School of Electrical Engineering (SELECT)

Vision

To be a leader for academic excellence in the field of electrical, instrumentation and control engineering imparting high quality education and research leading to global competence for the societal and industrial developments.

Mission

- Impart high quality education and interdisciplinary research by providing conducive teaching learning environment and team spirit resulting in innovation and product development.
- Enhance the core competency of the students to cater to the needs of the industries and society by providing solutions in the field of electrical, electronics, instrumentation and automation engineering.
- Develop analytical skills, leadership quality and team spirit through balanced curriculum.

1) First Place in HACKOWASP

Vishal Vinod Hingorani received a Certificate of Appreciation for securing the 1st position in a 36 hour long hackathon event, HACKOWASP.

2) Second Place in Robotics Competition at SRISHTI 2020

Mr. Abhishek Tyagi received a Certificate of Achievement for finishing as Runner-Up in the Robotics Competition at SRISHTI 2020, held at Saintgits College of Engineering, Kottayam, Kerala.

1) iCASIC 2020 was held on 27th and 28th February, 2020.

International Conference on Automation, Signal processing, Instrumentation and Control (iCASIC 2020) was organized by School of Electrical Engineering in association with International Society of Automation. It was held on 27th and 28th February, 2020. This conference provided an international forum for sharing knowledge and innovation in the field of Instrumentation, Control and Automation, Electrical, Electronics and Communication.

Top Publications January 2020

1) Reddy K.R., Meikandasivam S., Load Flattening and Voltage Regulation Using Plug-In Electric Vehicle's Storage Capacity with Vehicle Prioritization Using ANFIS, IEEE Transactions on Sustainable Energy, **I.F.** 7.650

2) Khatua P.K., Ramachandaramurthy V.K., Kasinathan P., Yong J.Y., Pasupuleti J., Rajagopalan A. Application and assessment of internet of things toward the sustainability of energy systems: Challenges and issues, Sustainable Cities and Society, **I.F.** 4.624

3) Cherukuri S.H.C., Saravanan B., Arunkumar G., Experimental evaluation of the performance of virtual storage units in hybrid micro grids, International Journal of Electrical Power and Energy Systems, **I.F.** 4.418

4) Solanke T.U., Ramachandaramurthy V.K., Yong J.Y., Pasupuleti J., Kasinathan P., Rajagopalan A. A review of strategic charging–discharging control of grid-connected electric vehicles, Journal of Energy Storage, **I.F.** 3.5175

5) Bisht A., Srivastava S., Purushothaman G., A new 360° rotating type stimuli for improved SSVEP based brain computer interface, Biomedical Signal Processing and Control, **I.F.** 2.943

6) Varikkottil S., Febin Daya J.L., Compact pulse position control-based inverter for high efficiency inductive power transfer to electric vehicle, IET Power Electronics, **I.F.** 2.839

7) Kumar G.K., Elangovan D., Review on fault-diagnosis and fault-tolerance for DC-DC converters IET Power Electronics, **I.F.** 2.839

8) Musafargani S., Mishra S., Gulyás M., Mahalakshmi P., Archunan G., Padmanabhan P., Gulyás B. Blood brain barrier: A tissue engineered microfluidic chip, Journal of Neuroscience Methods, **I.F.** 2.785

9) Rethinam S., Vijayan S., Aruni A.W., Basaran B., Alagumuthu T., Ramamoorthy R., Enhanced tissue regeneration using an nano- bioactive scaffold- A novel perspective, Materials Chemistry and Physics, **I.F.** 2.781

10) Basha C.H., Rani C., Different conventional and soft computing MPPT techniques for solar PV systems with high step-up boost converters: A comprehensive analysis Energies, **I.F.** 2.707

11) Kola Sampangi S., Thangavelu J., Optimal capacitor allocation in distribution networks for minimization of power loss and overall cost using water cycle algorithm and grey wolf optimizer, International Transactions on Electrical Energy Systems, **I.F.** 1.314

12) Senthilnathan K., Annapoorani K.I., Resilient cyber physical infrastructure for single-phase dual inverter with sliding mode control, International Transactions on Electrical Energy Systems, **I.F.** 1.314

13) Nayagam V.S., Premalatha L., Optimization of power losses in electric vehicle battery by wireless charging method with consideration of the laser optic effect, Measurement and Control (United Kingdom) **, I.F.** 1.229

1) Prabaharan N., Salam Z., Cecati C., Palanisamy K., Design and Implementation of New Multilevel Inverter Topology for Trinary Sequence Using Unipolar Pulsewidth Modulation, IEEE Transactions on Industrial Electronics, **I.F.** 7.503

2) Ram J.P., Pillai D.S., Ghias A.M.Y.M., Rajasekar N., Performance enhancement of solar PV systems applying P&O assisted Flower Pollination Algorithm (FPA), Solar Energy, **I.F.** 4.674

3) Garg A., Singh S., Li W., Gao L., Cui X., Wang C.-T., Peng X., Rajasekar N.
Illustration of experimental, machine learning, and characterization methods for study of performance of Li-ion batteries, International Journal of Energy Research, **I.F.**3.343

4) Perumal A.S., Kamaraj J., Coordinated control of Aichi microgrid for efficient power management using novel set point weighting iterative learning controller, Energies, **I.F.** 2.707

5) Harikrishna V., Gunabalan R., Senthil Kumar S., Pulse width modulation converter for light-emitting diode tube light applications, International Transactions on Electrical Energy Systems, **I.F.** 1.314

6) Cherukuri S.H.C., Saravanan B., Arunkumar G., A rule-based approach for improvement of autonomous operation of hybrid microgrids, Electrical Engineering, **I.F.** 1.296

Top Publications March 2020

1) Ratnam K.S., Palanisamy K., Yang G.,Future low-inertia power systems: Requirements, issues, and solutions - A review, Renewable and Sustainable Energy Reviews, **I.F.**10.556

2) Pillai D.S., Ram J.P., Ghias A.M.Y.M., Mahmud M.A., Rajasekar N. An Accurate, Shade Detection-Based Hybrid Maximum Power Point Tracking Approach for PV Systems, IEEE Transactions on Power Electronics, **I.F.**7.224

3) Suresh M.C.V., Edward J.B., A hybrid algorithm based optimal placement of DG units for loss reduction in the distribution system, Applied Soft Computing Journal, **I.F.** 4.873

4) Pavan Kumar Naidu R., Meikandasivam S., Power quality enhancement in a grid-connected hybrid system with coordinated PQ theory & fractional order PID controller in DPFC, Sustainable Energy, Grids and Networks, **I.F.** 3.182

5) Samuel V.J., Keerthi G., Mahalingam P., Coupled inductor-based DC-DC converter with high voltage conversion ratio and smooth input current', IET Power Electronics, **I.F.** 2.839

6) Kumar G.K., Parimalasundar E., Elangovan D., Sanjeevikumar P., Lannuzzo F., Holm-Nielsen J.B. Fault investigation in cascaded H-bridge multilevel inverter through fast fourier transform and artificial neural network approach, Energies, **I.F.** 2.707

7) Brahmendra Kumar G.V., Kaliannan P., Padmanaban S., Holm-Nielsen J.B., Blaabjerg F., Effective management system for solar PV using real-time data with hybrid energy storage system, Applied Sciences (Switzerland) , **I.F.** 2.217

8) Padmavathi P., Natarajan S., Single switch quasi Z-source based high voltage gain DC-DC converter International Transactions on Electrical Energy Systems, **I.F.** 1.314

9) Parandhaman B., Nataraj S.K., Baladhandautham C.B., Optimization of DC-link voltage regulator using Bat algorithm for proportional resonant controller-based current control of shunt active power filter in distribution network, International Transactions on Electrical Energy Systms, **I.F.** 1.314

Editorial Committee

Prof. Joshua Reddipogu, Assistant Professor Sr.