Ongoing R&D Projects (upto March, 2025)

Sl. No.	Title of the Project	Funding Agency	Name of PI	Department of PI
1	Tinkering and Innovation laboratory	Naresh Vashisht Foundation	Prof. Pankaj Mishra	Physics
2	To strengthen the research facilities in the Department of Chemical Engineering	DST, New Delhi	Prof. Rajiv Shekhar	Chemical Engineering
3	To strengthen the research facilities in the Department of Civil Engineering	DST, New Delhi	Prof. Sarat Kumar Das	Civil Engineering
4	Micromechanics based intra and inter-laminar damage models with emphasis on spatial randomness, boundary layer and interface	DST , New Delhi	Prof. Subhabrata Koley	Mechanical Engineering
5	Development of Classification, Identification and Feature Extraction Algorithms using Machine Learning and Artificial Intelligence techniques for Genome Classification, Protein Classification and Medical Image Analysis	SERB, New Delhi	Prof. Subhashis Chatterjee	Mathematics and Computing
6	Control of sprays and thermo-acoustic oscillations through an acoustic driven fuel injector: passive and active control strategy	DST, New Delhi	Prof. Rabindra Nath Hota	Mechanical Engineering
7	Cow dung derived hybrid adsorbent for heavy metal removal and its subsequent utilization as cheaper electrodes for energy storage devices	DST, New Delhi	Prof. Brijesh Kumar Mishra	Environmental Science & Engineering
8	Assessing tsunami vulnerability of low-rise structures by SPH modelling''	SERB, New Delhi	Prof. Sukanta Chakraborty	Civil Engineering
9	Development Of Highly Accurate Immersed Interface Method For Direct Numerical Simulation Of Fluid-Structure Interaction Problems Under Compressible Flow Regime	SERB, New Delhi	Prof. Swagata Bhaumik	Mechanical Engineering
10	To strengthen the research facilities in the Department of Mining Engineering	DST, New Delhi	Prof. Rabindra Kumar Sinha	Mining Engineering
11	To strengthen the research facilities in the Department of Applied Geology	DST, New Delhi	Prof. Shushanta Sarangi	Applied Geology
12	Design and Development of Artificial Intelligence Based Fiber optic Respiration Rate Measurement System for Psychophysiological Health Monitoring''	SERB, New Delhi	Prof. Amitesh Kumar	Electronics Engineering
13	Improving the Economic Well-Being of Scheduled Tribe Communities (ST) Using Game Theoretic and Operations Research Techniques in Jamtara District of Jharkhand State	DST, New Delhi	Prof. Rashmi Singh	Management Studies & Industrial Engineering

14	Studies in Nonlinear Dynamics of Mechanical Systems	DST , New Delhi	Prof. Aman Kumar	Mechanical Engineering
15	Joint geopotential field modelling for finding the missing link between the Chotanagpur Granite Gneiss Complex (CGGC) and Shillong-Meghalaya Plateau	SERB, New Delhi	Prof. Gangumalla Srinivasa Rao	Applied Geophysics
16	Performance Assessment of Skew and Curved Railway Bridges of Diverse Structural Configurations	S.R. Chaudhuri Consultancy Services Pvt. Ltd., Kolkata	Prof. Piyali Sengupta	Civil Engineering
17	Deconstruction of lignocellulosic biomass for bioenergy	SERB, New Delhi	Prof. Madhulika Gupta	Chemistry and Chemical Biology
18	Design and development of frequency stable and high Q-factor optoelectronic oscillator assisted by microwave photonic techniques	DRDO, New Delhi	Prof. Sanjeev Kumar Raghuwanshi	Electronics Engineering
19	Performance Evaluation of Box & Box Girder-type Railway Bridges under Sustained and Dynamic Loading	Pioneer Surveyors, Kolkata	Prof. Piyali Sengupta	Civil Engineering
20	Bricks with grooves and projections in the masonry wall without using mortar	Navayuga Engineering Company Limited	Prof. Sekhar Chandra Dutta	Civil Engineering
21	Abiotic synthesis of methane at the recess of Martian crust and prospect of microbial life in the Noachian Mars - Constraints from experimental and meteorite studies	Indian Space Research Organisation	Prof. Alik Sundar Majumdar	Applied Geology
22	Performance Study of Steel Oil Storage Tanks under Seismic Loading''	Ministry of Earth Sciences, New Delhi	Prof. Tanish Dey	Civil Engineering
23	Performance Improvement of Darrieus Hydrokinetic Turbine using different J-shape blades and Vortex Generator	SERB, New Delhi	Prof. Shibayan Sarkar	Mechanical Engineering
24	Explainable Deep Learning for Optimal Design and Robust Control of Coal Flotation Columns - Towards an Intelligent & Reliable Clean Coal Initiative	SERB, New Delhi	Prof. Priyanka Devi Pantula	Chemical Engineering
25	Strategic Intervention for Developing Sustainable Entrepreneurial Ecosystem in Jharkhand	Maithon Power Limited, Dhanbad	Prof. Shashank Bansal	Management Studies & Industrial Engineering
26	Modular Synthesis of Fluorinated Azole Pharmaceuticals using Chan-Lam Coupling Variants	SERB, New Delhi	Prof. Parthasarathi Das	Chemistry and Chemical Biology
27	Investigating the impact of pore geometry on the non-liner filtration characteristics in porous media	SERB, New Delhi	Prof. Mrityunjay Kumar Singh	Mathematics and Computing
28	Design of a webserver-based hybrid physiological sensor with optical cloth for real-time health specialist care	SERB, New Delhi	Prof. SanjeevKumar Raghuwanshi	Electronics Engineering
29	Capacity building for human resource development in Unmanned Aircraft System (Drone and related Technology)	Ministry of Electronics and Information Technology, New Delhi	Prof. Ravi Kumar Gangawar	Electronics Engineering
30	Smart Radio Environments: Implementation and deployment for targeted use-cases	TIH-IIIT, Banglore	Prof. Samrat Mukhopadhyay	Electronics Engineering

31	Generation of high chirp rate dual chirp microwave waveform in Ku band using novel microwave photonic techniques for high performance radar application	SERB, New Delhi	Prof. SanjeevKumar Raghuwanshi	Electronics Engineering
32	Inference on parameters of discriminant functions and model-based classification for multivariate distributions	SERB, New Delhi	Prof. Naba Kumar Jana	Mathematics and Computing
33	Monitoring the aggregation kinetics of amyloid-beta and its inhibition	DST , New Delhi	Prof. Umakanta Tripathy	Physics
34	Wave scattering by new-type floating barriers in deep water	SERB, New Delhi	Prof. Ramanababu Kaligatla	Mathematics and Computing
35	Development of spectrally efficient low complexity fast sparse channel estimation algorithms for orthogonal time frequency space (OTFS) modulation scheme	SERB, New Delhi	Prof. Himanshu Bhusan Mishra	Electronics Engineering
36	Multi-Window Cross-Correlation of Ambient Noise: A Novel Approach for Machine Learning Tools in Seismic Hazard Analysis	SERB, New Delhi	Prof. Mohit Agrawal	Applied Geophysics
37	Topological characterisation and entanglement content of the Mott metal-insulator transition	SERB, New Delhi	Prof. Sudeshna Sen	Physics
38	Development of Estimation Strategies for the Parameters of Stigmatized Characteristics Using Randomized Response Models	SERB, New Delhi	Prof. Garib Nath Singh	Mathematics and Computing
39	Multi-Carrier Waveforms for Intelligent Reflecting Surface (IRS) assisted Next-Generation Wireless Communication Systems	SERB, New Delhi	Prof. Himanshu Bhusan Mishra	Electronics Engineering
40	Development of dynamic geospatial framework and land suitability database for best alternative livelihood options in Indian Sundarban region	SERB, New Delhi	Prof. Sukha Ranjan Samadder	Environmental Science & Engineering
41	Evaluation and Synthesis of Green Hydrate Inhibitors with Enhanced Hydrate Inhibition and Biodegradability	SERB, New Delhi	Prof. Ajay Suri	Petroleum Engineering
42	Discontinuous Galerkin Finite Elements for Load Gerneration Mechanism in Titled pad Slider Bearing Lubrication	Department of Atomic Energy, Mumbai	Prof. Srinivasa Rao Pentyala	Mathematics and Computing
43	Towards Interpretable Information Systems: Leveraging Efficiency with Interpretability	DST , New Delhi	Prof. Koustav Rudra	Computer Science and Engineering
44	Design, Syntheses and Applications of Bifunctional Compounds of Tetravalent Group 14 Elements	SERB, New Delhi	Prof. Hari Pada Nayek	Chemistry and Chemical Biology
45	High Temperature CO_2 Capture using Novel Fly-ash infused CaO-MgO Sorbents in Pre & Post Combustion Processes: Kinetics,	SERB, New Delhi	Prof. Soubhik Kumar Bhaumik	Chemical Engineering
46	Regular Subsidence Monitoring Survey of Surda Mining Lease, Kendadih Mining Lease and Rakha Mining Lease for three (03)	Hindustan Copper Limited, East Singhbhum	Prof. Mohammad Soyeb Alam	Mining Engineering
47	Autonomous and Privacy-Preserving Learning for Online and Intelligent Analysis of Urban Data	DST , New Delhi	Prof. Monidipa Das	Computer Science and Engineering

48	Design and Development of Substrate Integrated Waveguide based Self-multiplexing Antennas for 5G communication systems	SERB, New Delhi	Prof. Santanu Dwari	Electronics Engineering
49	Development of Computer Program and Experimental set-up for Response Assessment of Concrete Structures under Drop-weight Impact and Contact Explosions	SERB, New Delhi	Prof. Satadru Das Adhikary	Civil Engineering
50	Aerodynamic and aeroacoustic characteristics and noise control of isolated and tandem propellers with and without installations	SERB, New Delhi	Prof. Kabilan B	Mechanical Engineering
51	Development of Algorithms for Collaborative Dual Arm Manipulation and Control	DRDO, Pune	Prof. Arun Dayal Udai	Mechanical Engineering
52	Biomechanical analysis on the use of Pulsating Liquid Jet in cement removal from the femoral canal in Revision Total Hip Arthroplasty: A novel approach for biomedical application	SERB, New Delhi	Prof. Amit Rai Dixit	Mechanical Engineering
53	Slope Instability Severity (SIS) Assessment at Coalfield Level using Integration of Innovative Spaceborne InSAR and Relevant Data for Enhanced Slope Failure Predictions	SERB, New Delhi	Prof. Mohammad Soyeb Alam	Mining Engineering
54	Assessment of basin scale terrestrial water balance closure and evaluation of its uncertainty	SERB, New Delhi	Prof. Kironmala Chanda	Civil Engineering
55	3D printing of overhang structures through different metal transfer strategies using wire arc additive manufacturing process	SERB, New Delhi	Prof. Alok Kumar Das	Mechanical Engineering
56	Regional Centre for Geodesy	DST, New Delhi	Prof. Vasanta Govind Kumar Villuri	Mining Engineering
57	Feasibility of bulk scale production of S/N-doped porous carbon and graphitic-C_3N_4 based metal chalcogenides Anodes for sodium-	IIT(ISM), Dhanbad	Prof. Ganesh Cahndra Nayak	Chemistry and Chemical Biology
58	Polysaccharide based copolymeric hydrogels for biomedical applications	SERB, New Delhi	Prof. Sagar Pal	Chemistry and Chemical Biology
59	Coloring graphs with at most Δ-1 Colors	Department of Atomic Energy, Mumbai	Prof. Dinabandhu Pradhan	Mathematics and Computing
60	On the reductions of airfoil-turbulence noise through novel dimple configurations	SERB, New Delhi	Prof. Kabilan B	Mechanical Engineering
61	Detection and Monitoring of Longwall Subsidence of Moonidih Colliery, BCCL using Spaceborne SAR Interferometry (InSAR) Techniques	BCCL, Dhanbad	Prof. Mohammad Soyeb Alam	Mining Engineering
62	Advanced Wear and Corrosion Resistance Coatings Development and Commercialization in India	DST, New Delhi	Prof. Kesavan Ravi	Fuel, Minerals and Metallurgical Engineering
63	Ultra-Low Power Neuromorphic Spiking Architecture for Assistive Smart Glass	Ministry of Electronics and Information Technology, New Delhi	Prof. Rajeev Kumar Ranjan	Electronics Engineering
64	Concept of temporal networks in hydroclimatic modelling in a changing climate: Application to streamflow and drought	Ministry of Earth Sciences, New Delhi	Prof. Kironmala Chanda	Civil Engineering

65	Development of a finite-element based Navier-Strokes solver to study the flow of non-Newtonian fluids past single/double objects in an extremely narrow channel	SERB, New Delhi	Prof. Subhankar Sen	Mechanical Engineering
66	Performance Evaluation of Nanolubricants in Cryogenic Environment for Low Temperature Applications	DRDO, Kanpur	Prof. Subrata Kumar Ghosh	Mechanical Engineering
67	FIST Engineering Sciences Level B C or D - Project	DST, New Delhi	Prof. Shravan Kumar	Fuel, Minerals and Metallurgical Engineering
68	Storage of hydrogen-methane mixture in porous aromatic frameworks (pafs): a multi-scale computational investigation	SERB, New Delhi	Prof. Sridhar Sahu	Physics
69	Development of Synthetic Lightweight Aggregates as Backfilling Material using Hydraulic Stowing Metho	CMPDI, Ranchi	Prof. Bhanwar Singh Choudhary	Mining Engineering
70	Organogermanium Supported Polynuclear Metal Complexes as Cooperatives Catalysts for Organic Reaction	CSIR, New Delhi	Prof. Hari Pada Nayek	Chemistry and Chemical Biology
71	Design, Fabrication and Calibration of Nanomaterial based Temperature Sensors for short-Duration Transient Measurements	CSIR, New Delhi	Prof. Rakesh Kumar	Mechanical Engineering
72	Creation of nodal centers for the production of imported APIs, KSMs and Intermediates to achieve self-sufficiency in health-care sector	DST, New Delhi	Prof. Parthasarathi Das	Chemistry and Chemical Biology
73	Development of Polymer augmented surfactant-based microemulsion systems for enhanced oil recovery	MHRD(SPARC), New Delhi	Prof. Ajay Mandal	Petroleum Engineering
74	Data reduction and surrogate modelling of transition to turbulence to Rayleigh-Taylor instability data obtained by DNS	DST, New Delhi	Prof. Aditi Sengupta	Mechanical Engineering
75	Micromechanical Simulation of Overburden Dump Slope under Field Geomining Conditions	MHRD(SPARC), New Delhi	Prof. Radhakanta Koner	Mining Engineering
76	Characterization of sulphide minerals in Indian basemetal and gold deposits for assessment of strategic element recovery opportunity	SERB, New Delhi	Prof. Prabodha Ranjan Sahoo	Applied Geology
77	Design of multi-stable variable stiffness composite shells for morphing applications	DRDO, New Delhi	Prof. Tanish Dey	Civil Engineering
78	3D Printing of Engineering Components through cold Spray Technique	CSIR, New Delhi	Prof. Alok Kumar Das	Mechanical Engineering
79	Development of Upconversion Nanoparticles Conjugated Carbon Dots as Amplified Singlet Oxygen Generator for Synergistic Photodynamic Therapy	Ministry of Education, New Delhi	Prof. Sumanta Kumar Sahu	Chemistry and Chemical Biology
80	Development of Suitable Methodology for Utilization of Coal Mine Overburden in Road Construction	TEXMiN (Technology Innovation in Exploration & Mining Foundation), DST,	Prof. Smruti Sourava Mohapatra	Civil Engineering
81	ChalPV: Chalcogenide-Perovskite (BaZrS3) based Photovoltaic Devices	DST , New Delhi	Dr. Jitendra Kumar	Electronics Engineering

82	Memristor Based Multilayer Neural Networks (MNN) And Its Application in Neuromorphic System	CSIR, New Delhi	Prof. Rajeev Kr. Ranjan	Electronics Engineering
83	Deployment of Smart Portable Off-Grid Hybrid Combined Heat & Power Unit Based on Hybrid Energy (Solar and Biomass) for Micro Farming and Small Food Processing Industries Located in Rural Areas of Jharkhand	Jharkhand Renewable Energy Development Agency, Ranchi	Prof. Nitai Pal	Electrical Engineering
84	Understanding the role of chemical composition, size, and sources on the particulate matter toxicity	SERB, New Delhi	Prof. Saifi Izhar	Environmental Science & Engineering
85	Cretaceous climate evolution in middle latitude Tethys, a study from green-silicates of Mahadek Formation, South Shillong Shelf	SERB, New Delhi	Prof. Udita Bansal	Applied Geology
86	Evaluation and Impact of the SMILE project	The Energy And Resource Institute, New Delhi	Prof. Saumya Singh	Management Studies & Industrial Engineering
87	IPR Chair Professor, Scheme for Pedagogy & Research in IPRs for Holistic Education and Academia (SPRIHA)	Department of Industrial Policy & Promotion, Ministry of Commerce &	Prof. Anand Rajagopal	CIIE
88	Integrated Fermentation and Chemical Catalysis for Jet Range Biorenewable Fuels and Blends	Department of Biotechnology, Government of India, New Delhi	Prof. Ejaz Ahmad	Chemical Engineering
89	Design and Analysis of Axial Flux Machine Technology for Electric Vehicle Motor Drives	SERB, New Delhi	Prof. Srinivas Lakshmi Vedantham	Electrical Engineering
90	Investigation of Modal and Non-Modal Instability in Fluid-Porous Double-Layer Configuration	SERB, New Delhi	Prof. Sourav Sengupta	Chemical Engineering
91	Bayesian Optimization-based Neural-Symbolic Artificial Intelligence (BONSAI) for Explainable Learning from Urban Data	SERB, New Delhi	Prof. Monidipa Das	Computer Science and Engineering
92	Investigations of Interoperability of Grid-forming Assets in Hybrid Power System	SERB, New Delhi	Prof. Dushyant Sharma	Electrical Engineering
93	Inferring Cancer Networks using Computational Biology	DST , New Delhi	Dr. Haswanth Vundavilli	Electrical Engineering
94	Blast fragment impact mitigation of structures using light weight Steel cementitious composite steel (SCCS) and Functionally graded cementitious composite (FGCC) systems	DRDO, New Delhi	Prof. Satadru Das Adhikary	Civil Engineering
95	Critical Analysis, Design, EM Modeling & Optimization of millimeter wave planar antenna	DRDO (CARS), Jodhpur, Rajasthan	Prof. Ravi Kumar Gangwar	Electronics Engineering
96	Design and experimental studies of the fiber-reinforced polymer (FRP) solid rock bolts for underground mine support systems	Ministry of Mines, New Delhi	Prof. Kalyan Kumar Singh	Mechanical Engineering
97	Data-driven Mineral Prospectivity Mapping in Jharkhand and its Surroundings	TEXMiN (Technology Innovation in Exploration & Mining Foundation), DST,	Prof. Partha Pratim Mandal	Applied Geophysics

98	A cross-lingual study of neuron-level explainability of deep natural language processing models and its application in framework building for cross-lingual natural language processing systems	SERB, New Delhi	Prof. Ayan Das	Computer Science and Engineering
99	Assessing the feasibility of using locked GFP chromophore derivatives in protein sensing, protein imaging as well as fluorogenic RNA-aptamer based imaging to design improved fluorophores	SERB, New Delhi	Prof. Soumit Chatterjee	Chemistry and Chemical Biology
100	Effective utilization and life enhancement of tailing pond at West Bokaro	Tata Steel Limited, Jamshedpur	Prof. Sagar Pal	Chemistry and Chemical Biology
101	Reduction of Specific fresh Water Consumption (SFWC) at OMQ	Tata Steel Limited, Jamshedpur	Prof. Sukha Ranjan Samadder	Environmental Science & Engineering
102	Quest for novel magnetism in selected 3d and 5d based transitional metal oxides	Indo German DST DAAD	Prof. Tusharkanti Dey	Physics
103	Aeroelastic and Gust Response Analysis of Variable Stiffness Smart Composite Wing	SERB, New Delhi	Prof. Prashanta Kumar Mahato	Mechanical Engineering
104	Synthesis of C-Aryl/Heteroaryl Glycosides via Photoredox-Catalyzed Homolysis of Glycosyl C-O Bonds: Application to the Synthesis of Neopetrosine Alkaloids A-D	SERB, New Delhi	Prof. Somnath Yadav	Chemistry and Chemical Biology
105	Application of spectroscopic methods and machine learning algorithms for a rapid and reliable estimate of the gross calorific value (GCV) in high-ash Indian coal	SERB, New Delhi	Prof. Anup Krishna Prasad	Applied Geology
106	Approximate closed form solution of an FGM rotating disc subjected to thermal stresses and its inverse estimation for thermo-mechanical parameters	SERB, New Delhi	Prof. Ashis Mallick	Mechanical Engineering
107	Development of Advection-Diffusion Based Chemo-Thermo-Physical Model for Post-fracturing Pressure Build-up in Shale Formations	SERB, New Delhi	Prof. Vinay Kumar Rajak	Petroleum Engineering
108	Development of ceramic dielectric material potentially viable for microwave devices	DST, New Delhi	Prof. Ravi Kumar Gangwar	Electronics Engineering
109	Site-Specific Challenges of Larger Offshore Wind Turbines along Indian Coast and Possible Geotechnical Solutions	SERB, New Delhi	Prof. Rajib Sarkar	Civil Engineering
110	Improved Lightweight Design of Variable Stiffness Composite Aircraft Panels Enabled by Tow-Steering and Machine Learning	SERB, New Delhi	Prof. Tanish Dey	Civil Engineering
111	YESI Knowledge Exchange Fellows scheme: 2023-2024	University of York,United Kingdom	Prof. Saifi Izhar	Environmental Science & Engineering
112	Engineer Ultrafast Switching in FePt-based Ferrimagnetic Alloys	SERB, New Delhi	Prof. Ritwik Mondal	Physics
113	Industrial scale up of biodegradable, non-polymer super-hydrophobic jute fabric exhibiting excellent water repellency & stiffness for shopping/hand bag products	National Jute Board, Ministry of Textiles, Kolkata	Prof. Aditya Kumar	Chemical Engineering

114	Development of “Chloroform COware Chemistry” as Toolbox for Safe Carbonylative Transformations	SERB, New Delhi	Prof. Parthasarathi Das	Chemistry and Chemical Biology
115	Foraminiferal, geochemical and sedimentological investigations on Holocene sediments of the Bay of Bengal: Unveiling climatic variations, oxygen-deficient environments and seepage effects	SERB, New Delhi	Prof. Ajoy Kumar Bhaumik	Applied Geology
116	The Game of Cops and Robbers and its Variations: Theory and Bounds	SERB, New Delhi	Prof. Dinabandhu Pradhan	Mathematics and Computing
117	Geochemical and mineralogical approach for the classification of pegmatites and related rocks in Koderma, Jharkhand and Mandya, Karnataka to evaluate the economic potentiality for Li-Cs-Rb, Nb-Ta and REE	SERB, New Delhi	Prof. Anand Rajagopal	Applied Geology
118	Synthesis of Bio-Based Zwitterionic surfactant for use in Enhanced Oil recovery (EOR) at High Reservoir Temperature Conditions	SERB, New Delhi	Prof. Tarun Kumar Naiya	Petroleum Engineering
119	Live cell imaging of RNA aggregation in nucleotide repeat expansion disorders	SERB, New Delhi	Prof. Sourav Kumar Dey	Chemistry and Chemical Biology
120	Long-Term Stress Field Perturbation and Stress Modeling Along the Myanmar-Andaman-Sumatra Subduction Margin	SERB, New Delhi	Prof. Prosanta Kumar Khan	Applied Geophysics
121	Growth of ß-Ga2O3/SnO2 Heterostructure Integration for UV Photodetector	SERB, New Delhi	Prof. R. Thangavel	Physics
122	Development of a wind turbine condition monitoring system using signal processing and machine learning techniques	SERB, New Delhi	Prof. Sachin Kumar Singh	Mechanical Engineering
123	Performance Enhancement of Cr-Mn based Austenitic Stainless Steel to be a Potential Low-cost Alternative to 300-Series	SERB, New Delhi	Prof. Madhumanti Bhattacharyya	Fuel, Minerals and Metallurgical Engineering
124	Photo-thermal optimization of upconversion nanoparticles as contrast enhancer for Optical Coherence Tomography (OCT)	SERB, New Delhi	Prof. Kaushal Kumar	Physics
125	Geochemical and paleomagnetic study of dolerite dykes in Meghalaya Plateau, Northeast India: Implications on mantle	SERB, New Delhi	Prof. Anand Rajagopal	Applied Geology
126	Studies on Ecosystem Services at GP-II Coal Block, Tamnar, Chhattisgarh	Adani Enterprises Limited, Ahmedabad	Prof. Vipin Kumar	Environmental Science & Engineering
127	Market Potential & Purchase intention of Ceramic Titles: a study among Indian consumers	Crystal Ceramic Industries Limited, Ahmedabad	Prof. Krishnendu Shaw	Management Studies & Industrial Engineering
128	Factors and Challenges Affecting the Tribal Heritage Entrepreneurship Opportunity in the Tribal Areas of the State of Jharkhand	ICSSR, New Delhi	Prof. Himanshu Gupta	Management Studies & Industrial Engineering
129	AI-driven synthesis of green flocculant and its application towards the treatmentn of mine process effluent	(Technology Innovation in Exploration & Mining Foundation), DST, New Delhi	Prof. Sagar Pal	Chemistry and Chemical Biology
130	Developments Tailors-made Surfactants for application in enhanced oil recovery	Syntron Industries Private Limited, Ahmedabad, Gujrat	Prof. Ajay Mandal	Petroleum Engineering

131	Study on Human-Machine Interaction with respect to gender inclusivity for Adani Natural Resources	Adani Enterprises Ltd., Udaipur, Chhattisgarh	Prof. L.A. Kumaraswamidhas	Mechanical Engineering
132	Reservoir Characterization of Raniganj CBM Field Through Pressure Transient Analysis (PTA)	Essar Oil and Gas Exploration and Production Limited, Durgapur, West	Prof. Rajeev Upadhyay	Petroleum Engineering
133	Information Security Education and Awareness (ISEA) Project Phase-III	Ministry of Electronics and Information Technology, New Delhi	Prof. Sachin Tripathi	Computer Science and Engineering
134	Aspects of Black Hole Thermodynamics in Quantum theories of Gravity	CSIR, New Delhi	Prof. Binata Panda	Physics
135	A Novel Modeling Approach for Selecting Suitable Intrinsic Bioremediation Strategies for Attenuating Oil Spills in Coastal	SERB, New Delhi	Prof. Renu V	Civil Engineering
136	Application of hybrid techniques for generation of Decision Support System for quantifying the population vulnerability due	SERB, New Delhi	Prof. Srinivas Pasupuleti	Civil Engineering
137	Analysis, modelling and mitigation methods for landslides along Bhalukpong-Tawang road in Arunachal Pradesh, India	SERB, New Delhi	Prof. Kripamoy Sarkar	Applied Geology
138	Landslide hazard assessment and mitigation - an integration of simulation techniques and machine learning algorithms in the	Ministry of Education (Scheme for Transformational and Advanced	Prof. Kripamoy Sarkar	Applied Geology
139	Design and Assessment of Complex Network Models and their Applications to halt Brain Disorder	SERB, New Delhi	Prof. Ranjit Kumar Upadhyay	Mathematics and Computing
140	Development of novel high-performance polymeric admixture for concrete and thereof'	JSW Cement Limited, Mumbai	Prof. Sagar Pal	Chemistry and Chemical Biology
141	FIST Engineering Sciences - Project	DST , New Delhi	Prof. Sukanta Das	Electrical Engineering
142	MOF-Driven Mixed Transition Metal Phosphide Impregnated Flexible Carbon Fiber for Solar-Driven Green Hydrogen	DST , New Delhi	Dr. Sk Riyajuddin	Physics
143	Making subgrade layer in flexible pavements water resistant using organosilane based chemical technology	Zydex Industries Private Limited, Vadodara, Gujarat	Prof. Avinash Kumar Singh	Civil Engineering
144	Performance assessment of bridge for design and operation rationalisation	Rajbir Construction Pvt. Ltd., Ranchi	Prof. Smruti Sourava Mohapatra	Civil Engineering
145	Lee distance distributions of linear codes over finite chain rings and construction of good codes over finite fields	SERB, New Delhi	Prof. Pramod Kumar Kewat	Mathematics and Computing
146	Development of Energy Efficient Ergonomically Designed (EEED) Chair Lift Man Riding System	CMPDI, Ranchi	Prof. Ajit Kumar	Mechanical Engineering
147	Capacity Building of Faculty and Institutions towards Design & Entrepreneurship Development	Ministry of Education, Department of Higher Education, New Delhi	Prof. Shikha Singh	Management Studies & Industrial Engineering
148	Design and development of High Entropy shape memory alloys for actuators application in the defence sector	DRDO, New Delhi	Prof. Rahul M R	Fuel, Minerals and Metallurgical Engineering
149	Exploring the drivers for purchasing recycled apparel: a study among Indian consumers'	Seej Fashion Private Limited, Noida	Prof. Krishnendu Shaw	Management Studies & Industrial Engineering
150	Design rationalisation of bridges for structural performance and traffic operation	Rotrans Infra Projects Private Limited, Bhubaneswar	Prof. Smruti Sourava Mohapatra	Civil Engineering

151	Design, Development and Standalone Implementation of Discrete Power Electronics Systems using Physics Informed Neural	SERB, New Delhi	Prof. Sukumar Mishra	Electrical Engineering
152	Technology Intervention in Lac Farming for Empowering the Marginal Women Farmers in the State of Jharkhand	Department of Scientific and Industrial Research, New Delhi	Prof. Shashank Bansal	Management Studies & Industrial Engineering
153	Bandwidth Adaptive RF Power Amplifier Modeling for Cross Bandwidth Testing	Analog Devices India Pvt. Ltd. (ADI), Bangalore	Prof. Rahul Bhattacharya	Electronics Engineering
154	Interface of Science, Society and Politics in the waste management of Darjeeling Himalayas	Jaya Prakash Narayan National Centre of Excellence in the Humanities, IIT Indore	Prof. Sanjay Tamang	Humanities and Social Sciences
155	From Uncertainty to Action: Recalibrating Digital Humanities Methods and Tools for Non-standard British Colonial South India	Jaya Prakash Narayan National Centre of Excellence in the Humanities, IIT Indore	Prof. Shanmugapriya T	Humanities and Social Sciences
156	Investigation on The Application of Abrasive Water Jet Machining for Milling Operations Like Pocketing and Slotting on Advanced	DRDO (DRDL), Hyderabad	Prof. Amit Rai Dixit	Mechanical Engineering
157	Austenite stabilization in Mn-Si-Al based Q&P steels through chemistry and partitioning schedule Optimization	Tata Steel Limited, Jamshedpur	Prof. Madhumanti Bhattacharyya	Fuel, Minerals and Metallurgical Engineering
158	Precision Electrochemical Polishing (EP) of Additively Manufactured Components using Flow-Through Carbon Fiber	DST, New Delhi	Dr. Abhijeet Sethi	Mechanical Engineering
159	Development of single-phase BCC refractory high entropy alloys for high temperature applications using machine learning (ML)	DRDO (AR&DB), New Delhi	Prof. Rahul M R	Fuel, Minerals and Metallurgical Engineering
160	INAE-SERB, DST Abdul Kalam Technology Innovation National Fellowship	INAE (The Indian National Academy of Engineering) and SERB (Science and	Prof. Sukumar Mishra	Electrical Engineering
161	FIST Mathematical Sciences - Projet	DST, New Delhi	Prof. Subhashis Chatterjee	Mathematics and Computing
162	Design and Development of Abrasion Resistant Alloys for Sustainable Mining Operations	Ministry of Mines, New Delhi	Prof. Avanish Kumar	Fuel, Minerals and Metallurgical Engineering
163	Constrains of inhomogeneity and anisotropy on strength mobilization in thermo-mechanical evolution of shear zone: an	Anusandhan National Research Foundation, New Delhi	Prof. Rajendra Kumar Dubey	Applied Geology
164	Hot Nanofluid Injection for Enhanced Oil Recovery: Design and Mechanism Development	Hindustan Oil Exploration Company Limited, Chennai	Prof. Ajay Mandal	Petroleum Engineering
165	Developing a Framework for Fintech and Financial Inclusion: A Way towards Viksit Bharat and Women Inclusivity	ICSSR, New Delhi	Prof. Preeti Roy	Management Studies & Industrial Engineering
166	Developing portable potentiometric biosensors for in-situ detection of trace metal pollutants (Cd,Pb,Hg and Cu)	Department of Biotechnology	Prof. Vipin Kumar	Environmental Science & Engineering
167	Intergenerational Mobility: Role of Bid-Rent Curves, Informal Spaces, and Informal Jobs	ICSSR, New Delhi	Prof. Diti Goswami	Management Studies & Industrial Engineering
168	Implementing PM Surya Ghar: Muft Bijli Yojna in Tribal Area of Jharkhand- Investigating the Drivers and Barriers of Solar	ICSSR, New Delhi	Prof. Mohd. Irfan	Management Studies & Industrial Engineering
169	Cost-effective Safety Solution for Low-rise Masonry Dwellings Subjected to Rock Fall Impact Induced by Landslides: Laboratory	National Mission on Himalayan Studies (NMHS), Almora, Uttarakhand	Prof. Sanket Nayak	Civil Engineering
170	Future-Ready Hospitals: Strategic Adoption of Industry 4.0 Technologies in Eastern and North-Eastern India	ICSSR, New Delhi	Prof. Esha Saha	Management Studies & Industrial Engineering

171	Investigation into the dynamics of the adsorption systems based on waste source-derived indigenously developed adsorbents for	Anusandhan National Research Foundation, New Delhi	Prof. Satyabrata Sahoo	Mechanical Engineering
172	Component Level and System-Level Vulnerability Assessment of Various Bridges under Diverse Loading Conditions	Sparsh Engineering Company Private Limited, Ranchi, Jharkhand	Prof. Piyali Sengupta	Civil Engineering
173	Analogous Studies and Geo-Physical Modeling of Moon/Mars	Indian Space Research Organisation (ISRO), Bengaluru	Prof. Saurabh Datta Gupta	Applied Geophysics
174	Precise Trajectory Propagation and Events Prediction for Highly Eccentric Orbits	Indian Space Research Organisation (ISRO), Bengaluru	Prof. Badam Singh Kushvah	Mathematics and Computing
175	To develop LLM based Expert AI agent for Mission Operation Management	Indian Space Research Organisation (ISRO), Bengaluru	Prof. Saurabh Srivastava	Computer Science and Engineering
176	Future of Geothermal in India	Project InnerSpace, Inc., Boston, Massachusetts, United States	Prof. Raj Kiran	Petroleum Engineering
177	Development of Green and Sustainable Process for Hydrogen-Rich Syngas Production from Biomass via Gasification	Hindustan Petroleum Corporation Limited, Green R&D Centre, Bangalore	Prof. Ejaz Ahmad	NVCHCCUST
178	Impact of climate change on vulnerable aquifer systems in and around industrial and mining areas of Damodar River Basin	Department of Water Resources, River Development and Ganga Rejuvenation,	Prof. Anshumali	Environmental Science & Engineering
179	Sustainable Learning Environments Design of an Off-Grid Distributed Energy System Integrating an Intelligent Water	DST, New Delhi	Prof. Sukanta Halder	Electrical Engineering
180	Development and Standardization of Biochar and By-products for Application in the Indian Iron & Steel Industry	Sentra.World Technologies Private Limited, Bangalore	Prof. Shalini Gautam	Fuel, Minerals and Metallurgical Engineering
181	Potential use of Generative AI for Power Quality Management	Capgemini Technology Services India Limited, Bangalore	Prof. Shikha Singh	Management Studies & Industrial Engineering
182	Understanding the Drivers and Barriers of Adopting Solar Pumps under PM KUSUM Yojana among Marginalized and Tribal	ICSSR, New Delhi	Prof. Krishnendu Shaw	Management Studies & Industrial Engineering
183	Large Language Model for Legal Assistance	IIT Mandi and HCI Foundation,, Mandi	Prof. Siddhartha Agarwal	Mining Engineering
184	Development of Low-Cost Artificial Intelligent System for Prediction of Bone Mineral Density (BMD) From Plain	Indian Council of Medical Research, New Delhi	Prof. Arup Kumar Pal	Computer Science and Engineering
185	Synthesis of gas atomized high mn-high cr steel powder for cold spraycladding application in reclamation of slurry handling	CSIR, New Delhi	Prof. Madhumanti Bhattacharyya	Fuel, Minerals and Metallurgical Engineering
186	NeTS Small NSF-DST Modernizing Underground Mining Operations with Millimeter-Wave Imaging and Networking	DST-NSF, United States	Prof. Dheeraj Kumar	Mining Engineering
187	Designing and delivering Capacity Building Programme for High Quality Millet Cultivation to empower Tribal Women	Coal India Limited, Kolkata	Prof. Niladri Das	Management Studies & Industrial Engineering
188	Development of the performance parameters for commercial Potentizer in Homeopathy	Bureau of Indian Standards, New Delhi	Prof. Subrara Kumar Ghosh	Mechanical Engineering
189	Bioscopy - Towards modern transdisciplinary education and research in microscopy" under Indo-Norwegian Cooperation	University Grants Commission, New Delhi	Prof. Biswajit Chowdhury	Chemistry and Chemical Biology
190	Design of Mechanical Metasurfaces for Wave Isolation Applications by Developing a Large Deformation Peridynamics	DRDO (AR&DB), New Delhi	Prof. Pranesh Roy	Civil Engineering

191	Development of lab-scale quantum fiber network, and design of plug-and-play photonic integrated modules for its transmitter &	Department of Telecommunication (DoT), Ministry of Communication, New	Prof. Mrinal Sen	Electronics Engineering
192	Development of Quantum Algorithms for Next Generation Wireless Communication Systems	Department of Telecommunication (DoT), Ministry of Communication, New	Prof. Samrat Mukhopadhyay	Electronics Engineering
193	Mapping Value/Chain and Identification of Bottlenecks for Handicrafts Products of Jharkhand	Ministry of Textiles, New Delhi	Prof. Mrinalini Pandey	Management Studies & Industrial Engineering
194	Microwave integration in urban mining processes for sustainable recovery of critical elements	Ministry of Mines, New Delhi	Prof. Aarti Kumari	Fuel, Minerals and Metallurgical Engineering
195	Development of low cost hydrometallurgical process for beneficiation and extraction of Indium values from Sphalerite ores	Ministry of Mines, New Delhi	Prof. Gaurav Jha	Fuel, Minerals and Metallurgical Engineering
196	Silicon Photonic Chip based N x N Photonic Switches for 6G and Beyond	Department of Telecommunication (DoT), Ministry of Communication, New	Prof. Devendra Chack	Electronics Engineering
197	Advanced AI-Driven Cyber-Physical Systems (CPS) for Sustainable Water Management and Treatment in Coalbed	TEXMiN (Technology Innovation in Exploration & Mining Foundation),	Project Leader: Prof. Rajeev Upadhyay, PE	Petroleum Engineering, Mining Engineering
198	Advanced Carbon Materials from Forest Biomass Waste: A Circular Approach to Renewable Energy Storage and Fire	Office of the Conservator of Forests and State Silviculturist, Bhubaneswar, Govt.	Prof. Ganesh Cahndra Nayak	Chemistry and Chemical Biology
199	TeraHertz Communication: Prototype Development and Algorithm Design	Department of Telecommunication (DoT), Ministry of Communication, New	Prof. Himanshu Bhusan Mishra	Electronics Engineering
200	Integration of Multilevel Multiphase Motor for Electric Vehicles: Design, Development, Real-time Fault Diagnosis, and Fault-	Anusandhan National Research Foundation (ANRF) New Delhi	Prof. Kartick Chandra Jana	Electrical Engineering
201	AI-Powered Vision Systems for Low-light and Low-visibility Underground Mining Environments	TEXMiN (Technology Innovation in Exploration & Mining Foundation),	Prof. Sudhakar Kumawat	Mathematics and Computing
202	Development of an Advanced Twin Roll Casting (TRC) System for Minimizing Segregation in Aluminum & Magnesium Alloys:	TEXMiN (Technology Innovation in Exploration & Mining Foundation),	Prof. Saurabh Srivastava	Computer Science and Engineering
203	Development of an Advanced Twin Roll Casting (TRC) System for Minimizing Segregation in Aluminum & Magnesium Alloys:	TEXMiN (Technology Innovation in Exploration & Mining Foundation),	Prof. Kasturi Sala	Fuel, Minerals and Metallurgical Engineering
204	Investigation into the planning and design aspects governing the selective coal cutting technology using surface minor for various	DST, New Delhi	Prof. L.A. Kumaraswamidhas,	Mechanical Engineering
205	CharacterizationofGroundwaterinseismicallyactiveregionsof Uttarakhand,India:Implicationsforearthquakeinducedvariations	Ministry of Earth Sciences, New Delhi	Prof. Tajdarul Hassan Syed	Applied Geology
206	Paired Early Career Fellowship in Applied Research (PECFAR) Award	Indo-German Science & Technology Centre (DST)	Prof. Ritwik Mondal	Physics
207	Light-Triggered 2D Materials Integrated Metal Oxides-based Memristive Crossbar Array for Bionic Visual Application	DST, New Delhi	Dr. Sanjay Kumar	Electronics Engineering
208	Fellowship / Salary of 20 nos. of TEXMiN Post-Doctoral Fellowship (TEXMiN PDFs)	TEXMiN Foundation of IIT(ISM) Dhanbad	NA	
209	CIL Innovation and Incubation Centre	Coal India Limited	Prof. Rabindra Kumar Sinha	Mining Engineering
210	Tata Steel Innovation Centre on Mining and Mineral Research, (Tata Steel - ICMMR)	Tata Steel Ltd.	Prof. Sagar Pal	Chemistry and Chemical Biology

211	Naresh Vashisht Centre for Hydrogen and Carbon Capture, Utilization and Storage Technologies	Shri Naresh Vashissht Foundation	Prof. Ejaz Ahmad	Chemical Engineering
212	Capacity Building Training Programmes on Basic Level and Advanced Level Information Technology and Computer Training	Ministry of Tribal Affairs, New Delhi	Prof. Rashmi Singh	Management Studies & Industrial Engineering
213	Setting up Mining, Employability and Livelihoods (MEL) Centre of Excellence	The American India Foundation Trust, New Delhi	Prof. Anshumali	Environmental Science & Engineering
214	IMiN - Centre of Excellence for Mining 4.0 at TEXMiN at IIT(ISM) Dhanbad campu	Coal India Limited	Prof. Dheeraj Kumar	Mining Engineering
215	Centre of Excellence	ReNew Foundation, New Delhi	Coordinator and Head : Prof. V.L. Srinivas	Electrical Engineering
216	Centre of Excellence (WIN-CoE)	Wadhwani Charitable Foundation, a California non-profit public benefit	Coordinator & Head of the CoE : Prof. Sagar Pal, CCB	Chemistry and Chemical Biology
217	Centre of Excellence (CoE) "**Coal to Acetylene and Fine Chemicals"**	Department of Chemicals and Petrochemicals, Ministry of Chemicals	Prof. Parthasarathi Das	Chemistry and Chemical Biology
218	Visvesvaraya PhD Scheme for Electronics and IT: Phase II at Indian Institute of Technology-ISM, Dhanbad	Ministry of Electronics and Information Technology, New Delhi	Prof. Ravi Kumar Gangwar	Electronics Engineering
219	Visvesvaraya PhD Scheme for Electronics and IT: Phase II at Indian Institute of Technology-ISM, Dhanbad	Ministry of Electronics and Information Technology, New Delhi	Prof. Ravi Kumar Gangwar	Electronics Engineering
220	Visvesvaraya PhD Scheme for Electronics and IT: Phase II at Indian Institute of Technology-ISM, Dhanbad	Ministry of Electronics and Information Technology, New Delhi	Prof. Ravi Kumar Gangwar	Electronics Engineering