

Sponsored Research Projects

S.No.	TITLE OF PROJECT	FUNDING AGENCY	PERIOD	AMOUNT (in Rupees)	STATUS	NAME(s) and AFFILIATION of PI & Co-PI(s)
1	Blast Analysis of Functionally Graded Materials Plate & Shell Panels	SERB-DST	3 years (2019-2022)	1736330	Ongoing	Dr. Shashnk Pandey, Dept. of Mechanical Engg
2	Hydraulic Design of Ash disposal system of thermal plant to minimize the heavy metal contamination of ground water	DST	3 years (2019-2021)	2221000	Ongoing	Dr. Satish Kumar, Dept. of Mechanical Engg.
3	Effect of Nano-particles in Viscoplastic Complex Fluids: A Thermorheological Characterization and Heat Transfer Investigation	SERB, DST	3 Years (2017-2020)	2805000	Ongoing	Dr. Md. Ashique Hassan, Dept. of Mechanical Engg
4	Effect of Perforation and Corrugation on the Nonlinear Flexural and Vibration Behaviour of Heated Layered/Graded Composite Panels under Various Loading/Support Conditions	SERB, DST	3 Years	1152000	Ongoing	Dr. Vishesh Ranjan Kar, Dept. of Mechanical Engg.
5	Comparative analysis of TEG and WHR system used for energy harvesting from engines	SERB, DST	3 Years	1992000	Ongoing	PI: Dr. Dulari Hansdah, Dept. of Mechanical Engg.
6	Mathematical Modeling and Finite Element Analysis of Wind Turbine Blades (WTB): Coupled 1D Approach	SERB, DST	3 Years	660000	Ongoing	Dr. K.K. Shukla, Dept. of Civil Engg.
7	Design and Development of Centralized Database on Scholarship/fellowships awarded in S & T sector.	DST	3 years (2019-2022)	2996000	Ongoing	Dr. Koushlendra Kumar Singh, Dept. of CSE
8	Development of Functionally Graded HA based Bioactive Composite Coating by Plasma Spraying and Electrophoretic deposition (EPD)	SERB, DST	3 years (2019-2022)	2208500	Ongoing	Dr. Renu Kumari, Dept. of MME
9	Transition Metal Carbide Nanomaterials for Energy Storage Application	Indo-US Science & Technology Forum (IUSSTF), India	3 years (2019-2022)	3152200	Ongoing	Dr. Subhash Singh, Dept. of Production and Industrial Engg

10	Mxene based conducting electrode for dye-sensitized solar cells application	SERB, DST		1984126	Ongoing	Dr. Subhash Singh, Dept. of Production and Industrial Engg.
11	Modelling & Simulation of ThreeDimensional Magnetohydrodynamic Nanofluid flows over a Stretching Surface	SERB-DST	3 years (2018-2021)	1747036	Ongoing	Dr. Raj Nandkeolyar, Dept. of Mathematics; Transferred from Thapar Institute of Engineering and Technology
12	Theoretical investigation on non-focal transport of particles in sediments laden turbulent flows using fractional diffusion equation	SERB-DST	3 Years (2018-2021)	1552000	Ongoing	Dr. Snehashish Kundu, Dept. of Mathematics
13	State Estimation and Fault Diagnosis for Differential-Algebraic nonlinear Control Systems	SERB-DST	3 years (2019-2022)	1800000	Ongoing	Dr.Mahendra Kumar Gupta, Dept. of Mathematics
14	Wavelet methods for nonlinear fractional partial differential equations with Engineering applications	NBHM (National Board for Higher Mathematics)	3 Years (2017-2020)	1350000	Ongoing	Dr. Sunil Kumar, Dept. of Mathematics
15	Spectral methods for fractional models of mathematical physics with new non-local and nonsingular Caputo-Fabrizio derivative	DST, SERB Government of India	3 Years (2018-2021)	2221200	Ongoing	Dr. Sunil Kumar, Dept. of Mathematics
16	Identification of factors for successful implementation of Amul like Cooperatives for forest produce	IMPRESS (Scheme of Indian Council of Social Sciences Research)	1 Year (2019-2020)	450000	Ongoing	Dr. Akanksha Shukla, Dept. of Humanities, Social Sciences and Management
17	Students Perception About Values and Professional Ethics as Compulsory Course in Engineering Education: An Exploratory Study	Indian Council of Philosophical Research (MHRD)	1.5 Years	100000	Ongoing	Dr. Manish Kumar Jha, Dept. of Humanities, Social Sciences and Management
18	Spatial Distribution of Uranium and Associated Water Quality Parameters in groundwater/drinking water of seven districts (East Singhbhum, Saraikela Kharsawan, West Singhbhum, Khunti, Simdega, Gumla, Latehar) of Jharkhand	Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS)	2 Years (2017-2019)	2752000	Ongoing	PI: Dr. Balram Ambade, Dept. of Chemistry Co-PI: Dr. Ch. Madhusudana Rao, Dept. of Civil Engg

19	Black carbon Aerosols over Jamshedpur: Source, Radiative Forcing and Climate Impact	SERB (Science & Engineering Research Board)	3 Years	3680000	Ongoing	PI: Dr. Balram Ambade, Dept. of Chemistry
20	Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmosphere of Jamshedpur, East India: sources, human health risk assessment and climate effects	DST SERB	2017-20	2899000	Ongoing	Dr. Balram Ambade, Dept. of Chemistry
21	Computational Modelling of Novel Materials for Efficient, Robust Organic Solar Photovoltaic Cells	DST	5 Years (2014-2019)	3500000	Ongoing	Dr. Neha Agnihotri, Dept. of Physics
22	Design and Development of Compact Semi-Automatic Parboiling Machine with Dryer for Marginal Farming	DST	2020-2022	1450000	Ongoing	PI: Dr A K Mandal ,Dept. of Mechanical Engg Co-PI: Dr M A Hassan, Dept. of Mechanical Engg
23	Nanoparticle Oxygen Carrier Assisted Chemical Looping Combustion	DST SERB	2020-2023	4874000	Ongoing	PI: Prof Sanjay, Dept. of Mechanical Engg Co-PI: Dr M. A. Hassan, Dept. of Mechanical Engg
24	Investigation of Instabilities and Vibrations in Cables and Belts Travelling over Pulleys	DST SERB	2020-2023;	7776000	Ongoing	PI: Prof P Wahi (IITKanpur) Co-PI: -Dr A K Mandal, Dept. of Mechanical Engg