

## MAJOR INDUSTRY & GOVERNMENT SPONSORED RESEARCH PROJECTS

SNo.	Project Title	Cost	Funding Agency	Name of Collaborators
1.	Water innovation Centre, Technology, Research and Education (WICTRE)	5.55 Cr	DST-SERB	PI: Shobha Shukla (IIT-B) Co-PI: Manoj Pandey
2.	Bio-mimetic and phyto-technologies designed for low-cost purification and recycling of water (INDIA-H2O)	5.14 Cr	Dept. of Biotechnology	Project Coordinator: Dr. Anurag Mudgal, Co-PI: Dr. Vivek Patel, Dr. Jatin Patel, Dr. Manish Sinha,
3.	Low Cost-Renewable Energy Driven (LC-RED) Water Treatment Solutions Centre	3.71 Cr	DST-Gol	PI: Dr Anurag Mudgal, Co-PI: Dr Vivek K. Patel, Dr. Jatin Patel
4.	Development of Lubricant research centre titled "BP Castrol Liquid Engineering Laboratory"	75 L	BP and CASTROL	Dr. S. S. Kacchawaha
5.	Integrated design and demonstration of Intensified Co2 capture with cost effective advanced process	62.7 L	Dept. of Biotechnology	PI: Dr. S. K. Dash Co-PI: Mr. Anirban Dey
6.	A novel nanoparticle based bioassay for sensitive detection of cancer specific proteases	65.4 L	DST-SERB	Dr. Manoj Pandey
7.	Mechanosynthesis of Stable and Efficient 2D Perovskite Solar Cells	56 L	DST - NATAG	Dr. Manoj Pandey
8.	Mechanochemical Approach for Perovskite Solar Cells: A way towards efficient, stable and low cost Solar cells	53.3 L	DST-NATAG	Dr. Pankaj Yadav
9.	Development of Metallic Nanowire Transparent Conducting Electrodes on Glass and Flexible Substrates	44 L	DST	Dr. Abhijit Ray, Prof. Indrajit Mukhopadhyay
10.	Graphene Protected Si Nano-Spheres (interconnected) for Developing High Energy Density Li Ion Battery	44 L	MES-DST	Dr. Ranjan Pati
11.	Sulfuric acid-mediated weathering in the Ganga, Yamuna and the Brahmaputra (GYB) River Basins: Constraints from Sulfur and oxygen isotopes in dissolved sulfate	41.12 L	MoES	Dr. J Brahma
12.	Sulfuric acid mediated weathering in the Ganga and the Brahmaputra (GYB) River Basins: Constraints from Sulfur	41.1 L	MoES	Dr. Anirban Das

	and oxygen isotopes in dissolved sulfate.			
13.	Tracking chromium (VI) migration in groundwater using stable isotopes of Chromium	38.6 L	DST	Dr. Anirban Das
14.	Mechanism of phase formation of silicon from ionic liquid by electrodeposition	37.9 L	DST-SERB	Prof. Indrajit Mukhopadhyay
15.	Nanostructured Electrolyte Materials for Low Temperature SOFC (LT-SOFC)	36.7 L	DST-SERB	Dr. Ranjan K. Pati
16.	Graphene Protected Si Nano-Spheres (interconnected) for Developing High Energy Density Li Ion Battery	36.7 L	DST-SERB	Prof. Indrajit Mukhopadhyay
17.	Mechanochemical Approach for Perovskite Solar Cells: A way towards efficient, stable and low cost Solar cells	36 L	SERB CORE RESEARCH GRANT	Dr. Manoj Pandey
18.	Development of full penetration CuOF to CuOF welding by GTAW for Neutral Beam Accelerator grid base plate to hydraulic piping connection	32.5 L	Board of Research in Nuclear Sciences (BRNS)	Dr Vishvesh J Badheka, Dr Kush Metha, Mr Jaydeep (ITER) Mr Ashish (ITER)
19.	Land Cover Classification of Polarimetric SAR Image/Data for Agricultural and Urban Region	32 L	ISRO	PI: Dr. Samir Patel, Co-PI: Dr. Vibha Patel, Dr. Tarjni Vyas
20.	Design and Development of high resolution diagnostic for ADITYA-U and SST-1 Tokamak	30 L	BRNS	Dr. Balamurali Krishna Mayya K.
21.	Nanostructured Electrolyte Materials for Low Temperature Solid Oxide Fuel Cell (LTSOFC)	30 L	DST-SERB	Dr. Ranjan Pati
22.	Fabrication of Nature Inspired-nanohybrid as Electrocatalyst for Water Splitting and CO <sub>2</sub> Reduction	30 L	ASEAN-India Science, Technology & Innovation Cooperation, SERB	Dr. Rohit Srivastava,
23.	Development of Novel 2D materials and their nanocomposites for Photo and electrocatalytic Hydrogen generation	29.9 L	DST-SERB	Dr. Abhijit Ray
24.	Structure, Interaction and Process for Energy Efficient CO <sub>2</sub> Separations Using Novel Ionic Liquids Supported Membranes	28.5 L	DST	PI: Dr. Swapnil Dharaskar Co-PI: Dr. Manish Kumar Sinha

25.	Development of dissimilar friction welding joint of higher pipe size (bigger than 1 inch pipe) for Al-SS and SS-Cu materials.	26.59 L	BRNS	Dr Kush Metha Dr Vishvesh J Badheka Mr Bharat Doshi (IPR)
26.	OVL Investment Evaluation	25 L	NITI Aayog	Dr. RK Vij, Dr. Asit Acharya, Jatin Agarwal
27.	ER Screening	23.6 L	GNRL	Dr. RK Vij, Jatin Agarwal
28.	Study of Heterogeneous precipitation patterns with the help of aerosol – cloud properties: Focus on western India and Arabian Sea	20.7 L	DST	Dr. Rohit Srivastava
29.	Due Dilligence	20.65 L	Siam Services	Dr. RK Vij, Jatin Agarwal
30.	ER Screening	18 L	GSPC	Dr. RK Vij, Jatin Agarwal
31.	ER Screening	17.7 L	HOEC	Dr. RK Vij, Jatin Agarwal
32.	Development of Aluminium-Stainless Steel transition pipe joints for cryogenic applications using CMT (Cold Metal Transfer) Process.	16.89 L	BRNS	Dr Vishvesh J Badheka, Dr Sushovan Basak (CV Raman College) Dr. Manidipto Mukherjee (SRM University) Mr Bharat Doshi (IPR)
33.	Assessment of wind and wave energy along Indian coastal region using space-based microwave radars	16 L	SAC- ISRO	Dr. S. S. Kacchawaha, Dr. Nagababu
34.	Global biodiversity, evolution, and Biogeographical connections of belemnites of southern and northern hemisphere around early/late Cretaceous.	12 L	DST & Russian Federation of Basic Research (Bi-Lateral Research project)	Dr. Bhawanisingh G. Desai Dr. Alexey Ippolitov
35.	Applications of Ionic Liquids as Alternatives of Surfactants for Enhanced Oil Recovery	10 L	ORSP PDP	Dr. Achinta Bera
36.	Development of Risk Management Model for Solar Power Plants	6 L	Kumars Energy (P) Ltd, Bangalore	Dr. Debasis Sarkar
37.	Study of Metallurgical Feasibility of friction stir weld of wing panel to the wind stringer Air craft applications.	4.48 L	DRDO	Dr Vishvesh J Badheka Dr S Rajesh, Grp. Capt., (IAF)