

## Sponsored Research Project Grant

Title of the Project	Investigators	Funding Agency	Sanctioned Project Grant (INR)	Duration (in Years)
Advanced Control for Regulatory and Servo Problems of Three Improvements in Divided Wall Column: Heat Integration, Azeotropic separation and Reactive distillation	Dr. Md Aurangzeb, Dr. Subhankar Roy	GUJCOST	12,96,000	2
Novel Nano-Materials Derived From Waste and its Applications in Improving Rheological Properties of Bitumen	Dr. Ashish Unnarkat, Dr.Himanshu Choksi	GUJCOST	23,63,200	3
Primary Health Screening Device Development Deploying Machin Learning	Dr.Shirsendu Mitra	BIRAC E-Yuva	3,35,000	1
Theme: (a) Energy-efficient biodiesel production technology at an industrial scale. (b) Improvement in yield and quality (fuel properties) of biodiesel.	Prof. Surendra Singh Kachhwaha, Dr. Pravin Kodgire	SHELL ENERGY INDIA PVT. LTD.	7000000	4
Development of novel solvent for CO <sub>2</sub> Removal by absorption from Industrial exhaust/flue gas. Phase-1	Dr. Sukanta Dash, Prof. Anirbid Sircar	Industry (BPCL)	25,00,000	2
Development of novel Sustenol solvent for post-combustion CO <sub>2</sub> capture	Dr. Sukanta Dash	Industry (Susteon Inc)	28,50,000	2
Integrated Design and Demonstration of Intensified CO <sub>2</sub> Capture with Cost effective Advanced Process	Dr. Sukanta Dash	DBT, India	67,77,000	3
Performance study of CC solvent in pilot plants with simulated flue gas from Industrial exhaust to develop large-scale CO <sub>2</sub> Removal (CDR) Technology	Dr. Sukanta Dash	Industry (Carbon Clean)	49,90,000	3
Development of Carbon Capture solvent for Ducon	Dr. Sukanta Dash	Ducon Infratechnologies	16,30,548	1
Structure, Interaction and Process for Energy Efficient CO <sub>2</sub> Separations Using Novel Ionic Liquids Supported Membranes	Dr. Swapnil Dharaskar, Dr. Manish Sinha	DST, India	28,50,000	3
Production of Green Methanol - Phase 1 Batch Reactor Process and Catalysts Evaluation Project	Dr. Swapnil Dharaskar, Dr. Ashish Unnarkat	LTTS, Baroda	44,00,000	2

Supported Ionic Liquid Membranes: Design, Analysis, and Theoretical Understanding for Customizing the Efficiency of CO <sub>2</sub> /CH <sub>4</sub> Separation	Dr. Swapnil Dharaskar	Sajjan India	75,000	1
Development of Advanced Materials for CO <sub>2</sub> Applications	Dr. Swapnil Dharaskar	Sajjan India	50000	1
Development of Advanced MXene-Based Materials for Removal of Emerging Pollutants from Wastewater.	Dr. Swapnil Dharaskar	Sajjan India	75000	1
Mechano-Chemical Synthesis of low cost & efficient Perovskite solar cells	Dr. Pankaj Yadav & Dr. Himanshu Choksi	GUJCOST	34,35,520/-	3
Chitosan-Based Biopolymer Additives in Geopolymer Concrete: A Biotechnological Innovation for Next-Generation Green Construction Materials	Dr. Niragi Dave and Dr. Bharti Saini	GSBTM	30,58,000	3
Production of Green Methanol - Phase 2 Packed Bed Reactor Project	Dr. Swapnil Dharaskar, Dr. Ashish Unnarkat	LTTS, Baroda	5500000	1
Development of Scalable Coastal Energy Plants (CEP) with Aluminum Scrap and Seawater for production of Green Hydrogen, Electricity and Aluminum Hydroxide	Dr. Ramesh K Guduru, Dr. R. K Vij, Dr. Anurag A Gupta, Dr. Paul Naveen, Dr. Surendra Sasikumar	SHELL ENERGY INDIA PVT. LTD.	31,81,000	4
Bio-mimetic and phyto technologies Designed for low cost purification and recycling of water (India H <sub>2</sub> O)	Prof. A Mudgal, Dr. Dr. M K Sinha	DBT	5,07,27,000	4.5