

## **Faculty Profile**



**Mr. S. Joyal Isac, M.E.,**  
Assistant Professor (S.G.) - EEE

### **HIGHLIGHTS:**

- Number of Journal Publications: 23
- H-Index: 6
- Patents Published: 4

### **PROFESSIONAL LINKS:**

- Scopus ID: 57983494200
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57983494200>
- Google Scholar ID: CgHoGNMAAAAJ
- Anna University Faculty ID: 2122190
- AICTE Faculty ID: 1-2193442049
- Anna University Supervisor ID: NA
- LinkedIn: <https://www.linkedin.com/in/joyal-isac-04b0309a/>
- Orcid: <https://orcid.org/0000-0002-8611-1865/>

### **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 11.5 Years
- Industrial Experience: 1.5 Years

### **INTERNATIONAL EXPOSURE:**

- Presented a paper titled “Implementation of Noval Vector based Current control method for DC Capacitor voltage regulation in DStatcom at International Conference on Power, Control, Signals and Instrumentation Engineering(ICPCSI-2017) held at Malaysia.
- Presented a paper titled “Structural and optical properties of Gd<sup>3+</sup> doped tellurium glass for warm white LED and radiation shielding applications“ at 2<sup>nd</sup> International Conference on Advanced Technology in Engineering and technology(ICATEM 2024) held at Dubai.

### **AREA OF SPECIALIZATION:**

- Electric Vehicles
- Renewable Energy Technologies

- Power Systems

**PATENTS PUBLISHED/GRANTED:**

- Electric Cycle Design
- Traffic Light Control System Using Solar Power

**COURSES CERTIFIED:**

- Pg Diploma in AIML
- Electric Vehicle Powertrain Design & Validation

**ACHIEVEMENTS AND AWARDS:**

- Best Project Award - IEAE(Self Organizing Bots)
- Best Teacher Award – Saveetha Engineering College
- Medal by Governor for excellence in Academics in Master’s degree(Power Systems)

**SPECIAL SESSIONS DELIVERED:**

- Delivered two days hands on training on “Introduction of PCB and PSPICE” at Sri Krishna College of Technology, Coimbatore conducted from 29.08.2016 to 31.08.2016.
- Delivered a guest lecture on “Renewable energy sources and its importance” for various schools including Pupil Saveetha Eco School.
- Delivered lecture on “Powertrain technology” at AICTE sponsored FDP on “Electric Vehicles: Technological Innovations and Market” trends from 02.12.2024 to 07.12.2024.

**PUBLICATION DETAILS:**

- Physical, optical, and luminescent characteristics of Sm<sup>3+</sup> doped tellurite glass suitable for yellow laser, warm white LED, and radiation shielding applications, Isac, S.J., Vinothkumar, P., Paul Dhinakaran, A., Praveenkumar, S, Optics and Laser Technology 2025, 182, 112111
- Automatic fault detection and stability management using intelligent hybrid controller, Suresh, M.P., Isac, S.J., Joly, M., Electric Power Systems Research, 2025, 238, 111075
- Growth and physiochemical properties of semi organic ammonium pentaborate dihydrate single crystal, Dhatchaiyini, K., Vinothkumar, P., Joyal Isac, S., ... Mahmoud, M.H., Fouad, H., Zeitschrift fur Physikalische Chemie, 2024, 238(8), pp. 1413–1430
- Hybrid approach for the detection of epileptic seizure using electroencephalography input, Basha, N.K., Surendiran, B., Benzikar, A., Joyal, S., International Journal of Information Technology (Singapore), 2024, 16(1), pp. 569–575
- Multi-Converter UPQC Optimization for Power Quality Improvement Using Beetle Swarm-Based Butterfly Optimization Algorithm, Sankar, J.I., Subbaraman, S., Electric Power Components and Systems, 2023, 51(20), pp. 2487–2498
- Economic Analysis of Demand Response Incorporated Optimal Power Flow, Meyyappan, U., Isac, S.J., Intelligent Automation and Soft Computing, 2023, 35(1), pp. 399–413
- Demarcation of non-carcinogenic risk zones based on the intake of contaminated groundwater in an industrial area of southern India using geospatial techniques, Govindaraj, V., Sankar, J.I., Gnanamanickam, J.N.G., Amala, S., Desalination and Water Treatment, 2022, 274, pp. 140–149

**CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**

- Joyal Isac, S, Kishore, B.G., Tamil Selvan, V., Sivaraj, C., Centralized Monitoring System for Street Light Fault Detection and Location Tracking using LoRa, 10th International Conference on Communication and Signal Processing, ICCSP 2024

- Amutha, S., Deepa, A.R., Joyal.S, Modality Direct Image Contrast Enhancement for Liver Tumour Detection, BITS Pilani, Advances in Data-driven Computing and Intelligent Systems, ADCIS 2023.
- S Joyal Isac, S Srinath. "Implementation of novel vector based current Control method for DC capacitor voltage regulation in DStatcom", IEEE International Conference on Power, Control, Signals and Instrumentation Engineering(ICPCSI), 2017
- Poongothai S, Joyal Isac S, Srinath S, "Reliable Standalone Self Sustained Power for Power Quality Improvement in Grid", National convention of Electrical Engineer, IEI-Pune
- Joyal Isac S, Suresh Kumar K, and Vijaya Kumar P, "Optimal capacitor placement in radial distribution system to minimize the loss using fuzzy logic control", Smart Structures and Systems (ICSSS), 2013

**PROFESSIONAL MEMBERSHIPS:**

- IEI
- ISTE
- SCRS

**OTHER DETAILS (If any):**

- Technically skilled in Electrical Design software's, ETAP, Custom Power devices, Latex, IoT and AIML
- Pedagogical skills, 21<sup>st</sup> century skills
- People handling skills
- Proficient in C and Python

**CONTACT INFORMATION:**

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