*, Vol.36(4), pp.1569-1579.
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33. Seetha Subha Priya, P., Nandhinidevi, S., Thangamani, M., and Nallusamy, S., (2020). A Review on Exploring the Deep Learning Concepts and Applications for Medical Diagnosis, *International Journal of Engineering Trends and Technology*, Vol.68(10), pp.63-66.

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