

List of Sanctioned research Project in Financial Year 2023-24					
APPLIED MECHANICS DEPARTMENT					
Sl.No.	Title of the Projects	Name of the Funding Agency	Name of Principal Investigator	Sanction Date	Sanctioned Amount in Rs.
1	Making Indian Commercial road Vehicles Environment Friendly and Fuel Efficient through Aerodynamics Research	SPARC	Dr. Akshoy Ranjan Paul	28.07.2023	4,757,663
2	Development of novel shape memory polyment composites for shape fixity, recovery and functional properties (Project ID- 2277)	UPCST, Lucknow	Dr. Abhishek Kumar	19.10.2023	972,000
3	Design and Development of Biomechanical Therapeutics to Mitigate Osteoporosis in Postmenopausal Women with Diabetes Mellitu	Ministry of Education, New Delhi	Dr. Abhishek Kumar Tiwari	26.09.2023	3,400,000
4	Synergistic Supply Chain Assessment of Critical Minerals involving Australia and India	CSIRO	Dr. Akshoy Ranjan Paul	14.02.2024	2,728,114
5	Project on Training programs in structural Bioinformatics and Drug Designing	DBT, New Delhi	Prof. R. P. Tiwari Prof. A. K. Ojha, Physics Dr. Ashutosh Mani, BTD Prof. Ramesh Pandey	20.09.2023	1,621,000
BIOTECHNOLOGY DEPARTMENT					
1	(KARYASHALA) on Emerging technologies in point-of-care diagnostics for disease monitoring	SERB, New Delhi	Dr. Seema Nara, Dr. Manisha Sachan,	02.06.2023	500,000
2	Metabolic Engineering of Lactic Acid Bacteria for the high yield of Lactic Acid	DST, New Delhi	Ms. Bhavana, Tondan, Mentor Dr. Rupika Sinha	28.07.2023	2,288,736
3	Investigating the role of nitric oxide and indole acetic acid - releasing chitosan nanoparticles induced alleviation mechanisms of chromium and metsulfuron methyl toxicity in rice and tomato	CSIR, New Delhi	Prof. Shivesh Sharma,	05.07.2023	2,542,560
4	International Travel Scheme for Attending "Goldschmidt 2023 France"	SERB, New Delhi	Dr. Joyabrata Mal	27.09.2023	91,402
5	Assessment of patient derived Exosomal Contents and Computational Analysis: Implication in Early Diagnosis, Risk Assessment for Pancreaticobiliary Cancer in India	DBT, New Delhi	Dr. Girjesh Kumar Patel	22.03.2023	5,360,000
6	Delineating the role of Epigenetic modifications over Soces3 Promoter region in nanosized Titanium dioxide sensitized airways of murine model	DST, New Delhi	Dr. Vani Mishra, WOS-A Under Prof. Shivesh Sharma,	10.11.2023	3,133,014
7	Bio-Technological Intervention for Health, Agriculture and Circular Economy	SERB, New Delhi	Dr. Sangeeta Negi,	05.02.2024	250,000
8	Plant growth-promoting bacteria as bioinoculants for combating drought stress in long bean ( <i>Vigna unguiculata</i> ssp. <i>sesquipedalis</i> )	SERB, New Delhi	Dr. Ashutosh Mani,	23.02.2024	4,015,904
9	Investigating the role of RSPO2 mediated tumor suppressive or oncogenic activity in metastatic CRC cells: A therapeutic approach	SERB, New Delhi	Dr. Sameer Srivastava	05.03.2024	4,466,264
CHEMICAL ENGINEERING DEPARTMENT					
1	Novel Ionic Liquid based Nano-photocatalytic Conversion of WCO into Biodiesel and Triacetin under Synergic Effects of Cavitation & Microwave: A Holistic Technique for Improved Economics with Reduced Damage to Environment and Safety	SERB, New Delhi	Dr. Dipesh Shikchand Patle,	28.04.2023	4,715,138
2	Design and development of a continuous compact integrated hydroponics-biosorption system: A sustainable approach for cultivation of vegetables/herb plants and domestic waste water treatment simultaneously (Project ID - 3086)	UPCST, Lucknow	Dr. Sushil Kumar	20.10.2023	650,000
3	Design of Novel heterogeneous catalysts for CO2 capture from flue gas baed on density fundctonal theory computations	SERB, New Delhi	Dr. Manju Verma,	20.12.2023	4,191,264
COMPUTER SCIENCE & ENGINEERING DEPARTMENT					
1	Artificial Intelligence - Based Real-time Posture Correction System for Desk Workers in Medical Settings using Wearable Devices and Computer Vission (Project ID - 2566)	UPCST, Lucknow	Dr. Rupesh Kumar Dewang, Dr. Ranvijay	11.12.2023	800,000

2	Karyashala on A practical approach to Machine Learning and Deep Learning for Computer Vision applications using high-end computing resources	SERB, New Delhi	Dr. Dushyant Kumar	12.02.2024	500,000
3	A Regularization factor based Novel Framework for Anomaly Detection using Artificial Intelligence	IIT Bhilai, Innovation and Technology Foundation, Durg, Chhattishgarh	Dr. D. K. Yadav, Dr. Mainejar Yadav, REC Sonbhadra	20.03.2024	5,017,000
<b>ELCETRICAL ENGINEERING DEPARTMENT</b>					
1	Coordinated operation of Cloud-hosted Digital Twin for Hydrogen Electrolyzers in Weak Grids [CODE Grid]	SERB, New Delhi	Dr. Navneet Kumar Singh	16.02.2024	2,071,564
<b>ELCETRONICS &amp; COMMUNICATION ENGINEERING DEPARTMENT</b>					
1	ML Enabled RISC-V based i - LoRa SOC for Forest event monitoring, Under Chips to startup (C2S) Programme	MeiTy, New Delhi	Prof. R. K. Nagaria, Co-CI Dr. Santosh Kumar Gupta	19.05.2023	9,600,000
2	Prototype development of a photovoltaic solar cell with a High Conversion Efficiency: An Application of Two-Dimensional Materials	CSIR, New Delhi	Dr. Yogendra Kumar Prajapati	13.07.2023	3,384,160
3	Spectrally Efficient Antenna Design for 5G and 6G using Reconfigurable Intelligent Surface (Project ID - 3054)	UPCST, Lucknow	Dr. Vinay Kumar	19.10.2023	1,383,000
4	Design and development of ML based adaptive optimal control algorithms for efficient regulation of the Wheeled Robots for Disaster Response.	SERB, New Delhi	Dr. Sumit Kumar Jha	18.01.2024	2,408,991
5	Secure message dissemination in cognitive vehicular cloud network for improved road safety (Project ID: 2434)	UPCST, Lucknow	Dr. Arun Prakash	20.10.2023	1,150,000
6	Karyashala on Workshop on high-end Optoelectronics Devices: Fabrication, Characterization, and Functionalization	SERB, New Delhi	Dr. Deepak Punetha	20.02.2024	500,000
<b>GIS CELL</b>					
1	Multi-sensor-multi-platform LiDAR systems integrated with a camera and artificial intelligence for sustainable forest management and urban tree inventories (Project ID- 2568)	UPCST, Lucknow	Dr. Manohar Yadav	26.10.2023	1,386,000
2	Advance Course: InSAR for Disaster Preparedness and Precursors	Indian Institute of Remots Sensing, Dehradun	Dr. Ramji Dwivedi	27.01.2022	912,500
3	Awareness Workshop: Advances in Geospatial Techniques for disaster Mitigation	Indian Institute of Remots Sensing, Dehradun	Dr. Ramji Dwivedi	13.01.2022	247,000
<b>HUMANITIES &amp; SOCIAL SCIENCE</b>					
1	Explorative Study of Expenditure based Model of Income Tax to curb under-reporting of income: Strategies for efficient and effective Direct Tax collection system	ICSSR, New Delhi	Dr. Ravindra Tripathi	03.05.2023	1,500,000
<b>MATHEMATICS DEPARTMENT</b>					
1	Roll of small solid particles to control the damage due to storage explosion	UPCST, Lucknow	Dr. Gorakh Nath	26.10.2023	1,136,000
<b>MECHANICAL ENGINEERING DEPARTMENT</b>					
1	Experimental Investigations on Nucleate pool boiling with enhanced surface geometries using EDM process	SERB, New Delhi	Dr. Ashwini Kumar Yadav	22.05.2023	1,721,500
2	Prototype design and performance analysis of an energy efficient domestic biogas cook-stove burner	SERB, New Delhi	Dr. Bireswar Paul	18.03.2024	4,284,479
<b>PHYSICS DEPARTMENT</b>					
1	Achieving high tunability of charge to spin current interconversion in irradiated 2D spin Hall material/ferromagnet heterostructure	Inter-University Accelerator Centre (An autonomous Centre of UGC)	Dr. Surbhi Gupta	10.01.2024	25,000
2	Swift heavy ion assisted control of resistive switching in epitaxial ZrO2 thin films for emerging memories	Inter-University Accelerator Centre (An autonomous Centre of UGC)	Dr. Sandeep Kumar	10.01.2024	25,000
<b>SCHOOL OF MANAGEMENT STUDIES</b>					
1	Developing a framework and designing assessment metrics for cyclic social innovation for circular economy in India	SPARC	Dr. Tripti Singh, Dr. Yatish Joshi, Foreign CO-PI	28.07.2023	4,559,690
2	Analysing the Behavioural Intention of Instructors to Adopt Blockchain in Grading and Certification	SPARC	Prof. Ganesh P Sahu	28.07.2023	4,999,766

3	An Assessment of the Atal Pension Yojana (APY) Awareness and Penetration in Prayagraj Division of Uttar Pradesh	ICSSR, New Delhi	Prof. Tanuj Nandan, Co-Ordinator Dr. Ravindra Tripathi & Other	25.09.2023	<b>806,250</b>
4	Assessing the Reach and Socio-economic Impact of Skill India Mission (PM Kaushal Vikas Yojana): A Rigorous	ICSSR, New Delhi	Dr. G. P. Sahu	25.09.2023	<b>1,500,000</b>
5	Green Energy Management & Audit System Usin IoT: A Study Based in Uttar Pradesh (Project ID - 3109)	UPCST, Lucknow	Dr. Tanuj Nandan, Current PI	26.10.2023	<b>1,386,000</b>
6	Assessing the role of Social Innovation in Promoting Circular Economy Practices in India	ICSSR, New Delhi	Dr. Richa Singh Dubey, Senior Fellowship Under, Prof. Tripti Singh	11.01.2024	<b>580,000</b>