

Internally Funded Projects

S.No	Project Title	Principal Investigators / Co Investigators	Funding Agency	Date / Month of Sanction / Commencement	Amount in Rs. (Lakhs)	Duration	Status
					Sanctioned		
1	Solar powered electric vehicle using BLDC drive	Dr R Seyezhai	SSN Trust	09.11.2013	4.5	2	Completed (2015)
2	Design of D Statcom for reactive power compensation for wind turbine system	Dr Ranganath Muthu, Mr Murugesan	SSN Trust	09.11.2013	3.5	2	Completed (2015)
3	Design and development of efficient building integrated PV system under partial shaded conditions	Dr R Ramaprabha, S Malathy	SSN Trust	09.11.2013	3.5	2	Completed (2015)
4	Design and Development of SRM drive with minimized torque ripple	P Saravanan	SSN Trust	16.10.2014	3.15	2	Completed (2016)
5	Electromechanical characterization of Sir EPDM blends	Dr R Rajini, Ms Deepalaxmi	SSN Trust	16.10.2014	3.5	2	Completed (2016)
6	Design and development of energy efficient reluctance motor drive	Dr V Kamaraj, Dr M Balaji, V S Nagarajan	SSN Trust	16.10.2014	3.25	2	Completed (2016)
7	Isolated active clamp forward DC-DC converter for microprocessor	Ms Alagu Dheeraj, Dr V Rajini (Co-PI)	SSN Trust	30.09.2015	3.7	2	Completed (2017)
8	Battery operated autonomous vehicle with IoT	P Saravanan	SSN Trust	16.10.2016	2.91	3	Completed (2019)

9	High voltage pulse generator based on high gain DC-DC converter for PEF food processing	Ms. S. Krishnaveni, Dr. V. Rajini	SSN Trust	16.10.2016	2.15	2	Completed (2018)
10	High efficiency PV module integrated converter based on cascaded,quasi-Z-source inverter	Dr. R. Seyezhai, Ms. D. Umarani	SSN Trust	16.10.2016	4.25	2	Completed (2018)
11	Design and development of switched reluctance motor drive with minimum torque ripple	Dr. Mrunal Deshpande	SSN Trust	16.10.2016	3.85	2	Completed (2018)
12	Identification of cable insulation material for nuclear power plants	Dr. R. Deepalaxmi Dr. V. Rajini	SSN Trust	24.10.2017	8	2	Completed (2019)
13	Measurement and optimization of electric field distribution around composite insulators	Dr Usha	SSN Trust	24.10. 2017	3.2	2	Completed (2019)
14	Design and development of modified multilevel inverter topology with reduced number of switches	Mr. V. Thiyagarajan	SSN Trust	18.03.2017	3	3	Completed (2020)
15	Design control and implementation of embedded switched inductorbased z- source inverter with high boost factor for photovoltaic interface	Dr R Ramaprabha	SSN Trust	10.01.2019	2.2	2	Completed (2021)
16	Development and implementation of flexible reduced device count multilevel inverter for PV systems	Dr. S Malathy	SSN Trust	29.03. 2019	2.2	2	Completed (2021)
17	Realization of swarm intelligence using real time deep learning algorithm	Dr. N. B. Muthu Selvan Dr. M. Devesh Raj	SSN Trust	14.11.2019	5.5	3	Completed (2021)

18	Design control and implementation of modular multilevel inverter for grid integration	Dr Pandikumar	SSN Trust	14.11.2019	3	2	Completed (2021)
19	Double input Y source converter with battery supercapacitor hybrid energy storage system for micro grid application	Dr U Shajith Ali	SSN Trust	3.12.2020	2.5	2	Completed (2022)
20	Design and implementation of smart controller for variable frequency drive	Dr. V. Thiyagarajan Dr. V. Kamaraj Dr. R. Rengaraj Dr. G. R. Venkatakrisnan	SSN Trust	03.12.2020	3.5	2	Completed (2022)
21	Fault detection of solar PV firm using machine learning and thermal image processing	Dr. S. Tamilselvi Dr. R. Rengaraj Dr. G. R. Venkatakrisnan	SSN Trust	03.12.2020	4.2	2	Completed (2022)
22	Fabrication of bifacial dyesensitized solar cells using conducting transparent counter electrodes	Dr. Mrunal Deshpande, Dr. R. Govindaraj SSN RC	SSN Trust	03.12.2020	4.8	2	Completed (2022)
23	Deposition and optimization of strontium niobate thin films as efficient UV transparent conducting electrode	Dr. M. Senthil Kumaran, Mr. Balaji Chandra SSN RC	SSN Trust	03.12.2020	3.5	2	Completed (2024)
24	Analysis of dynamic stability of a ball balancing robot	Dr. J. Anitha Roseline	SSN Trust	03.12.2020	3	2	Completed (2023)
25	Investigations of deep vision sensors for event-based control	Dr. K. Murugesan & Dr. K. Usha	SSN Trust	03.12.2020	2.7	3	Completed (2023)
26	Double input Y-source converter with battery-supercapacitor hybrid energy storage system for microgrid applications	Dr. U. Shajith Ali	SSN Trust	03.12.2020	2.5	3	Completed (2023)

27	IoT and machine learning based building energy management	Dr. R. Leo	SSN Trust	03.12.2020	2.5	3	Ongoing
28	Design and comparative evaluation of reluctance motor drives for energy efficient ceiling fan application	Dr. V. S. Nagarajan	SSN Trust	16.12.2021	5	2	Ongoing
29	Design and Development of an efficient electric trike power train for Indian Automotive sector	Dr.V.Rajini, Dr.K.Vijayasekar, Dr.M.Deveshraj	SSN Trust	24.02.2022	7	2	Ongoing
30	Design and Development of IoT Enabled 2DoF PID dead time compensating controller	Dr.R.Arun & Dr.P.Saravanan	SSN Trust	21.04.2023	2.9	3	Ongoing
31	Realization and Implementation of Distance Protection scheme for a power system with inverter based resources	Dr.A.Mariselvam	SSN Trust	01.12.2023	5	3	Ongoing
32	Deep Reinforcement Learning based Regulatory market policy for risk mitigation of hybrid H2 Electric Vehicle(EV) for Mobility towards Clean Energy Program	Dr.Rajesh Panda	SSN Trust	01.12.2023	2.1	2	Ongoing
33	Development of Effective AI models for automatic fault detection in PV Power Plants	Dr.Durga Devi & Dr.R.Ramaprabha	SSN Trust	01.12.2023	3.80	2	Ongoing
34	Dynamic Reserve point tracking in grid connected PV System	Dr.Sajjan kumar, Dr.G.Venkatakrishnan & Dr.R.Rengaraj	SSN Trust	01.12.2023	3.80	2	Ongoing