



School of Electrical Engineering (SELECT)



Vision

To offer an education in electrical engineering that provides strong fundamental knowledge, skills for employability, cross-disciplinary research and creates leaders who provide technological solutions to societal and industry problems.

Mission

- Provide personalized experiential learning in industry sponsored labs to prepare students in electrical engineering with strong critical thinking and employability skills.
- Foster design thinking, creativity and cross-disciplinary research with highly qualified faculty to create innovators and entrepreneurs in the broad area of electrical engineering.
- Collaborate with national and international partners to provide innovative solutions to societal and industry challenges.



1. Best Paper Award

The paper titled "IoT enabled Intelligent Fault Diagnosis Systems for Two level Voltage Source Converter authored by Swapnil Banerjee, Manikandan R, Raja Singh R and Harshit Mohan won the Best Paper Award at the 2021 International Conference of Computational Performance Evaluation held during 1st to 3rd December 2021





1. iPACT 2021

The School of Electrical Engineering (SELECT), Vellore Institute of Technology, Vellore and Faculty of Engineering, Universiti Malaya, Malaysia have jointly organized the 3rd International Conference on Innovations in Power and Advanced Computing Technologies (i-PACT '21) from 27th to 29th November 2021. The first in the series of i-PACT conferences was held in 2017 and technically co-sponsored by IEEE Madras Section. The second edition was conducted in 2019 by SELECT in association with IEEE NPSS. Now, the third edition was jointly organized in collaboration with the Universiti Malaya (UM), Malaysia and hosted by Universiti Malaya with which VIT has an active Memorandum of Understanding (MoU) to carry out academic and research activities. Incidentally, the conference was technically sponsored by IEEE Power Engineering Society - Malaysia Chapter and the Best Paper Award was sponsored by the Institution of Engineering and Technology (IET)- Malaysia.

Dr. G. Viswanathan, Honorable Chancellor, Vellore Institute of Technology was the Chief Guest of the inaugural session and addressed a large gathering of over 450 registered participants from 19 countries which included several eminent scientists and engineers from reputed industries and academia.

Leading luminaries from world class universities and premier industries delivered keynote expert lectures. These included Er. Paresh Oza, Head of Product Management & Development, Danfoss, Prof. Saad Mekhilef, Honorary Professor, Department of Electrical Engineering, Faculty of Engineering, UM, Malaysia, Prof. Sheldon Williamson - Canada Research Chair, Ontario Tech University, Canada, Dr. Aznan Ezraie Bin Ariffin- Chief Strategy Officer, TNB Research, Malaysia, Er. Kailash Sharma - Vice President Supply Chain, Schneider Electric-Bangalore, Dr. Krishnan Srinivasaraghavan - Head of Exploration, United Nations Development Programme (UNDP)-Accelerator Lab, and finally Dr. D.P. Kothari, Director Research, S.B. Jain Institute of Technology, Management & Research.









1) George J., Mani G., Alexander Stonier A., "An extensive critique of sliding mode control and adaptive neuro-fuzzy inference system for nonlinear system", Asian Journal of Control. **I.F.** 3.452

2) Venkateswari R., Rajasekar N., "Review on parameter estimation techniques of solar photovoltaic systems", International Transactions on Electrical Energy Systems. **I.F.** 2.860

3) Subramanian V., Indragandhi V., Kuppusamy R., Teekaraman Y., "Modeling and analysis of pv system with fuzzy logic mppt technique for a dc microgrid under variable atmospheric conditions", Electronics (Switzerland). **I.F.** 2.397

4) Nalajam P.K., V R., "Microstructural porosity segmentation using machine learning techniques in wirebased direct energy deposition of AA6061", Micron. **I.F.** 2.251

5) Sathyakam P.U., Bhattacharjee S., Raj S., "Crosstalk Analysis of Triangular CNT Bundle Interconnects", Journal of Electronic Materials. **I.F.** 1.938

6) Bingi K., Prusty B.R., "Forecasting Models for Chaotic Fractional-Order Oscillators Using Neural Networks", International Journal of Applied Mathematics and Computer Science. **I.F.** 1.417

7) Bhowmik A., Menon U., "An adaptive cryptosystem on a Finite Field", PeerJ Computer Science. I.F. 1.392



1) Jain S., Sawle Y., "Optimization and Comparative Economic Analysis of Standalone and Grid-Connected Hybrid Renewable Energy System for Remote Location", Frontiers in Energy Research. **I.F.** 4.008

2) Raj Nadimuthu L.P., Victor K., Basha C.H., Mariprasath T., Dhanamjayulu C., Padmanaban S., Khan B. , "Energy Conservation Approach for Continuous Power Quality Improvement: A Case Study", IEEE Access. **I.F.** 3.367



1) Thirunavukkarasu M., Sawle Y., "A Comparative Study of the Optimal Sizing and Management of Off-Grid Solar/Wind/Diesel and Battery Energy Systems for Remote Areas", Frontiers in Energy Research. **I.F.** 4.008

2) Natarajan B., Obaidat M.S., Sadoun B., Manoharan R., Ramachandran S., Velusamy N., "New Clustering-Based Semantic Service Selection and User Preferential Model", IEEE Systems Journal. **I.F.** 3.931

3) Subramaniam U., Subashini M.M., Almakhles D., Karthick A., Manoharan S., "An Expert System for COVID-19 Infection Tracking in Lungs Using Image Processing and Deep Learning Techniques", BioMed Research International. **I.F.** 3.411

4) Choudhury S., Acharya S.K., Khadanga R.K., Mohanty S., Arshad J., Rehman A.U., Shafiq M., Choi J.-G., "Harmonic profile enhancement of grid connected fuel cell through cascaded h-bridge multi-level inverter and improved squirrel search optimization technique", Energies. **I.F.** 3.004

5) Venkateswari R., Rajasekar N.,"Enhancing the power output of partially shaded PV array using column shift rightleft panel arrangement based array reconfiguration technique", International Transactions on Electrical Energy Systems. **I.F.** 2.860

6) Sengan S., Kotecha K., Vairavasundaram I., Velayutham P., Varadarajan V., Ravi L., Vairavasundaram S., "Real-time automatic investigation of indian roadway animals by 3D reconstruction detection using deep learning for R-3D-YOLOV3 image classification and filtering". Electronics (Switzerland). **I.F.** 2.397

7) Julius Fusic S., Hariharan K., Sitharthan R., Karthikeyan S., "Scene terrain classification for autonomous vehicle navigation based on semantic segmentation method", Transactions of the Institute of Measurement and Control. **I.F.** 1.796

8) Vivek P., Rekha M., Suvitha A., Kumar G.S., Jauhar R.M., Mahesh M., Kowsalya M., Steephen A., "Optical limiting behavior, nonlinear optical studies, geometrical descriptors, chemical properties data, topology analysis on tetraethylammonium L-tartarate dihydrate crystals", Molecular Crystals and Liquid Crystals. **I.F.** 0.896



Prof. Joshua Reddipogu, Assistant Professor Sr.

