

Extramural Ongoing Projects										
S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
1	ML-Aided Secure SoC and Analytics (MASTIC)	Paresh Saxena	CSIS	Rajib Ranjan Maiti	CSIS	06.08.2021	Axiado India Pvt Ltd	24	6736932	
2	Public transport policies and women's mobility in Indian cities	Rishi Kumar	Economics and Finance	NA	NA	01.07.2022	Azim Premji University Research	24	999600	
3	Resistive Memories for Neuromorphic and In-memory Computing Applications	Parikshit Parshuram Sahatiya	EEE	Subhradeep Pal	EEE	23.06.2022	Ceremorphic Technologies Pvt Ltd	36	3101040	
4	Feasibility study to assess the use of spent grain as feedstock for biomethanation	Sankar Ganesh P	Biological Sciences	NA	NA	25.10.2021	GPS Renewable	12	2600000	
5	Regeneration of Graphite anode and Li Metal recovery from used LFP Batteries	Afkham Mir	Chemical Engineering	Ankur Bhattacharje	EEE	14.07.2022	HBL	24	1318900	
6	Development of Infrared Sensor for Security Applications	Parikshit Parshuram Sahatiya	EEE	NA	NA	07.04.2022	Sri Karthikeya Security Services	18	1207800	
7	AntiTB drug development	D Sriram	Pharmacy	NA	NA	01.04.2021	KI, Sweden	12	965135	
8	Astrophysical objects in modified theories of gravity : theoretical predictions and observational perspective	Pradyumn Kumar Sahoo	Mathematics	NA	NA	14.02.2022	NBHM	36	1680900	
9	Mitigation Strategy to counter top-down cracking due to non uniform contact stresses in flexible pavements	Sridhar Raju	Civil Engineering	Chandu Parimi	Civil Engineering	03.07.2020	NHAI	36	2650000	
10	Real time Investigation of various analytes using droplet microfluidics integrated with high-speed vision	Arshad Javed	Mechanical Engineering	Sanket Goel	EEE	12.03.2021	NSM	24	2122560	Extended for one year
11	Topical nanomicelles eyedrop for delivering antifungal drug to treat corneal infection	Nirmal J	Pharmacy	NA	NA	28.07.2020	Parenteral Drug Association (PDA)	36	2000000	
12	Development and optimization of stable anti-leukemic drug loaded long circulating liposomes	Akash Chaurasiya	Pharmacy	NA	NA	25.06.2020	Parenteral Drug Association (PDA)	36	3000000	
13	Magnetoplasmonic studies on cobalt nickel based nanostructures	Runa Kumari (Priyalatha)	EEE	NA	NA	23.02.2020	DST (WOS-A)	36	2534000	
14	Molecular genetic analysis of schizophrenia patients	K N Mohan	Biological Sciences	NA	NA	06.02.2020	DST CSRI	36	6042360	ZBSA Funds received during May 2023
15	Investigate resveratrol as a non-invasive therapeutic option in mitigating keratoconus	Nirmal J	Pharmacy	NA	NA	05.11.2021	Velux Stiftung	24	4480060	
16	Development of Cost-effective, Electrophilic Trifluoromethylating Reagents and their Application to the Syntheses of New Classes of Medicinally Potential Trifluoromethylated Heterocycles	Tanmay Chatterjee	Chemistry	Balaram Ghosh	Pharmacy	19.04.2021	CSIR	36	2679000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
17	Novel Therapeutic Approaches for the treatment of Leukemia	Akash Chaurasiya	Pharmacy	NA	NA	05.03.2021	ICMR	36	4200000	
18	DST Inspire Faculty	Sanatanu Koley	Mathematics	NA	NA	01.04.2019	DST INSPIRE	60	3500000	
19	Structured dialogues for sustainable urban water management (SDSUWM)	Suchismita Satpathy	Humanities and Social Sciences	NA	NA	28.11.2019	DST	60	5726400	
20	Design, Synthesis and Biological Evaluation of 1,2,3-triazole Hybrids as Novel Quorum Sensing Inhibitors	KVG Chandra Sekhar	Chemistry	NA	NA	19.04.2021	CSIR	36	1800000	
21	Molecular mechanisms in plant-rhizobacterial interaction for abiotic stress tolerance	Sridev Mohapatra	Biological Sciences	NA	NA	22.06.2021	CSIR	36	2800000	
22	Development of mesoporous materials with enhanced hydrogen uptake for fuel cell vehicles	Sujith R	Mechanical Engineering	NA	NA	30.12.2020	DST SERB CRG	36	2567400	
23	Machine Vision based Adaptive Quality Assurance System for Aerospace Vehicle Assembly Unit	Sandip S Deshmuk	Mechanical Engineering	Chandu Parimi	Civil Engineering	24.06.2020	ARMREB, DRDO	36	3907830	
24	Process and hybrid tool design for higher productivity in FSW butt-joints of thick Al-alloy 2219 plates	Jeevan Jaidi	Mechanical Engineering	Sujith R	Mechanical Engineering	21.09.2021	ARDB / DRDO	36	3311616	
25	Investigation on Dynamic Deformation Behavior of Tungsten Heavy Alloys (WHAs) for Defence Applications	Nitin Ramesh K	Mechanical Engineering	Navin Kumar, and Swadesh K Singh	IIT Ropar	18.08.2021	ARMREB/DRDO	36	4074495	
26	Design and Development of a Multi Sensor System for Health Monitoring of Defence Stored Article	Sandip S Deshmukh	Mechanical Engineering	Alivelu Manga Parimi and Parikshit Sahatiya	EEE	24.01.2022	DRDO CARS	36	1000000	
27	Testing on-spot food quality mainly focusing with detection of biogenic amines for the defence personnel using simple fluorophore	Manab Chakravarty	Chemistry	Chanchal Chakraborty	Chemistry	10.09.2021	DRDO LSRB	36	2889500	
28	Indigenization of core shell rubber modified EPOXY Resin	Karthik Chetan	Chemical Engineering	NA	NA	01.12.2021	ASL DRDO CARS	24	1541000	
29	Developmental Studies on Influence of Temperature on Carbon/Epoxy composite properties	Pavan Kumar Penumakula	Mechanical Engineering	Ramesh Babu A	Chemical Engineering	14.2.2022	ASL DRDO CARS	36	4578518	
30	Theoretical and simulation based approaches to determine the forming limit diagrams of Ti-6Al-4V at elevated temperatures	Kurra Suresh	Mechanical Engineering	Sujith R	Mechanical Engineering	19.06.2020	DRDO ARDB	36	1550600	
31	Reduction of Coke Deosition for JP - 7 (Vajrabega) Fuel	Srikanta Dinda	Chemical Engineering	NA	NA	22.04.2022	DRDL/DRDO	24	4045400	
32	Investigation of functional role and therapeutic potential of nesfatin-1 in Chronic Kidney Disease	Arti Dhar	Pharmacy	Onkar Kulkarni	Pharmacy	19.02.2021	ICMR	36	2900000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
33	Development of a multipurpose diagnostic device based on microporous microneedle patch for minimally invasive sampling and electrochemical detection of glucose, uric acid and thyroid stimulating hormone from interstitial fluid.	V Vamsi Krishna Venuganti	Pharmacy	Parikshit Sahatiya	EEE	26.08.2021	ICMR	36	5421609	
34	Microfluidic Portable, IoT enabled, Multiplexed Antibiotic Susceptibility Testing device with Integrated Thermal Management: Application to Resistant Bacterial Electrochemical Activity	Khairunnisa Amreen under supervision of Sanket Goel	EEE	NA	NA	12.07.2021	ICMR-DHR	36	2649500	
35	Development of Epigenome Targeted Therapeutics with Improved Selectivity and Drug-ability for the Treatment of Cancer	Balaram Ghosh	Pharmacy	Swati Biswas	Pharmacy	16.11.2021	DHR ICMR	36	3048300	
36	Therapeutic potential of spironolactone loaded light-responsive sustained-release gel depot in treating diabetic retinopathy	Nirmal J	Pharmacy	NA	NA	18.01.2021	ICMR	36	2753000	
37	Sequestration of Heavy Metals using Multi Functional Biodegradable natural Polymers	Ramakrishnan Ganesan	Chemistry	N Rajesh	Chemistry	19.08.2021	CSIR	36	1614000	
38	Lipids and Cyclic nucleotides-mediated regulation of the lytic cycle in Toxoplasma gondii	Nishith Gupta	Biological Sciences	NA	NA	15.12.2020	Wellcome Trust/DBT (India Alliance)	60	44994400	
39	Neurobiology: DBT BUILDER - BITS Pilani, Hyderabad Campus Interdisciplinary Life Science Programme for Advanced Research and Education	Yogeeswari Perumal & Onkar Prakash Kulkarni & Punna Rao Ravi & Vidya Rajesh & Balaram Ghosh & Pragya Komal	Institute wide (Pharmacy)	NA	NA	22.07.2021	DBT Builder	60	29008484	
40	Development of an endogenous STING agonist adjuvanted Mycobacterium bovis BCG vaccine to enhance efficacy against tuberculosis	Ruchi Jain Dey	Biological Sciences	William Ramses Bishai	Scientist E, NIAB	16.03.2021	DBT Indo USA	36	5913360	
41	Enhanced Strength-to-weight Ratio INCONEL-718 Alloy Structures Made by Additive Manufacturing for Aerospace Applications	Srinivasa Prakash Regalla	Mechanical Engineering	Kurra Suresh	Mechanical Engineering	11.03.2021	DST SERB CRG	36	2533696	
42	Investigating the Equation of State of Neutron Stars via emitted Gravitational Wave	Swastik Bhattacharya	Physics	Sarmishtha Banik	Physics	08.12.2020	DST SERB CRG	36	2335000	
43	IoT and ML enabled Multiplexed Fully Integrated Portable Platform for Onsite Measurement of Water Quality Indicators	R N Ponnalagu	EEE	Manik Gupta, Satish Kumar Dubey, Sanket Goel	CSE, Mechanical Engineering, EEE	14.07.2021	DST SERB POWER	36	2678170	
44	Weak Galerkin method for parabolic problems	Jhuma Sen Gupta	Mathematics	NA	NA	31.12.2020	DST SERB CRG	36	2203696	
45	Data driven Multimodal System for Academic Stress Management in Indian Universities (ARU)	Manik Gupta	CSIS	Dipanjan Chakraborty	CSIS	14.07.2021	DST SERB POWER	36	1658316	
46	Defend Internet of things based cyber espionage through analysis of encrypted or encrypted network traffic using machine learning	Rajib Ranjan Maiti	CSIS	NA	NA	25.01.2021	DST SERB CRG	36	3344000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
47	To delineate domain-specific functions of Histone Deacetylase 6 (HDA6) in gene regulation and genomic instability and- to develop a novel non-transgenic epigenetic mutagenesis tool for plant improvement via HDAC modulation	Gireesha T M	Biological Sciences	NA	NA	31.12.2020	DST SERB CRG	36	4238696	
48	Performance Evaluation of Construction and Demolition Waste as Stone Column Material for Improving Bearing Capacity of Soft Soil	Anasua GuhaRay	Civil Engineering	NA	NA	18.03.2021	DST SERB POWER	36	2892296	
49	Development of Tribologically Optimized Laser Cladded Friction Material for Automotive Brake Pad-Disc System	Piyush Chandra Verma	Mechanical Engineering	NA	NA	20.12.2021	DST SERB SRG	36	1236400	
50	Embeddings and extensions of Sobolev-type spaces	Nijjwal Karak	Mathematics	NA	NA	08.11.2021	DST SERB SRG	24	1509816	
51	Tribological behavior of Scalable and Low-cost Multilayered MoS ₂ Coatings for Hydrogen Valve Applications.	Prabakaran Saravanan	Mechanical Engineering	NA	NA	18.12.2021	DST SERB SRG	36	2391400	
52	Survivin mRNA antigen and CTLA4inhibitor loaded lipid nanoparticles for lymph node targeted oral cancer immunotherapy	V Vamsi Krishna Venuganti	Pharmacy	NA	NA	10.01.2022	DST SERB CRG	36	6338360	
53	Mathematical modelling of oscillating water column wave energy converter devices under irregular and multidirectional incident waves	Santanu Koley	Mathematics	NA	NA	18.02.2022	DST SERB CRG	36	2187196	
54	Development of a high-efficiency, all-weather Atmospheric Water Generator (AWG) comprising of low-temperature-swing driven desiccant coated fin-tube heat exchangers".	Mrinal Ketan Jagirdar	Mechanical Engineering	NA	NA	27.12.2021	DST SERB SRG	36	2973710	
55	Influence of Wetting Regime on Evaporative Drying of a Sessile Drop on a Topographically Patterned Surface	Nandini Bhandaru	Chemical Engineering	NA	NA	24.12.2021	DST SERB CRG	36	5668696	
56	Mechanistic insights of CO ₂ methanation using core-shell catalysts u	Satyapaul A Singh	Chemical Engineering	I Sreedhar	Chemical Engineering	22.12.2021	DST SERB CRG	36	3204660	
57	Physiological Importance of Pyruvate Homeostasis in the Intracellular Parasite Toxoplasma gondii	Nishith Gupta	Biological Sciences	NA	NA	12.01.2022	DST SERB CRG	36	5948888	
58	Low-cost fibre reinforced elastomeric isolation using locally available materials – design methodology, numerical and experimental investigation	Mohan S C	Civil Engineering	NA	NA	16.12.2021	DST SERB CRG	36	4799696	
59	Design and development of miniaturized MIMO antennas with high isolation at sub-6 GHz and millimeter wave for 5G MIMO and massive MIMO systems applications".	Sourav Nandi	EEE	NA	NA	20.12.2021	DST SERB SRG	24	1269400	
60	Therapeutic potential of novel dual receptor acting designer peptide NPA7 in hypertension and associated renal complication	Arti Dhar	Pharmacy	NA	NA	10.03.2021	DST SERB CRG	36	3588860	
61	Dynamics of Operators on Weighted Spaces of Holomorphic Functions defined on Infinite Dimensional Spaces	Deepika	Mathematics	NA	NA	08.06.2022	DST SERB POWER	36	2291696	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
62	Semiconductor-based thin-film coatings for mitigating nosocomial infections through antibacterial action under dark-light dual mode	Jayati Ray Dutta	Biological Sciences	Ramakrishnan Ganesan	Chemistry	07.07.2022	DST SERB POWER	36	2556400	
63	Design and Implementation of a Hardware Efficient Secure Pseudorandom Bit Generator for Physical Layer Security in the Resource Constraint IoT Devices	Amit Kumar Panda	EEE	NA	NA	12.01.2022	DST SERB SRG	24	2521810	
64	Design and simulation of oligosaccharide wrapped super-paramagnetic iron oxide nanoparticles as promising thernautics	Durba Roy	Chemistry	NA	NA	18.02.2022	SERB Matrix	36	660000	
65	Synthesis of novel coumarin-based lignans targeting pro-inflammatory cytokines for the treatment of chronic kidney disease	Sajeli Begum	Pharmacy	Onkar P. Kulkarni	Pharmacy	29.01.2021	DST SERB CRG	36	3391540	
66	Development of Endothermic Fuel for Supersonic Vehicle Applications	Srikanta Dinda	Chemical Engineering	NA	NA	23.12.2020	DST – SERB - CRG	36	4226000	
67	Computational Modelling of damage in Solids	Raghu Piska	Civil Engineering	NA	NA	13.07.2021	DST INSPIRE	60	3500000	
68	Development of Theranostic Agents for Photodynamic/ Photothermal Treatment of Oral/Lung Cancer and Related Diseases	D Ramaiah, Manab C, Vamsi K V, Amit Nag	Institute wide (Chemistry)	NA	NA	11.03.2022	DST PURSE Theme-I	48	7,08,61,085	
69	Thematic project of waste-to-energy	Sankar Ganesh, Chanchal Chakraborty, Supradeepan and Satyapaul Singh, Ankur Bhattacharjee	Institute wide (Biological Sciences)	NA	NA	11.03.2022	DST PURSE - (Theme-III)	48	58127554	
70	Development of a sustainable eco-friendly concrete material with complete replacement of traditional ingredients with waste materials (WASTECRETE).	Arkamitra Kar	Civil Engineering	Georges Zissis and Rachida Idir	Professor, Université Paul Sabatier, Toulouse, Midi-Pyrenees,	30.06.2022	DST CEFIPRA	36	3338655	
71	Prediction of RUL (Remaining Useful Life) of the Lithium-Ion Battery pack using machine learning techniques for second life usage	Alivelu Manga Parimi	EEE	Parikshit Sahatiya, Ankur Bhattacharjee	EEE	14.07.2022	HBL	24	1120900	
72	“Socio-Economic Impacts of Cyclones and the Coping Strategies of the Local Communities in Odisha, India with a Special Focus on Women”	Archana Srivastava	Economics and Finance	Rishi Kumar	Economics and Finance	14.11.2020	Shastri Institutional Collaborative Research Grant	24	1000000	
73	Modeling the effect of changing bio film thickness on the performance of a microbial fuel cell	Balaji Krishnamurthy	Chemical Engineering	Vikranth Kumar Surasani	Chemical Engineering	22.12.2021	DST SERB CRG	36	2910422	
74	Testing of Artificial Intelligent Systems	Bhanu Murthy/ Lov Kumar	CSIS	NA	NA	10.08.2021	TestAlng Solutions Pvt. Ltd.	24	888000	
75	Literature Search of LAI Development and Adverse Event Level	Akash Chaurasiya	Pharmacy	NA	NA	25.10.2021	Novartis Health Care	4	259600	extended till 31.08.2023
76	Development and characterisation of rL5 polymerase zeta subunit MAD2B/Rev7 targeted inhibitors as potential anticancer therapeutic agents using in - vitro and In - vivo approach	Arti Dhar	Pharmacy	NA	NA	01.11.2021	ICMR	36	1434000	
77	Calpain mediated disruption of axon-glia interaction in peripheral neuropathies	Abhijeet Rajendra Joshi	Pharmacy	NA	NA	13.12.2021	DST INSPIRE	60	3500000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
78	Development of the Ti6Al4V alloy structure using wire arc additive manufacturing process for aerospace application	Ravi Shanker Vidyarthi	Mechanical Engineering	NA	NA	01.02.2022	Teachers Associateship for Re	36	1830000	
79	Dynamics of active particles near a non-isothermal fluid-fluid interface	Sayan Das	Mechanical Engineering	NA	NA	13.07.2021	DST Inspire	60	3500000	
80	DST INSPIRE Fellowship	Chanchal Chakraborty	Chemistry	NA	NA	13.12.2017	DST Inspire	48	3500000	
81	Chemistry	DST FIST	Chemistry	NA	NA	05.03.2021	DST FIST	60	18700000	
82	Implementation of ionic liquids in crystallization protocol: Applications in Crystal Engineering	Arijit Mukherjee	Chemistry	NA	NA	13.09.2022	DST SERB SRG	24	3300000	
83	Designing Metallo(salen) polymers for detection of phosphorylated peptides and proteins: Amplification of Signal via Disassembly Strategy	Nilanjan Dey	Chemistry	NA	NA	13.09.2022	DST SERB SRG	24	3300000	
84	Design and Simulation of Improved Polysaccharide based Membranes, the Future Must for Food Packaging	Durba Roy	Chemistry	NA	NA	07.07.2022	DST SERB Power	36	2908400	
85	Investigation of compaction of DNA by some potential surfactants in the presence of nanoparticles and decompaction induced by cyclodextrins using fluorescence spectroscopy and small angle neutron scattering techniques.	Subit kumar saha	Chemistry	NA	NA	24.06.2022	UGC DAE CSR	12	45000	
86	Second messenger (p)ppGpp mediated bacterial persistence and regulation of SpoT"	Kirtimaan Syal	Biological Sciences	NA	NA	30.03.2021	DBT Ramalingaswamy	36	4250000	
87	EON's DINI (Diet-Infection-Nutrition-Immunity) Axis approach – Proof of Concept: Immunomodulatory Nutritional Intervention for CRC Management	Kumar Pranav Narayan	Biological Sciences	NA	NA	19.04.2021	Esoerer Onco Nutrition (EON)	24	2000000	
88	Computation of free energy changes based on the confirmations of bimolecules in two states during ligand binding and others biochemical reactions : a novel approach screen drug targets	Debashree Bandopadhyay	Biological Sciences	NA	NA	04.03.2022	DST Matrix	36	660000	
89	Development of database for Reactive Oxygen species (ROS) towards understanding Mechanism control and Therapeutics against Mitochondrial Dysfunction	Debashree Bandopadhyay	Biological Sciences	NA	NA	17.07.2020	CSIR-HRDG	36	854667	
90	Stem cell models to study the interplay between DNMTs and HDACs in schizophrenia	K N Mohan	Biological Sciences	Trinath Jamma	Biological Sciences	31.12.2020	DST SERB CRG	36	5557760	
91	A pilot study for evaluation of 15 Copy Number Variants (CNVs) among schizophrenia patients from India	K N Mohan	Biological Sciences	Vidya Rajesh	Biological Sciences	12.02.2021	ICMR	36	2700000	
92	Pre-Clinical efficacy evaluation of three synthetic peptides For the treatement of inflammatory bowel diseases & sepsis	D Sriram	Pharmacy	Arti Dhar	Pharmacy	01.01.2020	ISSAR	36	2980000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
93	Pre-Clinical Efficacy Evaluation (In vivo) of synthetic peptides & its formulations - For the disease targets Involved Inflammator pathways	D Sriram	Pharmacy	NA	NA	05.11.2022	Pravi Bio	36	1416000	
94	Impact of age/age-related hearing loss on basal forebrain-modulated cortical neurophysiology – A search for therapeutic targets".	Srinivasa Prasad Kommajosyula	Pharmacy	NA	NA	26.09.2022	DST SERB SRG	24	2919400	
95	Development of a Cost Effective Solar Energy based Drinking Water cum Cold Storage Facility for Coastal Communities in India	Sandip S Deshmuk	Mechanical Engineering	Santanu Prasad Datta	Mechanical Engineering	20.01.2022	DST SERB CRG	36	2556400	
96	Enhancement of Mechanical Properties and Forming Behavior of AZ31 Alloy using Shear Deformation Techniques for Automotive & Aerospace Applications".	Swadesh Kumar Singh	Mechanical Engineering, GRIET	Nitin Ramesh Kotkunde	Mechanical Engineering	17.12.2020	DST SERB CRG	36	1280000	
97	High Precision, Miniaturized and Smart Colorimetric Device for Pesticide Quantification and Monitoring Applications in Food and Environment	Satish Kumar Dubey	Mechanical Engineering	Sanket Goel & Arshad Javed	EEE & Mechanical Engineering	24.11.2022	DST SERB CRG	36	3656389	
98	An Indigenous Air-Conditioning Facility for Hospitals during the Covid-19 Pandemic	Santanu Prasad Datta	Mechanical Engineering	NA	NA	01.06.2022	DSIR-PRISM	24	1000000	
99	Geometric Obnoxious Facility Location Optimization	Santanu Prasad Datta	CSIS	N R Aravind - Mentor	IIT, Hyderabad	19.10.2022	DST SERB TARE	36	1830000	
100	Synthesis and thermoelectric properties of misfit compound combining a topological quantum material	Satya Narayan Guin	Chemistry	NA	NA	19.12.2022	DST SERB CRG	36	6850206	
101	Synthesis, Characterization and Catalytic Behavior of Atom Precise Metal-Oxide Nanoclusters	Balaji Gopalan	Chemistry	NA	NA	19.12.2022	DST SERB CRG	36	2506196	
102	Simulation-based optimization framework for waste cold recovery in LNG regasification terminals	Arnab Dutta	Chemical Engineering	NA	NA	28.09.2022	DST SERB SRG	24	1505870	
103	Synthesis and characterisation of virantage VW10200RFP	Purnima	Chemical Engineering	Chanchal Chakraborty and Satyapal Singh	Chemistry and Chemical Engineering	18.10.2022	DRDO CARS	18	1503084	
104	Design and Synthesis of Microporous Adsorbents for Gas/Vapour Separation and CO ₂ Capture	Himanshu Aggarwal	Chemistry	NA	NA	19.12.2022	SERB CRG	36	4029696	
105	Single step' Conversion of CO ₂ from Thermal Power Plant Exhaust to Dimethyl Ether	Sounak Roy	Chemistry	ddy & Satyapaul Singh Amar	Chemistry and Chemical Engineering	19.12.2022	SERB CRG	36	4469696	
106	Design and Simulation of a 325 MHz, 100 kW and 150 kW Inductive Output Tube(IOT)	Harish Dixit	EEE	Prasant Kumar Pattnaik	EEE	30.11.2022	BRNS	24	2549600	
107	In situ Wittig-Homer reactions in dioxygen: Direct and facile access to versatile vinylene-linked small and polymeric x-conjugates as potential molecular materials	Manab Chakravarty	Chemistry	NA	NA	19.12.2022	SERB CRG	36	4062696	
108	Development of a meta-material based Vibration isolation frame for housing fuel bundies	Sabareesh Geetha Rajasekharan	Mechanical Engineering	Brajesh Kumar Panigrahi & Kundan Kumar Singh	Mechanical Engineering	23.01.2023	BRNS	36	2569600	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
109	Lattice Boltzmann Method (LBM)for multiphase flow and transport in porous media	Vikranth Kumar Surasani	Chemical Engineering	NA	NA	26.12.2022	SERB CRG	36	2940463	
110	Allele mining for the epigenetic regulator NGRS and other yield-associated gene (GRF4) and their modulation using multiple genomic and molecular approaches to enhance rice yield under low nitrogen conditions	Gireesha T M	Biological Sciences			05.07.2022	Agricultural Science Fund (ICAR)	36	14779000	
111	Glucocorticoid receptor (GR)-targeted liposomal nano-platform for drug sensitization, EMT-reversal toward effective treatment of aggressive oral cancer	Kumar Pranav Narayan	Biological Sciences	Raj Kumar Banerjee	CSIT-IICT, Hyderabad	18.11.2022	DBT-1	36	5368360	
112	Antibacterial, host-modulating and regenerative nanofibers membrane for guided tissue regeneration	Kumar Pranav Narayan	Biological Sciences	Atul Sendu Giri & Piyush Khanna	Biological Sciences	22.11.2022	DBT-2	36	1914000	
113	Systematic evaluation of the role of IRE1 in the modulation of chronological aging via ER - mitochondrial crosstalk during chronic ER stress	Shuvadeep Maity	Biological Sciences	NA	NA	14.10.2022	DST SERB SRG	36	2816156	
114	Synthesis of transition metal-phosphate-based nanocomposites and investigation of their applications towards thermal energy storage, thermal management and solar thermal energy storage	Sandip S Deshmukh - Rudrarapu Aravind	Mechanical Engineering	NA	NA	01.11.2022	SERB NPDF	24	2236800	
115	Tailor-made, Tumor-Targeted Vitaprotein Nanoparticles of Lapatinib and Letrozole as NanoChemo-Cocktail for Hormone-Receptor-Amplified Advanced Metastatic Breast Cancers Treatment	Swati Biswas	Pharmacy	Balaram Ghosh	Pharmacy	09.01.2023	ICMR	36	2882000	
116	Design and development of a miniature broad band vibration energy harvester to power biomedical implantable device	Brajesh Kumar Panigrahi	Mechanical Engineering	Sabareesh G R	Mechanical Engineering	23.12.2022	ICMR	24	1915226	
117	Study of late-time cosmic acceleration in curvature-less and torsion-less theories of gravity with recent observations	Pradyumn Kumar Sahoo	Mathematics	NA	NA	14.03.2023	DST SERB CRG	36	2148696	
118	Exploiting Adaptive Data-Rate Technique for Longer Network Lifetime & Resource Allocation of LoRa based IoT Applications	Nikumani Choudhury	CSIS	NA	NA	20.03.2023	DST TIH (Technology Innovation Hub) - IoT Chankya Fellowship	41	2375080	
119	Understanding the role of PERK and MAM signaling during HD condition	Shuvadeep Maity	Biological Sciences	Debashree B and Pragya Komal and Kirtimaan Syal	Biological Sciences	13.03.2023	ICMR	36	3823000	
120	Understanding the novel role of PERK in the context of ER-mitochondrial communication in NAFLD	Shuvadeep Maity	Biological Sciences	Pragya Komal and dr Kirtiman Syal	Biological Sciences	04.01.2023	ICMR	36	4248280	
121	Biosensor Monitoring of Signaling Dynamics in the Intracellular Pathogen Toxoplasma Gondii	Nishith Gupta	Biological Sciences	Takeharu Nagai	Osaka University, Japan	23.09.2022	DST IJSPS (India - Japan Society for the Promotion of Science)	24	764000	
122	Shellac Mediated Laser Induced Reduced Graphene Oxide (rGO) Films for Studying Docking of Biomarker at Nano-Bio Interfaces	Sanket Goel and Chandrani Pramanik	EEE	Vimal Kumar Sharma	TATA Steel	28.11.2022	Tata Steel Ltd.	6	706820	
123	Completely Positive Maps and Quantum Conditional Entropy	Nirman Ganguly	Mathematics	NA	NA	26.12.2022	SERB MATRICS	36	660000	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
124	Study of ergodic theorems for Γ -actions on a group X , where Γ is a subgroup of $\text{Aut}(X)$	Sharan Gopal	Mathematics	NA	NA	26.12.2022	SERB MATRICS	36	660000	
125	A posteriori error analysis for parabolic integro-differential equations with positive type kernels	Gujji MohanMurali Reddy	Mathematics	NA	NA	26.12.2022	SERB MATRICS	36	660000	
126	Development of polymeric microneedle device for the targeted delivery of therapeutics to the posterior segment of eye	Vamsi Krishna Venuganti	Pharmacy	NA	NA	05.01.2023	DSIR-PRISM	22	2000000	
127	Development of an integrated software and hardware-based system to estimate the axial stresses in hangers used in network arch bridges	Amit Kumar Gupta	Mechanical Engineering	Sabareesh G R and Brajesh K	Mechanical Engineering	10.01.2023	Ms. Poddar Infratech Pvt. Ltd., Delhi	6	1765280	
128	Performance Evaluation of Soft Soil Treated with a Novel Geopolymer of Microbially Induced Calcium Carbonate Precipitation in Waste Material for Sustainable Development	Anasua Guharay and Toshiro Hata	Civil and Hiroshima University, Japan.	NA	NA	11.01.2023	India-Japan Cooperative Science Programme (IJSCP)	24	753500	
129	Biomimetic corneal patch for treating fungal keratitis	Nirmal J	Pharmacy	Sanket Goel and Prashant Garg	EEE and LVPEI	10.01.2023	ICMR	36	2498280	
130	Residual life Estimation of Mettalic/ Composite Strutures Such as PCB's Used in Aerospace Systems Subjected to Dynamic and Thermal Loading	Sabareesh Geetha Rajasekhar	Mechanical Engineering	Sudha Radhika	EEE	23.02.2023	DRDO ARMREB	36	3927928	
131	Improving the Machinability in Drilling of Solid and Porous Bone Cements to Mitigate the Problems during the Re-surgery of Bone Cancer Patients	Amrita Priyadarshini	Mechanical Engineering	Hima Kanth L	Doctor in Sonshine Hospital	24.02.2023	DST SERB CRG	36	3188776	
132	Design and Development of System-on-Chip for Multiplexed Biomarker Detection	Ponnalagu	EEE	Sanket Goel and Syed Ershad Ahmad	EEE and Mechanical Engineering	08.11.2022	SRC IRP Program	36	2828320	
133	Digital twin based solutions for improving reliability and efficiency of multi-stage wind turbine gearboxes	Sabareesh Geetha Rajasekharan	Mechanical Engineering	Inturi Vamsi	st Prof, CBIT Hyderabad	02.03.2023	DST SERB CRG	36	2808696	
134	A novel phase field framework for microstructure driven crack propagation in polycrystalline materials	Amol Vuppuluri	Mechanical Engineering	Raghu Piska	Civil Engineering	10.03.2023	DST SERB CRG	36	1894200	
135	Preclinical and phase 0/1 clinical investigation of minimally invasive microneedle sclera patch for effective chemotherapy in retinoblastoma	Vamsi Krishna V	Pharmacy	Vishal Raval	LVPEI	06.03.2023	ICMR	36	1500000	
136	Elucidating the role of Transforming Growth Factor-B (TGF-B) regulated long-non-coding RNAs (lncRNAs) in Epithelial to mesenchymal transition (EMT) and as therapeutic targets for Oral Cancer	Vivek Sharma	Biological Sciences	NA	NA	15.03.2023	ICMR	36	2472000	
137	A Co-constructed Online Professional Development Toolkit for English Language Teachers Working in Resource-constrained Schools in India	Santosh Kumar Mahapatra (India) PI and Taslima Ivy from the University of Manchester (UK) PI	Humanities and Social Sciences	Gary Motteram and Felix Kwihangana from the , and Ms shambhavi Singh, an independent researcher from India	University of Manchester (expert member)	15.09.2022	British Council, UK	6	2308780	
138	Design and development of portable acidosis kit for the rapid,trace-level detection of Ketone bodies in biological samples	Nilanjan dey	Chemistry	Balaram Ghosh	Pharmacy	10.03.2023	ICMR	36	3436600	

S.No	Title	PI Name	Department	Co-PI Name	Department	Sanctioned Date	Funding Agency	Duration (Months)	Sanctioned Amount	Remarks
139	Development of Performance Grade (PG) Bituminous Binder Classification system for India	Sridhar Raju	Civil	Akshay Gundla	Civil Engineering	28.03.2023	MoRTH - Ministry of Road Transport & Highways	36	15510000	
140	Design and Development of flexible thermoelectric devices (TEDs) for various applications	Sanket Goel	EEE	Satish Kumar Dubey, Prof. Arshad Javed,	Mechanical Engineering	01.05.2023	DRDO	24	3434000	
141	Development of a novel cost effective and smart building material for indoor thermal comfort and enhanced energy storage	Parameshwaran R	Mechanical Engineering	Vinayaka Ram	Civil Engineering	09.05.2023	DST SERB CRG	24	2259400	
142	Development of an Efficient Solar Distillation Apparatus	Sandip S Deshmukh	Mechanical Engineering	NA	NA	19.05.2023	PRISM DSIR	24	834587	
143	Development of a wound dressing material with a simultaneous dual function of antibacterial and visible colorimetric detection of infection	Jayati Ray Dutta	Biological Sciences	Ramakrishnan Ganesan	Chemistry	14.06.2023	DST SERB CRG	36	3413360	