Details of Seed Money/Research Grant Phase-I

Sr. No.	Research Project Title	Name of PI	Seed Amount
1	Experimental and Numerical simulation of large deformation geotechnical problems	Dr. Jitesh T. Chavda	9,70,000
2	Development of next-generation biodegradable iron implants for orthopaedic and cardiovascular applications	Dr. Pawan Sharma	9,75,000
3	Development of ultrafine-grained magnesium alloys by a novel differential speed rolling process and studies its effect on tension-compression asymmetry	Dr. Biranchi Narayan Sahoo	9,70,000
4	Simplified predictive torque control strategies for an induction motor drive	Dr. K. V. Praveen Kumar	10,00,000
5	Coupled numerical simulation of hydrodynamic and morphology for a river reach considering sediment extraction	Dr. Bandita Barman	9,85,854
6	Predictive active control using neural network for partially observed building frames	Dr. Vashisht Bhaiya	5,00,000
7	A novel hybrid cascade multi-level inverter with a single DC source by employing a toroidal transformer	Dr. Jammala Venkataramanaiah	10,00,000
8	Trajectory optimization of re-entry vehicles using combined metaheuristic and collocation-based methods	Dr. Gangireddy Sushnigdha	10,00,000
9	Effect of creep and anisotropy angle on deformation behaviour of underground openings	Dr. Ankesh Kumar	10,00,000
10	Experimental and Numerical investigations on instantaneous behaviour of FRP-strengthens RC beams	Dr. Kashyap A. Patel	8,00,000
11	Development of optimal switching angle methods for asymmetric cascade H-bridge multilevel inverter	Dr. Aeidapu Mahesh	10,00,000
12	Thermal conductivity enhancement of a PCM-based heat sink using heat pipes	Dr. Naresh Yarramsetty	9,90,793
13	Development of a test facility to study combustion dynamics of high-hydrogen and bio-fuels in the turbulent gas turbine combustor	Dr. Nikhil A. Baraiya	9,85,000

14	Design and Development of solar solar-driven water generation system based on a desiccant-coated heat exchanger	Dr. Amit Kumar	9,75,000
15	Development of a versatile battery charger for electric vehicles with reduced sensor count	Dr. Sanjay Tolani	10,00,000
16	A TCAD framework for assessment of spacer material and back-gate bias on the electrical performance of negative capacitance FETs	Dr. Abhishek Acharya	10,00,000
17	Spectrum sensing for cognitive radio: A Way to improve spectrum utilization in India	Dr. Kamal M. Captain	10,00,000
18	Development of many-objective optimization framework for VLSI circuits	Dr. Deepak Joshi	9,25,000
19	Heart rate and lung volume estimation from the speech signal	Dr. Suman Deb	9,43,000
20	The assessment of process strategies and damage predictions for improving a novel SPIF process	Dr. Amrut Mulay	9,80,000
21	Design of metamaterial-based microwave absorber using agricultural waste	Dr. Kirti Inamdar	9,07,250
22	Study of air gap membrane distillation process for seawater desalination using synthesized hydrophobic membrane and investigate the possibility of zero liquid discharge	Dr. Sarita Kalla	9,75,000
23	Continuous and sustainable extraction of critical metals from e-waste	Dr. Jogender Singh	10,00,000
24	Food grade Nano emulsions and their stability aspects for efficient delivery of micronutrients via fornication	Dr. Sundar S. K.	9,95,000
25	Ab initio synthesis of phosphate framework materials with adaptable properties	Dr. Ritambhara Jangir	10,00,000
26	On trigonometric approximation of function and their conjugates belonging to certain Lipschitz classes	Dr. Shailesh Kumar Srivastava	6,84,122
27	Experimental and Numerical investigation of thermal analysis of multi-layered biological tissue phantom: An application to radiation therapy	Dr. Vipul Mangalbhai Patel	9,89,580
28	Study and Analyses of CNT reinforced laminated plates	Dr. Sumit Khare	9,75,000
29	Strategies for the heterocycles synthesis: Art of contriving molecules via C-H bond activation	Dr. Togati Naveen	10,00,000
30	Optimization-based algorithms for state and parameter estimation, and their performance evaluation	Dr. Rahul Radhakrishnan	10,00,000
31	Microwave plasma interaction with conducting surface and its effect on plasma parameters	Dr. Shail Pandey	10,00,000
32	Research on power electronics and control: Grid-Interface for renewables, storage, and green micro-grids	Dr. Rajasekharareddy Chilipi	10,00,000

33	Optimization of the performance of low-cost surface-modified nanoparticles based water filtration and its LCA study	Dr. Vineet Kumar Rathore	9,95,000
34	Pyrolysis of sewage sludge for enhancing the quality of syngas and liquid fuel produced	Dr. Prabhansu	9,50,000
35	Vibration energy harvesting through linear/nonlinear vibration of cantilever beams of different materials	Dr. Rohit Tamrakar	9,87,000
36	Development and Performance Study of Wire Electrochemical Spark Machining setup	Dr. Pallvita Yadav	9,00,000
37	Investigations on gasification of refused derived fuel (RDF) in typical Indian context	Dr. Rohan R. Pande	9,73,375
38	Block chain-enabled public key infrastructure-based solutions for the Internet of Things (IoT)	Dr. Balu L. Parne	9,20,000
39	On Optimality and Duality for interval-valued Variation Programming Problems	Dr. Indira P. Debnath	3,80,000
40	Design and analysis of secure and efficient 'Smart Contracts' using Block chain Technology	Dr. Keyur Parmar	9,30,000