

Ongoing R&D Projects (upto March, 2023)

S. No.	Project Name	Funding Agency	Name of PI	Department of PI
1	Investigating the impact of pore geometry on the non-linear filtration characteristics in porous media	DST, New Delhi	Prof. M. K. Singh	Mathematics and Computing
2	Regular Subsidence Monitoring Survey of Surda Mining Lease, Kendadih Mining Lease and Rakha Mining Lease for three (03) years	HCL	Prof. Mohammad Soyeb Alam	Mining Engineering
3	Crustal Structure and Electrical LAB Beneath Rajmahal Trap and Dalma Volcanics from Magnetotelluric Investigations	MoES, New Delhi	Prof Arun Singh	Applied Geophysics
4	To strengthen the research facilities in the Department of Computer Science and Engineering	DST, New Delhi	Prof. Prasanta K. Jana	Computer Science and Engineering
5	Scientific Study on Impact of Ironore Mining in Hydrological Behavior of Aquifers in Nadidih Iron & Mn. Mines in Tehsil Koira, Dist.: Sundargarh, Odisha of M/s Feegrade & Co. (P) Ltd. and M/s Bonai Industrial Co. Ltd.	Rungta Sons Private Limited	Prof. Biswajit Paul	Environmental Science & Engineering
6	Upgradation of Power Hydraulics Lab	DST, New Delhi	Prof. Kabir Dasgupta	Mechanical Engineering
7	AUGMENTATION OF RESEARCH FACILITY IN THE DEPARTMENT OF MECHANICAL ENGINEERING	DST, New Delhi	Prof. Shailendra Narayan Singh	Mechanical Engineering
8	Thermochemical convection in the Earth's core with thermal core-mantle interaction.	DST, New Delhi	Prof. Swarandeeep Sahoo	Applied Geophysics
9	CO2 and biomass as feedstock for the production of fuels and chemical intermediates (CO2BioFeed)	IGSTC, New Delhi	Prof. Biswajit Chowdhury	Chemistry
10	FIST-2019 Project of Department of Electronics Engineering	DST, New Delhi	Prof. Sushrut Das	Electronics Engineering
11	Characterization of Groundwater in seismically active regions of Uttarakhand, India: Implications for earthquake induced variations	MoES, New Delhi	Prof. Tajdarul Hassan Syed	Applied Geology
12	Design and Development of broadband circularly polarized conformal antenna array for Airborne application	DRDO	Prof. Ravi Kumar Gangwar	Electronics Engineering
13	To strengthen the research facilities in the Department of Chemical Engineering	DST, New Delhi	Prof. Rajiv Shekhar	Fuel, Minerals and Metallurgical Engineering
14	Quality Assessment of Coal for BCCL, Dhanbad	BCCL	Prof. Anand Anupam	Fuel, Minerals and Metallurgical Engineering
15	Study of Dust Suppression Chemical	Tata Steel Limited, Jamshedpur	Prof. Alok Sinha	Environmental Science & Engineering
16	Foam Assisted Oil-Water Nanoemulsion for Enhanced Oil Recovery: Experimental and Molecular Dynamic Simulation Studies	Oil Industry Development Board	Prof. Ajay Mandal	Petroleum Engineering
17	To strengthen the research facilities in the Department of Civil Engineering	DST, New Delhi	Prof. Sarat Kumar Das	Civil Engineering
18	Linear Spatio-Temporal Receptivity Analysis of Compressible And Mixed Convection Boundary Layer Using Bromwich Contour Integral Method	DST, New Delhi	Prof. Swagata Bhaumik	Mechanical Engineering
19	Laser Biospeckle techniques for optimum utilization of irrigation water by monitoring in-situ plant water stress	DST, New Delhi	Prof. Anil Kumar Nirala	Physics
20	Prediction of MexB efflux inhibitors: A combined Molecular Dynamics Simulations and Machine Learning Approach	DST, New Delhi	Prof. Niladri Patra	Chemistry and Chemical Biology
21	Use of Natural Extracts as Pour Point Depressants for Flow Assurance of Waxy Crude	Oil Industry Development Board	Prof. Tarun Kumar Naiya	Petroleum Engineering
22	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
23	DEVELOPMENT OF CONTENT-BASED IMAGE FILTERING APPROACH TO PREVENT OBJECTIONABLE IMAGE RETRIEVAL FROM THE INTERNET	CSIR, New Delhi	Prof. Arup Kumar Pal	Computer Science and Engineering

24	Improving the quality and yield of salt produced by the marginal agarias of Kutch, Gujarat (Halwad Region) through scientific intervention and improving their income through value addition of bitterns, halophyte plantation and potable water recovery & Arid Region Reclamation Technology with respect to Lignite Mining Areas in Kutch, Gujarat	DST, New Delhi	Prof. Biswajit Paul	Environmental Science & Engineering
25	"Micro Scale investigation of miscibility behaviour of CO ₂ with crude oil for enhanced oil recovery and its geological sequestration potential in the oil field of Cambay Basin"	DST, New Delhi	Prof. Ajay Mandal	Petroleum Engineering
26	Joint Inversion of Gravity and Magnetotelluric Data with variable Density and Conductivity for Enhancement of Subsurface Imaging of the Sedimentary Environments Using Global Optimization Technique	DST, New Delhi	Prof. Upendra K. Singh	Applied Geophysics
27	Joint Inversion of Shear Coupled-PL Waveforms, Receiver Functions and Dispersion Curves	DST, New Delhi	Prof. Mohit Agrawal	Applied Geophysics
28	Mine Slope Management and Monitoring System	DST, New Delhi	Prof. Radhakanta Koner	Mining Engineering
29	Development of a low cost technology based on biochar supported green zerovalent iron for arsenic and fluoride removal from water	DST, New Delhi	Prof. Sheeja Jagadevan	Environmental Science & Engineering
30	JOINT MODELLING OF LONGITUDINAL AND TIME-TO-EVENT DATA WITH MULTIPLE IMPUTATION	CSIR, New Delhi	Prof. Gajendra Kumar Vishwakarma	Mathematics and Computing
31	Design and Fabrication of Light-weight Flexible Polarization Independent Broadband RF and Microwave Absorber Based on Active/Passive Anisotropic Metamaterial	CSIR, New Delhi	Prof. Raghendra Kumar Chaudhary	Electronics Engineering
32	Crustal and lithospheric architecture beneath Dalma Volcanics and Rajmahal Trap, Eastern India	DST, New Delhi	Prof. Shalivahan	Applied Geophysics
33	The μ th order mehler-fock transform and some allied operators on function spaces	NBHM	Prof. Akhilesh Prasad	Mathematics and Computing
34	Earthquake Early Warning detection and classification based on TEC value using Artificial Intelligence	DST, New Delhi	Prof. Sanjeev Anand Sahu	Mathematics and Computing
35	Effect of Blasting on Opencast Mine Dump and Development of Relationship between Blast induced Vibration and Dump Design	CIL	Prof. Rajib Sarkar	Civil Engineering
36	Design and deployment of Ventilation Fan Wind Power Recovery System as an alternate source of Electrical Energy in Underground Coal Mines	CIL	Prof. Tanmoy Maity	Mining Machinery Engineering
37	Continuous monitoring in the change of ecology of Ananta OCP, MCL	CIL	Prof. Subodh Kumar Maiti	Environmental Science & Engineering
38	Development of Classification, Identification and Feature Extraction Algorithms using Machine Learning and Artificial Intelligence techniques for Genome Classification, Protein Classification and Medical Image Analysis	DST, New Delhi	Prof. Subhashis Chatterjee	Mathematics and Computing
39	To develop an Artificial Intelligence (AI) based machine learning solutions to enable prediction of occurrence of fire in Open cast mines extracting locked coal pillars with safety	CIL	Prof. Haider Banka	Computer Science and Engineering
40	Delhi Cluster - Delhi Research Implementation and Innovation (DRIIV) Theme: Solid Waste Management	Office of the Principal Scientific Adviser, GoI	Prof. Ejaz Ahmad	Chemical Engineering
41	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
42	Investigating Uncharted 2D Catalytic Materials for Lignocellulosic Biomass Transformation into High-Value Platform Chemicals and Fuel	DST, New Delhi	Prof. Ejaz Ahmad	Chemical Engineering
43	Accurate Correlation of Dot Size Distribution with the Spectral Response of AS-grown and Interdiffused Stacked Quantum Dots embedded in p-i-n Solar Cells	DST, New Delhi	Prof. Subindu Kumar	Electronics Engineering
44	CORROSION POTENTIAL OF INDUSTRIAL WASTE AS A GEOMATERIAL USING INVERSE DIELECTRIC SPECTROSCOPY	DST, New Delhi	Prof. Sarat Kumar Das	Civil Engineering

45	Assessment of the change detection due to mining activities of SAIL-RMD mines through preparation of High Resolution Satellite map obtained from fusion of CARTOSAT-2 and LISS-IV datasets at a scale of cadastral map and preparation of LULC maps of high-resolution satellite image	SAIL, Bokaro	Prof. Vasanta Govind Kumar Villuri	Mining Engineering
46	Optimization of Distribution Network of Crystal Ceramic Industries Private Limited	Crystal Ceramic Industries Private Limited	Prof. Krishnendu Shaw	Management Studies
47	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
48	Low cost treatment method for fluoride and Arsenic contaminated ground water	Ministry of Drinking Water and Sanitation	Prof. Brijesh Kumar Mishra	Environmental Science & Engineering
49	Structural and machinery failure analyses through Vibration and Acoustic techniques	Advanced Engineering Diagnostics Solutions	Prof. Madan Lal Chandravanshi	Mechanical Engineering
50	DEVELOPMENT OF MOLECULAR CATALYSTS FOR CO2 REDUCTION, WATER OXIDATION AND REDUCTION	CSIR, New Delhi	Prof. Sumanta Kumar Padhi	Chemistry and Chemical Biology
51	Cloud based Smart Video Surveillance System with Application Layer Cyber Physical Systems Security	IIT, Kanpur	Prof. Arup Kumar Pal	Computer Science and Engineering
52	Sampling and quality assessment of 1.70 Lakh Tons of Rejects of lying between gate of 5.0 MTPA Patherdih NLW Washery and to south side of Kaccha road to Siding at 5.0 MTPA Patherdih NLW Washery	BCCL	Prof. Shalini Gautam	Fuel, Minerals and Metallurgical Engineering
53	Sampling, analysis and grading of 106805.21 MT in H-14 & 169911.38 MT in H-15 heap of Reject at Patherdih Coal Washery	BCCL	Prof. Shraavan Kumar	Fuel, Minerals and Metallurgical Engineering
54	Multiscale simulation of weld solidification cracking in Ni-based superalloys used in aerospace applications	ISRO	Prof. Rahul M R	Fuel, Minerals and Metallurgical Engineering
55	Application of Two-Chamber Reactors for Safe Carbonylation Reactions: Affordable Synthesis of Stable Isotope Labelled Drug Standards	Department of Atomic Energy	Prof. Parthasarathi Das	Chemistry and Chemical Biology
56	Tunneling or Propping? Shareholders Decision on Related Party Transaction: Evidence from a Quasi Natural Experiment	SEBI	Prof. Shashank Bansal	Management Studies
57	Design and development of knee and spinal smart protective devices for improving the health and safety of	CIL	Prof. Kalyan Kumar Singh	Mechanical Engineering
58	SCIENTIFIC STUDY REGARDING CONTROLLED BLAST DESIGN, GROUND VIBRATION MONITORING, AND FRAGMENTATION ASSESSMENT DURING BLASTING AT NAVI MUMBAI INTERNATIONAL AIRPORT	Smartchem Technologies Limited	Prof. Arvind Kumar Mishra	Mining Engineering
59	Alkylthiocyanates as New Bifunctional Reagents in Photo-Redox Reactions: Ambident Reactivity Enabling Photo-Cascade Synthesis of Diverse S- and N-Heterocycles from Olefins	DST, New Delhi	Prof. Soumitra Maity	Chemistry and Chemical Biology
60	Investigation of single-particle structures in pygmy resonances in nuclei and development of a gamma-neutron detector for its study	DST, New Delhi	Prof. Soumya Bagchi	Physics
61	Assessing tsunami vulnerability of low-rise structures by SPH modelling"	DST, New Delhi	Prof. Sukanta Chakraborty	Civil Engineering
62	Development Of Highly Accurate Immersed Interface Method For Direct Numerical Simulation Of Fluid-Structure Interaction Problems Under Compressible Flow Regime	DST, New Delhi	Prof. Swagata Bhaumik	Mechanical Engg.
63	Investigation of the human retinal vasculature for early prognosis of microaneurysm regions	DST, New Delhi	Prof. Ajay Bhandari	Mechanical Engineering
64	Evaluation of an evaporating nanofluid meniscus for improved performance of Heat Pipes	DST, New Delhi	Prof. Pawan Kumar Singh	Mechanical Engineering
65	To strengthen the research facilities in the Department of Mining Engineering	DST, New Delhi	Prof. RabinProf.a Kumar Sinha	Mining Engineering
66	ON THE REDUCTIONS OF AEROFOIL-TURBULENCE NOISE THROUGH WAVY LEADING AND TRAILING EDGE SERRATIONS	DST, New Delhi	Prof. Subramanian Narayan	Mechanical Engineering

67	Separation and recovery of fine particles from coal washery effluents using bio-coagulant	CIL	Prof. Sukha Ranjan Samadder	Environmental Science & Engineering
68	Development of guidelines for delineation of water stressed area and designing of environmental friendly water storage structure for meeting the water needs in mining areas	CIL	Prof. Prasoon Kumar Singh	Environmental Science & Engineering
69	Investigation of the spall behavior of glass-filled epoxy composites using laser spallation technique	DST, New Delhi	Prof. Sarthak Sambit Singh	Mechanical Engineering
70	Analysis of CO, CO ₂ , CH ₄ and its homologues; measurement for the presence of above gases and their potential danger/harmful effects on human; Random analysis of ambient air quality and analysis of water quality for the mine discharge water in Sijua Area of BCCL	BCCL	Prof. Manish Kumar Jain	Environmental Science & Engineering
71	Linear Canonical Transform and associated Wavelets and Wavelet Transform	DST, New Delhi	Prof. Akhilesh Prasad	Mathematics and Computing
72	Numerical study of unsteady entropy generation and MHD combined convection in lid-driven porous enclosure	DST, New Delhi	Prof. Pentyala Srinivasa Rao	Mathematics and Computing
73	Study of Multi-time Control Problem Governed by Curvilinear Integral Cost Functional with Applications	DST, New Delhi	Prof. Anurag Jayswal	Mathematics and Computing
74	Investigating the optimal electricity generation mix for India using a fuzzy portfolio optimization approach	DST, New Delhi	Prof. Mohd. Irfan	Management Studies
75	To strengthen the research facilities in the Department of Applied Geology	DST, New Delhi	Prof. Shushanta Sarangi	Applied Geology
76	Real-time energy efficient cyber-physical intelligent system for mine slope health monitoring	CIL	Prof. Radhakanta Koner	Mining Engineering
77	CRITICAL INVESTIGATION ON ALLOY STAINLESS STEEL BI METALLIC JOINING USING FRICTION STIR WELDING FOR AEROSPACE APPLICATION	DRDO	Prof. Somnath Chattopadhyaya	Mechanical Engineering
78	Bulk production of Supramolecular Gelator for Demulsification of CRM Scum	Tata Steel Limited, Jamshedpur	Prof. Swapan Dey	Chemistry and Chemical Biology
79	ENHANCING THE OPERATIONAL EFFICIENCY OF A HYDRAULIC EXCAVATOR MACHINE BY INTRODUCING A NOVEL ENERGY RECUPERATIVE MECHANISM	DST, New Delhi	Prof. Niranjana Kumar	Mining Machinery Engineering
80	Impact of pesticide drops on a leaf: Minimizing of the use of pesticides from the study of the spread	DST, New Delhi	Prof. Deepak Kumar Mandal	Mechanical Engineering
81	Design and Development of Hardware for Controls using Ball Screw/Belt Type Linear Actuators	Janatics India Private Limited	Prof. Arun Dayal Udai	Mechanical Engineering
82	A study on the formation and tectono-metamorphic evolution of Neoproterozoic granites and alkaline igneous complexes in the Salem block, southern India: Implications for lower crustal processes and the geodynamics of the Southern Granulite Terrane'	DST, New Delhi	Prof. Joseph Rohan D'souza	Applied Geology
83	Fluid-structure interactions in a power-law fluid	DST, New Delhi	Prof. Subhankar Sen	Mechanical Engineering
84	Novel formulations and green additives as a replacement for carcinogenic Methyl tertiary-butyl ether(MTBE) and aromatics in gasoline	DST, New Delhi	Prof. Ejaz Ahmad	Chemical Engineering
85	Design and Development of Artificial Intelligence Based Fiber optic Respiration Rate Measurement System for Psychophysiological Health Monitoring"	DST, New Delhi	Prof. Amitesh Kumar	Electronics Engineering
86	Analysis of Operator's field of view of Normet Equipment: Visibility from cabin as per IS/ISO 5006:2017	Normet India Private Limited	Prof. L A Kumaraswamidhas	Mining Machinery Engineering
87	STUTI IIT(ISM) Dhanbad - 2021	DST, New Delhi	Prof. Sagar Pal	Chemistry and Chemical Biology
88	EFFECT OF COAL QUALITY ON THE PERFORMANCE OF JSL THERMAL POWER PLANT	Jindal Stainless Limited	Prof. Barun Kumar Nandi	Fuel, Minerals and Metallurgical Engineering
89	ASSESSMENT OF LOSSES AND IMPROVEMENT OF EFFICIENCY OF JAJPUR THERMAL POWER PLANT, JSL	Jindal Stainless Limited	Prof. Anand Anupam	Fuel, Minerals and Metallurgical Engineering

90	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
91	Design and Development of Compact and Low-profile Multiband Conformal Antenna System for In-vehicle Telecommunications Equipments Supporting Cellular/Communication Bands	DST, New Delhi	Prof. Ravi Kumar Gangwar	Electronics Engineering
92	Quantum Error Correcting Codes (CSS Construction) with symbol pair metric over Finite Fields	DST, New Delhi	Prof. Abhay Kumar Singh	Mathematics and Computing
93	Analytical Modelling of Multi-layered 2-D Transition metal dichalcogenide FET based Biosensor using Green's function approach	DST, New Delhi	Prof. Manodipan Sahoo	Electronics Engineering
94	Mathematical study on the analysis of thermoelastic damping and frequency shift in thermoelastic micro/nano-scale beams with complexities	DST, New Delhi	Prof. Abhishek Kumar Singh	Mathematics and Computing
95	Study on leaching effect of ash dyke and ash disposal areas at Jindal Power Limited, Tamnar, Raigarh, Chattisgarh	Jindal Power Limited	Prof. Gurdeep Singh	Environmental Science & Engineering
96	Fabrication of different grades of tool steel by twin wire arc additive manufacturing combined with in-situ alloying	DST, New Delhi	Prof. Amitava Mandal	Mechanical Engineering
97	Motivate School Students and Teachers Concerning the Relevance of Science and Technology through Innovative Communication Techniques	DST, New Delhi	Prof. Rashmi Singh	Management Studies
98	Development of Millimeter-Wave MIMO Cognitive Radio Systems using Metasurface and Substrate Integrated Waveguide for Future Wireless Communication	DST, New Delhi	Prof. Raghendra Kumar Chaudhary	Electronics Engineering
99	Assessment of Properties of Coal Imported by Damodar Valley Corporation	DVC, Maithon	Prof. Barun Kumar Nandi	Fuel, Minerals and Metallurgical Engineering
100	Trace element systematics and sulfur isotope signature of auriferous sulfides within the Vempalle dolostone: Implications for refractory gold mineralization in and around Tummalapalle area of South-western Cuddapah basin, Andhra Pradesh	DST, New Delhi	Prof. Sahendra Singh	Applied Geology
101	Chemical depolymerization of polyethylene terephthalate (PET) by graphene oxide (GO) supported transition metal complexes	DST, New Delhi	Prof. Chanchal Halder	Chemistry and Chemical Biology
102	Assessing the Techno-commercial Status of TRL 6 and above Technologies in the Field of Healthcare and Agriculture	DSIR, New Delhi	Prof. Shashank Bansal	Management Studies
103	Design and Development of Non-Invasive Optical Respiration Rate Measurement System for Psychophysiological Health Monitoring in MRI Environment	DBT, New Delhi	Prof. Amitesh Kumar	Electronics Engineering
104	Integrated non-invasive geophysical, archeological and biogeochemical characterization of Ithkhouri heritage sites in the Mohane River Valley	DST, New Delhi	Prof. Sanjit Kr. Pal	Applied Geophysics
105	Conservation of the metallic cultural heritage assets by waterborne superhydrophobic and anti-dust coatings	DST, New Delhi	Prof. Aditya Kumar	Chemical Engineering
106	Development of Microstructure-Property-Processing Correlations for nickel based superalloys	ISRO	Prof. Rahul M R (Co-PI)	Fuel, Minerals and Metallurgical Engineering
107	Design and analysis of code based public-key cryptosystem	DRDO	Prof. Abhay Kumar Singh	Mathematics and Computing
108	Development of Machine Learning and Blockchain-Based methods for Business Enhancement	Aeroqube Technologies Pvt. Ltd	Prof. Rajendra Pamula	Computer Science and Engineering
109	Studies in Nonlinear Dynamics of Mechanical Systems	Advanced Engineering Diagnostics Solutions	Prof. Aman Kumar	Mechanical Engineering
110	Joint geopotential field modelling for finding the missing link between the Chotanagpur Granite Gneiss Complex (CGGC) and Shillong-Meghalaya Plateau	DST, New Delhi	Prof. Gangumalla Srinivasa Rao	Applied Geophysics
111	Auto-Evaluation of Tenders Using Artificial Intelligence / Machine Learning at Mahanadi Coalfields Limited	MCL	Prof. Siddhartha Agarwal	Mining Engineering
112	Performance Assessment of Skew and Curved Railway Bridges of Diverse Structural Configurations	S.R. Chaudhuri Consultancy Services Pvt. Ltd.	Prof. Piyali Sengupta	Civil

113	A Study on consumers' attitude and future prospects towards buying green clothing in India	Aarnav Fashions Limited	Prof. Krishnendu Shaw	Management Studies
114	Design and Investigation of High-Performance In0.52Al0.48As/In0.53Ga0.47As MOSFET with optimized switching efficiency	DST, New Delhi	Prof. Kaushik Mazumdar	Electronics Engineering
115	Development of a Low-Cost Digital Instrumentation System for Angular Position Measurement of a Rotating Shaft using Tunneling Magneto-Resistance Angle Sensor	IITI DRISHTI CPS	Prof. Kishor Bhaskarrao Nandapurkar	Electrical Engineering
116	CONTRACT FOR INTELLECTUAL SERVICES RELATIVE TO SUPPORT THE ITF WORK IN INDIA IN THE FRAMEWORK OF THE DECARBONISING TRANSPORT IN EMERGING ECONOMIES (DTEE) AND THE NDC TRANSPORT INITIATIVE FOR ASIA (NCD-TIA	Organisation for Economic Co-operation and Development, Paris France	Prof. Leeza Malik	Civil
117	Deconstruction of lignocellulosic biomass for bioenergy	DST, New Delhi	Prof. Madhulika Gupta	Chemistry and Chemical Biology
118	Design and development of frequency stable and high Q-factor optoelectronic oscillator assisted by microwave photonic techniques	DRDO	Prof. Sanjeev Kr. Raghuvanshi	Electronics Engineering
119	Performance Evaluation of Box & Box Girder-type Railway Bridges under Sustained and Dynamic Loading	Pioneer Surveyors, Kolkata	Prof. Piyali Sengupta	Civil
120	Feasibility study of existing pipelines for hydrogen storage and transportation	BinSys Technologies Private Limited, New Delhi	Prof. Vinay Kumar Rajak	Petroleum Engineering
121	Development of Numerical algorithm and CDM Model for Fatigue life estimation of Hydraulic cylinder under various loading conditions	ETPL (EKIN Techprudent Pvt. Ltd.)	Prof. K.P. Ajit	Mechanical Engineering
122	Testing and analysis of coal sample for OTPS, Obra	Obra Thermal Power Project	Prof. Shalini Gautam	Fuel, Minerals and Metallurgical Engineering
123	Collaborative Work for Laboratory Study on Nano-Lubrication in Hot Rolling	RDCIS, SAIL	Prof.Subrata Kumar Ghosh	Mechanical Engineering
124	Bricks with grooves and projections in the masonry wall without using mortar	NECL	Prof. S. C. Dutta	Civil Engineering
125	The Study of Evidence of Deep Ecology in the Early Buddhist Text	ICHR	Prof. Gyan Prakash	Humanities and Social Sciences
126	<i>CBM resource estimation and feasibility study of field development using fully-integrated Geocellular model approach coupled with AI/ML algorithms in the Damodar River Valley, Godavari, Mahanadi, Satpura and Rajmahal Basin, India</i>	DGH (Directorate General of Hydrocarbons)	Prof Rajeev Upadhyay	Petroleum Engg
127	Development of Integrated Geocellular model for CBM resource estimation with the support of Machine Learning based sub-surface image resolution enhancement and implementation of Joint-Inversion algorithm from newly acquired geoscientific data in the South Rewa Basin, Wardha valley (Wardha-Godavari basin), Kamptee sub-basin, Cambay-Kutch- Saurashtra basin and Rajasthan basin India	DGH (Directorate General of Hydrocarbons)	Prof. Saurabh Datta Gupta	Applied Geophysics
128	Coastal Risk Analysis (CORAL): An India's perspective	DST, New Delhi	Prof. Vittal H	Environmental Science & Engineering
129	Dump bearing strength analysis	Tata Steel Limited, Jamshedpur	Prof. Vishwas N. Khatri	Civil Engineering
130	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	ISRO	Prof. Alik Sundar Majumdar	Applied Geology
131	Lithotype control over gas storage, gas permeability and geomechanical attributes of coal seams: Implications for Coalbed Methane production and carbon dioxide sequestration in India	DST, New Delhi	Prof. Ashutosh Tripathy	Applied Geology
132	Design, development and establishment of vibration assisted wire electrical discharge turning for aerospace materials to achieve better surface integrity	DRDO	Prof. Alok Kr. Das	Mechanical Engineering
133	Design, synthesis and biological evaluation of Monopolar spindle 1 inhibitors as potential therapeutics for triple negative breast cancer"	DST, New Delhi	Prof. Naga Rajiv Lakkaniga	CCB (Chemistry and Chemical Biology)
134	Geometric Facility Optimization problems in Imprecise domain	DST, New Delhi	Prof. Ankush Acharyya	Mathematics and Computing
135	Catalytic/Non-catalytic Co-Hydrothermal Liquefaction of Integrated Plastic Wastes with Food Waste/Agricultural Residue to Produce Renewable Transportation Fuel	DST, New Delhi	Prof. Madhumita Patel	Environmental Science & Engineering

136	Machine learning-enabled framework for the design of new multicomponent alloys	DST, New Delhi	Prof. Rahul M R	Fuel, Minerals and Metallurgical Engineering
137	Optimization of High-Speed Railway viaduct design	National High Speed Rail Corporation Limited	Prof. Piyali Sengupta	Civil Engineering
138	Performance Study of Steel Oil Storage Tanks under Seismic Loading"	MoES, New Delhi	Prof. Tanish Dey	Civil Engineering
139	Investigation of slow flows of non-spherical granular materials	DST, New Delhi	Prof. Sandip Mandal	Chemical Engineering
140	Role of Free Stream Excitation on the Separation-Induced Transition in Low Pressure Turbines Using an Accuracy-Preserving Parallel Algorithm	DST, New Delhi	Prof. Aditi Sengupta	Mechanical Engineering
141	Experimental and numerical investigation of non-isothermal droplet dynamics in viscoelastic fluids	DST, New Delhi	Prof. Antarip Poddar	Mechanical Engineering
142	Characterization and beneficiation studies on auriferous quartzite ore for producing concentrate for recovery of gold	MMIPL (Manmohan Mineral Industries Pvt. Ltd.)	Prof. Pankaj Kumar Jain	Fuel, Minerals and Metallurgical Engineering
143	Performance Improvement of Darrieus Hydrokinetic Turbine using different J-shape blades and Vortex Generator	DST, New Delhi	Mentor: Prof. Shibayan Sarkar	Mechanical Engineering
144	Explainable Deep Learning for Optimal Design and Robust Control of Coal Flotation Columns - Towards an Intelligent & Reliable Clean Coal Initiative	DST, New Delhi	Prof. Priyanka Devi Pantula	Chemical Engineering
145	Strategic Intervention for Developing Sustainable Entrepreneurial Ecosystem in Jharkhand	MPL (Maithon Power Limited)	Prof. Shashank Bansal	Management Studies
146	Advanced Greedy Algorithms for Sparsity-Aided Generalized Online Caching	DST, New Delhi	Prof. Samrat Mukhopadhyay	Electronics Engineering
147	Modular Synthesis of Fluorinated Azole Pharmaceuticals using Chan-Lam Coupling Variants	DST, New Delhi	Prof. Parthasarathi Das	Chemistry and Chemical Biology
148	FEASIBILITY STUDY OF M-SAND FROM COAL OB	Tata Steel Limited, Jamshedpur	Prof. S.K. Das	Civil Engineering
149	Utility Driven Approach to Learn Credible Interpretations of Machine Learning Models	DST, New Delhi	Prof. Koustav Rudra	Computer Science and Engineering
150	Environmentally benign MnO ₂ -nanoflower based biopolymer-nanocomposite for packaging and moisture/gas barrier properties	DST, New Delhi	Mentor: Prof. Ejaz Ahmad	Chemical Engineering
151	Rare earth elements identification and its recovery in Indian coals and coal by-products	DST, New Delhi	Mentor: Prof. Aarti Kumari	Fuel, Minerals and Metallurgical Engineering
152	Sampling and analysis of 58000 MT of reject from heap no. 4 B(R) Ext. New of Dahibari Coal Washery	BCCL	Prof. Shravan Kumar	Fuel, Minerals and Metallurgical Engineering
153	Methane Production from Gas Hydrates Using Slow Depressurization and Carbon Dioxide Injection	DST, New Delhi	Prof. Pawan Gupta	Petroleum Engg
154	Design of a webserver-based hybrid physiological sensor with optical cloth for real-time health specialist care	DST, New Delhi	Prof. S.K. Raghuvanshi	Electronics Engineering
155	Study of Strongly Coupled Non-Ideal Plasma States of Carbon at Extreme Conditions	DST, New Delhi	Prof. Amitava Adak	Physics
156	Investigations of strongly correlated topological phases in heavy fermion and rare-earth materials	DST, New Delhi	Prof. Sudeshna Sen	Physics
157	Capacity building for human resource development in Unmanned Aircraft System (Drone and related Technology)	MeitY, New Delhi	Prof. R.K. Gangwar	Electronics Engineering
158	Smart Radio Environments: Implementation and deployment for targeted use-cases	IIITB COMET	Prof. Samrat Mukhopadhyay	Electronics Engineering
159	Sustainable digital interventions for resource poor farmers	J-PAL (The Abdul Latif Jamil Poverty Action Lab), Cambridge, USA	Prof. Aparna Krishna	Management Studies
160	Design Rationalization of Bridge in Concurrence with National Standards	Rotrans Infra Projects Private Limited, Bhubaneswar	Prof. Sanket Nayak	Civil Engineering
161	Generation of high chirp rate dual chirp microwave waveform in Ku band using novel microwave photonic techniques for high performance radar application	DST, New Delhi	Prof. S.K. Raghuvanshi	Electronics Engineering

162	Experimental investigations for the flow of viscoelastic and shear-thinning fluids through rigid and deformable tubes and channels	DST, New Delhi	Prof. Bidhan Chandra	Chemical Engineering
163	Inference on parameters of discriminant functions and model-based classification for multivariate distributions	DST, New Delhi	Prof. Nabakumar Jana	Mathematics and Computing
164	Monitoring the aggregation kinetics of amyloid-beta and its inhibition	DST, New Delhi	Mentor: Prof. Umakanta Tripathy	Physics
165	Wave scattering by new-type floating barriers in deep water	DST, New Delhi	Prof. Ramanababu Kaligatla	Mathematics and Computing
166	Photocatalytic Sp3 C-N Bond Formation Extended by MHAT Catalysis	DST, New Delhi	Mentor : Prof. Soumitra Maity, Assoc	Chemistry and Chemical Biology
167	Monitoring of Air Quality in Non-Monsoon Period at Identified Locations of Kendra Area (ECL), both Ambient and the process area to arrive at the impact of proposed changes in the cluster No. 11	ECL	Prof. Suresh Pandian E	Environmental Science & Engineering
168	Development of spectrally efficient low complexity fast sparse channel estimation algorithms for orthogonal time frequency space (OTFS) modulation scheme	DST, New Delhi	Prof. Himanshu Bhusan Mishra	Electronics Engineering
169	Multi-Window Cross-Correlation of Ambient Noise: A Novel Approach for Machine Learning Tools in Seismic Hazard Analysis	DST, New Delhi	Prof. Mohit Agrawal	Applied Geophysics
170	Topological characterisation and entanglement content of the Mott metal-insulator transition	DST, New Delhi	Prof. Sudeshna Sen	Physics
171	Single Crystal Growth and Study of Frustrated Magnetism in Triangular Lattice Cuprates Ba3Cu(Nb/Ta)2O9	DST, New Delhi	Prof. Tusharkanti Dey	Physics
172	Development of Estimation Strategies for the Parameters of Stigmatized Characteristics Using Randomized Response Models	DST, New Delhi	Prof. G.N. Singh	Mathematics and Computing
173	Multi-Carrier Waveforms for Intelligent Reflecting Surface (IRS) assisted Next-Generation Wireless Communication Systems	DST, New Delhi	Prof. Himanshu Bhusan Mishra	Electronics Engineering
174	Development of dynamic geospatial framework and land suitability database for best alternative livelihood options in Indian Sundarban region	DST, New Delhi	Prof. S.R. Samadder	Environmental Science & Engineering
175	Evaluation and Synthesis of Green Hydrate Inhibitors with Enhanced Hydrate Inhibition and Biodegradability	DST, New Delhi	Prof. Ajay Suri	Petroleum Engineering
176	Discontinuous Galerkin Finite Elements for Load Generation Mechanism in Titled pad Slider Bearing Lubrication	NBHM	Prof. P.S. Rao	Mathematics and Computing
177	Towards Interpretable Information Systems: Leveraging Efficiency with Interpretability	DST, New Delhi	Prof. Koustav Rudra	Computer Science and Engineering
178	Design, Syntheses and Applications of Bifunctional Compounds of Tetravalent Group 14 Elements	DST, New Delhi	Prof. H.P. Nayek	Chemistry and Chemical Biology
179	High Temperature CO ₂ Capture using Novel Fly-ash infused CaO-MgO Sorbents in Pre & Post Combustion Processes: Kinetics, Thermodynamics and Breakthrough Studies	DST, New Delhi	Prof. Soubhik Kr. Bhaumik	Chemical Engineering
180	Slope stability study of existing dumps and quarry related to mining leasehold for iron ore namely Patabeda iron and Manganese mine over 19.425 Ha in village Patabeda in Koida Tahasil of Sundargarh district, Odisha	M/s M.G. Mohanty, Odisha	Prof. Vishwas N. Khatri	Civil Engineering
181	Review of Social Impact Assessment Framework for Coal Mining Industry in India	NCL	Prof. Sheo Shankar Rai	Mining Engineering
182	Review of Social Impact Assessment Framework for Coal Mining Industry in India	CCL	PI-I: Prof. Aparna Krishna	Management Studies
183	Coupled Geomechanical and Fluid Flow Study of High-temperature Wells Using FEM and CFD Analysis	University of Oklahoma, Norman, USA	Prof. Raj Kiran	Petroleum Engineering
184	Autonomous and Privacy-Preserving Learning for Online and Intelligent Analysis of Urban Data	DST, New Delhi	Prof. Monidipa Das	Computer Science and Engineering
185	Carrying Capacity Study of Dhanbad city under National Clean Air Program (NCAP)	Jharkhand State Pollution Control Board, Ranchi	Prof. Suresh Pandian Elumalai	Environmental Science & Engineering
186	Design and Development of Substrate Integrated Waveguide based Self-multiplexing Antennas for 5G communication systems	DST, New Delhi	Prof. Santanu Dwari,	Electronics Engg.

187	Semantics-driven Theory-guided Analysis for Understanding the Development Pattern and Impact of COVID-19 Pandemic	DST, New Delhi	Prof. Monidipa Das	Computer Science and Engineering
188	Nitrogen Removal from Coal Tar	Tata Steel Limited, Jamshedpur	Prof. Ejaz Ahmad	Chemical Engineering
189	Development of Computer Program and Experimental set-up for Response Assessment of Concrete Structures under Drop-weight Impact and Contact Explosions	DST, New Delhi	Prof. Satadru Das Adhikary	Civil Engg
190	Aerodynamic and aeroacoustic characteristics and noise control of isolated and tandem propellers with and without installations	DST, New Delhi	Prof. Kabilan B	Mechanical Engineering
191	Development of Algorithms for Collaborative Dual Arm Manipulation and Control	DRDO	Prof. Arun Dayal Udai	Mechanical Engg
192	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	DST, New Delhi	Prof. A.R. Dixit	Mechanical Engg
193	Slope Instability Severity (SIS) Assessment at Coalfield Level using Integration of Innovative Spaceborne InSAR and Relevant Data for Enhanced Slope Failure Predictions	DST, New Delhi	Prof. Mohammad Soyeb Alam	Mining Engineering
194	Assessment of basin scale terrestrial water balance closure and evaluation of its uncertainty	DST, New Delhi	Prof. Kironmala Chanda	Civil Engg
195	Sampling and analysis of 40,000 MT Slurry from Heap no. 'B', Heap no. 'C' and Heap no. 'E' at Moonidih Coal Washery	BCCL	Prof. Pankaj Kumar Jain	Fuel, Minerals and Metallurgical Engineering
196	High accuracy computing of thermally-stratified free shear layers: Combined Kelvin-Helmholtz instability	National Supercomputing Mission	Prof. Aditi Sengupta	Mechanical Engg
197	3D printing of overhang structures through different metal transfer strategies using wire arc additive manufacturing process	DST, New Delhi	Prof. Alok Kr. Das	Mechanical Engg
198	Regional Centre for Geodesy	DST, New Delhi	Prof. V.G.K. Villuri	Mining Engineering
199	CIL Innovation and Incubation Centre	CIL	Prof. Dheeraj Kumar	Mining Engineering
200	Tata Steel Innovation Centre on Mining and Mineral Research, (Tata Steel - ICMMR)	Tata Steel Limited, Jamshedpur	PIC: Prof. Sagar Pal	Chemistry & Chemical Biology
201	Naresh Vashisht Centre for Hydrogen and Carbon Capture, Utilization and Storage Technologies	Shri Naresh Vashisht, President, Vashisht Foundation	Prof. Sandipan Kr. Das	Mechanical Engg