

Academics

1. Subjects Taught

- Power Electronics
- Basic Electronics
- Electronics Measurements
- Network Analysis
- Electrical Machines
- Control Systems
- Nanocomposite Materials Science
- Micro and Nano Devices
- Computer Method Power System Analysis
- Electrical Machines Design

2. List of short-term courses / national level technical symposia organised

- National Workshop on “Dielectric Materials and Devices”, SJCE, Mysore, 25-26 July, 2014.
- National Workshop on “Servicing and Maintenance of UPS and Air Conditioners”, SJCE, Mysore, 14-19 July, 2014.
- National Workshop on “Servicing and Calibration of Advanced Electronic Instruments”, SJCE, Mysore, 10-21 June, 2013.
- National Workshop on “Role of Nanocomposites in Dielectrics and Devices”, SJCE, Mysore, 16-17 March, 2012.
- National Workshop on "Calibration and Handling of Advanced Electronic Instruments”, SJCE, Mysore, 22- 27 October, 2007.
- National Workshop on “Electronics in Industrial Automation”, SJCE, Mysore, 16-21 July, 2007.
- AICTE-ISTE short-term course on “Effective Laboratory Management and Technical Report Preparation”, SJCE, Mysore, 22-28 January, 2007.
- AICTE-ISTE short-term course on “Repair, Maintenance & Calibration of Electrical & Electronics Laboratory Instruments”, at S.J. College of Engineering, Mysuru.
- AICTE-ISTE short-term course on “Soft Skills & Efficiency Enhancement” at S.J. College of Engineering, Mysuru during August 02-14, 2004.
- Hands on training on “Advanced Equipments and Servicing”, Under Self Financing Scheme.

3. R&D Projects Executed

AICTE Sponsored RPS Project

- "Development Of Dielectric Nanocomposites For Power And Micro Electronics Applications",2010-2012, Rs 8.6Lakhs.

VTU Sponsored RPS Project

- "Development Of Hybrid Conducting Nanocomposites For Engineering And Electronics Packaging Applications",2010-2012,Rs. 8Lakhs.

Central Power Research Institute Sponsored RSOP Project

- "Development Of Fiber Glass Reinforced Nano Composites Rods For High Voltage Polymer Insulators",2011-2013,Rs. 4.5Lakhs.

4. Research Interest: Nano Dielectric/ Insulator, Conducting Composites For EMI, PTC, Discharge, Packaging, Organic Film Transistor/ Sensor And Power Electronics

5. Ph.D Guided

- "Performance Evaluation Of Epoxy-Ommt, Epoxy-TiO₂, And Vinyl Ester-Ommt Nanodielectrics For Electrical Applications", Rashmi, 2012.
- "Effect Of The Type And Content Of Filler On Electrical, Mechanical And Thermal Properties Of Epoxy Nanocomposites For Electrical Insulation", Veena M G ,2013.
- "Investigation On Polymer Nanocomposites For Electromagnetic Interference Shielding And Positive Temperature Coefficient Of Resistance Applications In Electronics", Dinesha P,2014.
- "Investigation On Effects Of Nano Size Fillers And Moisture On Electrical Performance Of Glass Fiber Reinforced Hybrid Composites", Suchitra M ,2018.
- "Performance Analysis Of Organic Semiconductor Based Field Effect Transistors", Parameshwara S,2018.

Ph.D Work in progress

- "Performance Evolution of Epoxy based Composite for EMI Shielding Application", Umashankar.M.
- "A Novel Approach for Assessment of Pollution Performance of Glass Fiber Epoxy Nanocomposite for High Voltage Insulation", Santhy P kuruvilla.
- "Study of Organic High Dielectric Constant Nanocomposite Materials for Capacitor and Microelectronics Application", Hadimani Shivakumar.
- "Development of Novel Nanocomposite Material for Use in Corrosive Environment of Modern Power Plants", Bommegowda.K.B.

6. PG Final Year Projects Guided (in the reverse chronological order)

- "Study Of Nanofiber Interleaved Composite Laminates For EMI Shielding", Lavanya.M.S, 2016-2017.
- "Study Of High K Graphene Based Polymer Nanocomposite For Energy Storage Solution", Mythri.R, 2016-2017.
- "Study of Breakdown Strength and Partial Discharge of Hybrid Nanocomposite for High Voltage Insulators", Md Saiful Islam, 2015-2016.

- "Design and Implementation of Sensorless Speed Control of Interior Permanent Magnet Synchronous Motor", Sandeep, 2015-2016.
- "Study of Single Phase Inverter Control with Capacitor Current Feedback", Bommegouda.K.B, 2014-2015.
- "Design And Verification Of Energy Monitoring And Communication System For DC Micro Off-Grid Solution", Deepthi.M.S, 2014-2015.
- "Mains Failure Detection Using Fourier Series And Recursive Discrete Fourier Transform", Shilpa.B.R, 2014 – 2015.
- "Induction Motor Drive Based On Digital Signal Processor" Bharath Kumar.T, 2013-2014.
- "Modeling And Design Of Phase Shifted Full Bridge Zero Voltage Transition DC-DC Converter For Cathodic Protection", Manasa.H.S, 2013-2014.
- "Modeling And Implementation Of Multiphase Boost Converter For Solar Battery Charging System", Vishwas.K, 2013-2014.
- "Performance Analysis Of Organic Field Effect Transistors", Mouna.R.S, 2014.
- "Effect of Charge Carrier Mobility and Contact Resistance on the Performance of Organic thin-film Transistor", Deepakala.K, 2012.

7. UG Final Year Projects Guided (in the reverse chronological order)

- "UPS Performance Remote Monitoring System", Prasanna.H.G, Kumar.S, Naveen Kumar.R, 2016-2017.
- "Study of High K Dielectrics Composites For Supercapacitor Applications", Banda Tanuja, Darshan.B.N, Sharanya.G.J, MD Aamir Sohail, 2016-2017.
- "Study On The Role Of Dielectric And Its Interface In The Performance Of Organic Thin-Film Transistors", Priya Koushik, Kavitha M Hiremath, Shubha.B.L, Sushmitha Hiremath, 2015-2016.
- "Design And Development Of Programmable Peristaltic Pump: Feature Enhancement", Anirudh.G, Darshan.A, M.N.Sunaada Hebbar, Mrithyunjaya, 2015-2016.
- "Design and Development of Miniaturise USB Charger", Ramachandra Raju.M.P, Sachin.S, Shilpa, Varalakshmi.G, 2014-2015.
- "Automated Guided Vehicle for Factory Floor Automation", Rahul.A.R, Abhay.M.S.Aradhya, Kishore Nayak.M, Pragathi.M.R, 2014-2015.
- "Performance Analysis of Organic Based Field Effect Transistor for Logic Circuit's Application", Soundarya.H.V, Manavi.M.K, Ranjana Shirol, Shwetha, 2013-2014.
- "Design And Implementation Of Some Function Of Black Box", Jagadish.S, Kailash.V, Karthik.K.N, Varsha.M, 2012-2013.
- "Design And Development Of A Two Quadrant Regulator For Equalising Loads On Ni-Cd Batteries Of A Space Craft", Shobha.H.J, Susheela.A, Sunny P Marak, 2011-2012.
- "Bio-Smart Voting System", Ramya.T, Srirama.R, Soumya.S, 2010-2011.
- "High Efficient Multi Output Power Supply for Satellite Application", Damchi R Marak, Divya.B.R, Ganashree.M.S, Pushpalatha.S, 2009-2010.
- "Multifunctional Microcontroller Based System", Gopi.M, H.C.Nagaraja, Niranjana M Gowda, Nrupatunga, 2008-2009.
- "PIC Based Code Lock", Arun.M, Kumara Swamy, Manish Golder, Navin Prakash Mogha, 2003-2004.

