



# PSG Institute of Technology and Applied Research

Approved by AICTE, New Delhi Image Affiliated to Anna University, Chennai

## Research and Development

### Sponsored Projects

#	Investigator(s)	Title of the project	Agency/ Scheme	Sanctioned Date	Project Duration	Sanctioned Amount (Rs.)	Status
1	Dr. P. Manoj Kumar	Development of Cost-Effective 2.5 KW Proton exchange membrane (PEM) Fuel Cell Stack based on less-Pt Bimetallic Electrocatalysts and Mesoporous Carbon Support Materials	Ministry of Petroleum and Natural Gas	20 Sep 2023	24 months	6,578,000	Approved
2	Dr. M Jayasanthi	Wearable Thoracic Fluid Content Measurement Prototype for Congestive Heart Failure Patients	DBT/BIRAC	26 Dec 2022	8 months	1,000,000	On-going
3	Dr. R. Manimegalai	Security Enhancement Techniques for Multi-Core Processors	SERB/TARE	6 Oct 2022	36 Months	1,830,000	On-going
4	Dr M Jayasanthi	Development of an improved multivariate machine learning solution with additional features for non-invasive anemia detection	SERB/TARE	2 Dec 2021	36 Months	1,830,000	On-going
5	Dr V Rajkumar	Wire Arc Additive Manufacturing of of Hastelloy C 276 for chemical and pressure vessel applications	SERB/TARE	2 Dec 2021	36 Months	1,830,000	On-going

6	Dr M Devasena	Evaluation of vancomycin resistant bacteria neutralization kinetics and possible transduction of resistant determinants by bacteriophage encapsulated core shell nanofiber membranes in hospital effluent treatment	SERB/CRG	29 Oct 2021	36 Months	702,000	On-going
7	Dr M I Abdul Aleem Dr A Hariharan Mr K Kavikumaran	Development of Value-added green construction materials from Waste Foundry Sand	DST/WMT	23 Aug 2021	36 Months	4,448,306	On-going
8	Dr M I Abdul Aleem Mr K Kavikumaran	Processing and Development of hybrid eco-friendly raw material for manufacturing indoor lightweight wall panel	DST/WMT	26 Mar 2021	36 Months	5,397,040	On-going
9	Dr D Thangaraju	Solution Processed Upconversion Luminescent Nanoparticle Selfassembly for Development of Electron Beam Excitation Assisted High-resolution Optical Microscope	DST/IJCSP	4 Jan 2021	24 Months	538,200	On-going
10	Dr A Kumaravel	Synthesis of a novel, highly hydrophobic and antimicrobial organic inhibitors for corrosion protection applications of mild steel in acidic medium	SERB/TARE	18 Nov 2020	36 Months	1,830,000	On-going
11	Dr M Devasena	Transport of Dissolved Methane Plumes in Groundwater: Experimental and Numerical Investigations	DST/Indo-Iran	30 Jan 2020	24 Months	560,680	On-going
12	Dr M Devasena	Sanitation in the Circular Economy – an integrative modular on-site toilet treatment for recovery of NPK fertilizer, carbon water	SERB/IMPRINT-2	22 Jan 2020	24 Months	1,60,000	Completed

13	Dr M Arun	Affordable Housing for Economically Weaker Section in all Disaster Prone Areas	SERB/TARE	16 Dec 2019	36 Months	1,830,000	Completed
14	Dr P Prabhunathan	Design and Fabrication of Supercapacitor Device from Nitrogen Rich Porous Carbon of Hybrid Bio-Mass Polybenzoxazines	SERB/TARE	04 Dec 2019	36 Months	1,830,000	Completed
15	Dr P Manoj Kumar	Development of Mesoporous TiN@Nitrogen-doped Carbon Nanostructured support materials with less-pt electrocatalysts for durable and low-cost PEM fuel cells	DST/ORTD	30 Sep 2019	36 Months	385,000	Completed
16	Dr G Rajeshkumar	Investigation on mechanics of needle insertion on soft materials	SERB/TARE	12 Mar 2019	36 Months	1,830,000	Completed
17	Dr P Manoj Kumar	Modelling and experimental studies of cavitation in globe valve	SERB/TARE	26 Feb 2019	36 Months	1,830,000	Completed
18	Dr D Thangaraju	Development of lead-free all-inorganic halide perovskites embedded silica nanomatrix for bioimaging applications	SERB/ECRA	19 Nov 2018	36 Months	4,895,411	Completed
19	Dr G Chandramohan	Improvement of mechanical properties of medium carbon low alloy steel through boronizing technique	ARDB	19 July 2016	24 Months	859,500	Completed
					<b>Total</b>	<b>4,01,64,137</b>	