



# KONGU ENGINEERING COLLEGE

## CAMPUS R&D NEWS



Transform Yourself

**VOL 02**

**SEPTEMBER 2021**

**ISSUE 09**

### PH.D VIVA-VOCE COMPLETED

1. K.S.Kalaivani, Research Scholar, Department of Computer Science and Engineering defended her thesis entitled “Performance enhancement of machine learning approaches for document level sentiment classification” on 15.09.2021.
2. P.Kulanthaivel, Research Scholar, Department of Civil Engineering defended his thesis entitled “Performance evaluation of microbial stabilized soils” on 20.09.2021.

### 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.

### REFERRED JOURNAL PUBLICATIONS

1. Janani, S., Ranjani, V., Ram Prithivi, H., and Poongundran, R., (2021). A study on sustainable reutilization of C&D debris in the construction of traffic barrier. *Materials Research Proceedings*, Vol.19, pp.108-114.

2. Vinodhkumar Shanmugasundaram., and Balaji Shanmugam., (2021). Characterisation of magnesite mine tailings as construction material. *Environmental science and pollution research*, Vol.28(33), pp.45557-45570.
3. Vijayanand, S., and Anbarasu, M., (2021). Parametric study and improved design guidelines of CFS batted built-up columns. *Steel and Composite Structures*, Vol.5(5), pp.733-746.
4. Krithiga, P., Sudharsana, V., Sribalaji, R., and Snega, C., (2021). Covid 19 Pandemic: Assessment of Knowledge and Attitudes in Biomedical Waste Management among Health Care Professionals in Tamil Nadu. *Asia Pacific Journal of Health Management*, Vol.16(3), pp.154-164.
5. Kulanthaivel, P., Selvakumar, S., and Soundara, B., (2021). Influence of nano-silica and sodium silicate on the strength characteristics of clay soil. *Nanotechnology for Environmental Engineering*, Vol.6(3), pp.46.
6. Selvakumar, P., Anson, J.J., Harish, V., and Gulshan, T.K. (2021). Performance studies on solar air heater with staggered open channel aluminium turbulators. *Journal of The Institution of Engineers (India): Series C*, Vol.102(5), pp.1261-1265.
7. Arul, S., Senthilnathan, T., Jeevanantham, V., and Satheesh Kumar, K.V., (2021). Pseudocapacitive characteristics of Mg Doped ZnO nanospheres prepared by coprecipitation. *Archives of Metallurgy and Materials*, Vol.66(4), pp.1141-1148.
8. Priyanka, E.B., Thangavel, S., and Kalavathidevi, T., (2021). Miniaturized antenna design for communication establishment of peer-to-peer communication in the oil pipelines. *Petroleum Research*, Vol.6, pp.291-302.
9. Kalavathidevi, T., Priyanka, E.B., and Sakthivel, P., (2021). FPGA Implementation of Balanced Biorthogonal Multiwavelet using Direct Pipelined Mapping Method for Image Compression Applications. *Sensing and Imaging*, Vol.22(1), pp.1-19.
10. Maheswari, C., Ramya, A. S., Meenakshipriya, B., Sudhahar, S., Prabhu Raj, B., Lokesh, B., and Ramani, G. (2021). Analysis and optimization on the biodegradable plate making process parameters using RSM-based Box- Behnken Design method. *Journal of Material Cycles and Waste Management*, Vol.23, pp.2255-2265.
11. Kamalesh, MS., Nattuthurai, S., Chokkalingam, B., Muthusamy, S., and Cherukupalli, K., (2021). Development of ripple reduced solar photovoltaic regulators using boomerang sliding mode control strategy. *International Journal of Circuit Theory and Applications*, Vol.49(9), pp.2979-3006.

12. Srinivasan Murugesan., Amalanathan, A.J., Sarathi, R., Balaji Srinivasan., and Ravi Samikkannu., (2021). Investigation on impact of magnetic field on the corona discharge activity in Punga oil using fluorescent fiber and UHF sensor techniques. *IEEE ACCESS*, Vol.9, pp.129218-129228.
13. Sheryl Oliver, A., Jayasankar, T., Sekar, K.R., Kalavathi Devi, T., Shalini, R., Poojalaxmi, S., and Viswesh, N.G., (2021). Early Detection of Lung Carcinoma using Machine Learning. *Intelligent Automation & Soft Computing*, Vol.30(3), pp.775 – 770.
14. Yuvaraj, K., and Ragupathy, U.S., (2021). Hybrid Active Contour Mammographic Mass Segmentation and Classification. *Computer Systems Science and Engineering*, Vol.40(3), pp.823-834.
15. Vajravelu, A., Janarthanan, P.P., Karthik, R.P., Wahab, E.M.H.B.A., Jamil, M.M.B.A., Zaki, W.S.B.W. and Chandran, M.A., (2021). Certain Investigations on an Electroencephalogram (EEG) Montaging and Remontaging. *Design Engineering*, Vol.7, pp.9851-9869.
16. Vajravelu, A., Karthik, R.P., Janarthanan, P.P., Wahab, E.M.H.B.A., Jamil, M.M.B.A., and Zaki, W.S.B.W., (2021). Identification of Features to Analyze the Autism Spectrum Disorder using Electroencephalography. *Design Engineering*, Vol.7, pp.9834-9850.
17. Suthagar, S., Tamilselvan, K.S., Priyadharshini, M. and Nihila, B., (2021). Determination of Apple, Lemon, and Banana Ripening Stages using Electronic Nose and Image Processing. *In Innovations in Cyber Physical Systems*, pp.755-769.
18. Chandrasekaran, A., Senthil Kumar, K., Hemalatha, K., Naveen, N., Navin Kumar, S., Netheswaran, A., and Kumaravel Subramaniam, T., (2021). Design of Novel Fault Tolerance Ripple Carry Adder Based on QCA. *International Journal of Interdisciplinary Global Studies*, Vol.14(4), pp.390–393.
19. Preethi, S., Prakash, A.A., and Thangarajan, R., (2021). Plant Disease Recognition from Leaf Images using Convolutional Neural Network. *Intelligent Systems*, pp.169-176.
20. Mohamed Salb., Miodrag Zivkovic., Nebojsa Bacanin., Amit Chhabra., and Suresh, M., (2021). Support Vector Machine Performance Improvements for Cryptocurrency Value Forecasting by Enhanced Sine Cosine Algorithm. *International Conference on Computer Vision and Robotics*, pp.28
21. Ramu, A.G., Kim, S., Jeon, H., Al-Mohaimed, A.M., Al-onazi, W.A., Sathishkumar, V.E., and Choi, D., (2021). A study on the optimization of residual stress distribution in the polyethylene and polyketone double layer pipes. *Journal of King Saud University-Science*, Vol.33(6), p.101547.
22. Keerthika Periasamy., Suresh Periasamy., Sathiyamoorthi Velayutham., Zuopeng Zhang., Syed Thouheed Ahmed., and Anitha Jayapalan., (2021). A proactive model to predict osteoporosis: An artificial immune system approach. *Expert Systems (Special Issue)*, Vol.1-19.
23. Kamalam, G.K., and Selvaraj, A., (2021). Enhanced constrained application protocol for secured medical data transmission model for internet of things. *Computational Intelligence*, Vol.37(3), pp.1014-1033.
24. Sairagul Giridhariprasad., Dinesh Kumar Ravi., Kaviya Miller and Baskar Rajoo., (2021). Optimization of incorporating Kappa carageenan based gels on improving cloud stability, physical stability and viscosity of ready to drink mango juice. *Journal of Food Science*, Vol.86, pp.4017-4025.
25. Yamuna, V., and Arun Prakash, K., (2021). A fuzzy incidence coloring to monitor traffic flow with minimal waiting time. *Expert Systems with Applications Expert Systems with Applications*, Vol.186, p.115664.
26. Rangasami, C., (2021). Effect of Laser irradiation on Ag<sub>3</sub>54In<sub>10</sub>62Sb<sub>49</sub>56Te<sub>36</sub>28. *Materials Today Proceedings*, Vol.47(9), pp.1892-1895.
27. Karthika, C., Praveena, R., and Sadasivam, L., (2021). A DFT approach to analyze charge transfer path through trans and cis isomers of azobenzene. *Indian Journal of Chemistry*, Vol.60A, pp.700-704.
28. Jayaseelan, R., Srinuvasan, P., and Kamalakannan, J., (2021). Activated carbon of lignite loaded - Al<sub>2</sub>O<sub>3</sub> -Cu<sub>2</sub>O nanocomposite material purification of dye and high power electrochemical applications. *Materials Today: proceedings*, Vol.47, pp.261-267.
29. Devadhasan, B.D., Meyer, N., Vetrivel, S.C., and Magda, R., (2021). The Mediating Role of Person-Job Fit between Work-Life Balance (WLB) Practices and Academic Turnover Intentions in India's Higher Educational Institutions. *Sustainability*, Vol.13(19), p.10497.
30. Thangaraj, P., and Balasubramanie, P., (2021). Meta heuristic QoS based service composition for service computing. *Journal of Ambient Intelligence and Humanized Computing*, Vol.12(5), pp.5619-5625.
31. Vinothini, C., and Balasubramanie, P., (2021). Meta-heuristic firefly approach to multi-servers load balancing with independent and dependent server availability consideration. *Journal of Ambient Intelligence and Humanized Computing*, Vol.12(5), pp.5443-5455.

32. Sakthi, S., and Balasubramanie, P., (2021). Dynamic cross propagation algorithm based detection of micro calcification in digital mammogram. *Journal of Ambient Intelligence and Humanized Computing*, Vol.12(6), pp.5877-5894.
33. Venkatachalam, R., Velusamy, M., Mani, K., Adhikesavan, G., Masan, S., and Ananthi Palanisamy., (2021). Depiction of structural properties of chromium doped SnO<sub>2</sub> nano particles for SRAM cell applications. *Materials Today: Proceedings*, Vol.45, pp.3483-3487.

EDITOR(S)

Dr.S.Shankar  
Dr.C.Maheswari

ADDRESS FOR COMMUNICATION

Research & Development Cell  
Kongu Engineering College  
Perundurai 638060, TamilNadu, INDIA  
[rnd@kongu.ac.in](mailto:rnd@kongu.ac.in)