

External Funded Projects

| S. No. | Project Title | Faculty | Funding Agency | Amount in lakhs | Duration (in Years) | Starting year | Year of Completion |
|--------|--|---|-----------------------|-----------------|---------------------|---------------|--------------------|
| 1 | Design of silicon carbide based hard switched DC-AC power Converter | Dr. B. L. Mathur (PI) Dr. R. Seyezhai (Co-PI) | AICTE - RPS | 5 | 3 | 2007 | 2010 |
| 2 | Matrix converter based Weak grid connected DFIG System | Dr. Ranganath Muthu (PI) Dr. M. Senthil Kumaran (Co-PI) | CWET (MNRE) | 7.5 | 3 | 2011 | 2015 |
| 3 | Design and Development of Z source cascaded MLI for PV applications | Dr. R. Seyezhai (PI) | AICTE | 24.5 | 3 | 2013 | 2016 |
| 4 | Design and Development of Flywheel based Power Conditioning System for a Renewable energy fed Micro grid | Ms. M. Vijayalakshmi (FT PhD Student) Dr. R. Ramaprabha (Scientist Mentor) | DST - WoS A | 21 | 3 | 2014 | 2017 |
| 5 | A Novel fused converter for SPV wind hybrid systems for powering rural telephony | Dr. V. Rajini (PI) | MNRE | 34 | 2 | 2014 | 2016 |
| 6 | Design and Development of Hybrid Switched Reluctance Motor Drive | Dr. M. Balaji (PI) | DST - SERB | 22.18 | 3 | 2015 | 2018 |
| 7 | Smart Street Lighting System | Mr. V. Thiyagarajan | Horizon Solutions Ltd | 1 | 1 | 2015 | 2016 |

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| 8 | A low cost minimal footprint single phase solid state transformer for medium voltage applications | Dr. V. Rajini (PI) | AICTE - RPS | 20 | 3 | 2016 | 2019 |
| 9 | Design and implementation of Trip wire alarm system for HEC mitigation in Forest Borders | Dr. R. Jayaparvathy (PI) | Government of Tamilnadu | 5.5 | 1 | 2017 | 2018 |
| 10 | Modernization of HV lab as a unified power engineering lab with electromechanical energy conversion power electronics and power systems experiments | Dr. V. Rajini (PI) | AICTE – MODROBS | 19.54 | 1 | 2018 | 2019 |
| 11 | A Robustly Optimal Energy Management System for High PV penetrated Smart Cities with A Case Study: Implementation of PVs for Smart Street Light Poles | Dr. Mrunal Deshpande | University of new South Wales UNSW), Sydney | 5.5 | 1 | 2018 | 2019 |
| 12 | Design and Development of Axial Flux Switched Reluctance Motor based Battery operated Vehicle | Dr. P. Saravanan | DST-SERB | 55 | 3 | 2016 | 2021 |
| 13 | Modernization of Renewable Energy Conversion Laboratory | Dr. V. Kamaraj & Dr. R. Seyezhai | AICTE-MODROBS | 11 | 2 | 2019 | 2021 |
| 14 | Design and Development of Energy Efficient Permanent Magnet Assisted Reluctance Motor Drives for Pump Application | Dr. V. Kamaraj (PI) Dr. M. Balaji & Dr. V S Nagarajan (Co-PIs) | DST - SERB | 21.19 | 3 | 2019 | 2022 |
| 15 | Radiation resilient RF receiver front end components through SIGs BICMOS: Design and validation | Dr. C. Premanand Dr. K. K. Nagarajan (Co-PIs) | BRNS | 32.5 | 3 | 2020 | 2023 |

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| 16 | Experimental analysis and optimization of electric Field distribution around polymeric insulators in Extra high voltage transmission lines | Dr. K. Usha (PI) | SERB | 29.75 | 3 | 2022 | 2025 |
| 17 | Design and Development of Replicable and Scalable Cyper Physical Micro Grid System” | Dr. R. Deepalaxmi (CO-PI) Dr. C. Vaithilingam VIT, Chennai (PI) | DST - India-Serbia, Bilateral STC | 15.30 | 3 | 2022 | 2025 |
| 18 | Assessment and Monitoring of Invasive Alien plant species in India and formulation of Strategies for management of key invasive alien plant species in different regions of the country | Dr. R. Jayaparvathy (PI) | ICFRE-AICRP-7-Ministry of Environment, Forests and Climate change | 31.15 | 3 | 2022 | 2025 |
| 19 | Development of black phase Formamidinium lead triiodide-based hybrid perovskite light absorber with improved thermal stability for solar cell applications | Dr Mrunal Deshpande (PI) Dr R Govindraj (Co-PI) | UGC DAE CSR | -- | 24 Months | March 2023 | March 2024 |