

SCHEME FOR TRANSFORMATIONAL AND ADVANCED RESEARCH IN SCIENCES (STARS)

Indian Institute of Science, Bangalore - 560012

Results of first call (April 2019)

Date: 28.10.2019

Reference no.: STARS/Rec-final/Apr19/01

The following proposals have been recommended for funding under the first call (Apr 2019) of the STARS scheme. The details of the sanctioned grant along with the terms and conditions will be communicated to the principal investigators and their host institutions. Kindly respond to the notification given at the end of the document.

P. ID	Domain	Title	Principal Investigator	Institution
108	Biological Sciences	A targeted engineering approach to study PPAR α as a metabolic regulator for regression of cardiac hypertrophy	Dr.Sagartirtha Sarkar	University of Calcutta
116	Nano Sciences	2D-TMD and carbon dot embedded metal-oxide nanomaterials for ultrasensitive and ultraselective H ₂ S detection	Dr.Shaibal Mukherjee	IIT, Indore
122	Chemical Sciences	Fluorometric polymeric sensor for speedy formalin detection in commercial fishes	Dr.Priyadarsi De	IISER, Kolkata
127	Biological Sciences	Mosquito biodiversity and insecticide resistance documentation using phenotypic, barcoding and metabarcoding methods	Dr. Rama Vaidyanathan	Dr.MGR Educational and Research Institute
135	Nano Sciences	Pb-free perovskite for commercially deployable high-efficiency thin-film photovoltaics	Dr.SushobhanAvasthi	IISc, Bangalore
145	Nano Sciences	Silver nanowire-based transparent and flexible tactile and force sensors	Dr. Parasuraman Swaminathan	IIT, Madras
148	Nano Sciences	Fundamental study of organic solvent transport in nanochannels for energy and environment applications	Dr. Vishal Nandigana	IIT, Madras
156	Physical Sciences	Engineering unconventional superconductivity in artificial geometry of quantum materials	Dr. Tanmoy Das	IISc, Bangalore
158	Biological Sciences	Single domain antibodies as novel therapeutics for snakebites.	Dr.Sharvan Sehrawat	IISER, Mohali

163	Earth Sciences	Does The Ediacaran Shuram Excursion represent a globally synchronized diagenetic event?	Dr. Melinda Kumar Bera	IIT, Kharagpur
167	Biological Sciences	Elucidation of mechanism and pharmacology of purinergic channels through cryoEM imaging	Dr. Aravind Penmatsa	IISc, Bangalore
171	Biological Sciences	Structural basis of the interaction between Staphylococcus aureus pore forming toxins and GPCRs: A novel framework for combating antimicrobial resistance	Dr. Somnath Dutta	IISc, Bangalore
175	Chemical Sciences	Cavity catalysis (CAVCAT): Accelerating Chemical Reactions by Coupling to Vacuum Field	Dr.Jino George	IISER, Mohali
180	Biological Sciences	Understanding the molecular dynamics of Ying yang1 (Yy1) during retina regeneration	Dr. Rajesh Ramachandran	IISER, Mohali
182	Data Sciences	On some challenging boundary-value-problems arising in the vibro-acoustical study of Indian musical instruments	Dr. Anurag Gupta	IIT, Kanpur
202	Chemical Sciences	Room Temperature Capture and Photocatalytic Reduction of CO ₂ on Iron Oxide-Based Nanomaterial Surfaces	Dr.Atanu Bhattacharya	IISc, Bangalore
215	Chemical Sciences	High entropy alloy nanoparticles (HEA-NPs) supported CeO ₂ catalyst for Dry reforming of CO ₂ .	Dr. Sudhanshu Sharma	IIT, Gandhinagar
224	Biological Sciences	Epigenetic regulation and its inhibition as a mechanism to block GPI anchor biosynthesis in C. albicans	Dr. Rohini Muthuswami	JNU
226	Nano Sciences	Topotronic device design for Ultra-low-power logic and Quantum Computing	Dr.BhaskaranMuralidharan	IIT, Bombay
229	Biological Sciences	Antibacterial polymers to combat drug-resistant bacteria	Dr. Abhijit Mishra	IIT, Gandhinagar
231	Nano Sciences	Harnessing low cost, high efficiency stable photovoltaics based on layered hybrid perovskites	Dr.Rupak Banerjee	IIT, Gandhinagar
238	Nano Sciences	Ferroelectric and Multifunctional thin films towards photovoltaic applications	Dr.Debraj Choudhury	IIT, Kharagpur

240	Physical Sciences	Studying the marriage of quantum spin liquids with other novel states of electronic matter to discover new functionalities	Dr. Yogesh Sing	IISER, Mohali
245	Biological Sciences	Potential use of a BBX protein in engineering drought tolerance in Soybean	Dr. Sourav Datta	IISER, Mohali
248	Biological Sciences	Calcium permeable onco-TRP channels as diagnostic markers and therapeutic targets for cancer	Dr.Appu Kumar Singh	IIT, Kanpur
250	Chemical Sciences	Electrophilic Aluminum Compounds for Catalytic CO ₂ Hydrosilylation	Dr. Ajay Venugopal	IISER, Thiruvananthapuram
253	Physical Sciences	Femtosecond laser processed spider silk as a novel 3D-scaffold and biosensor	Dr. Kamal Singh	IISER, Mohali
255	Chemical Sciences	From Waste to Asset using Cheap and Abundant Alkaline Earth Metal Catalysts: Carbon dioxide as a building block for Methanol Formation and N-Methylation of Amines	Dr.DebasisKoley	IISER, Kolkata
257	Chemical Sciences	Photocatalysis Employing Combination of Plasmonic Nanoparticle and Molecular Catalyst: Probing Spatiotemporal Interfacial Charge/Energy Transfer Dynamics	Dr. Vishal Govind Rao	IIT, Kanpur
261	Data Sciences	Short and Long-term Fog Predictions using Data Science	Dr. Arnab Bhattacharya	IIT, Kanpur
267	Biological Sciences	A biomimetic ECM protein-based bioadhesive graft copolymer for implants - Targeting enhanced soft tissue integration and osseointegration	Dr. Nishant Chakravorty	IIT, Kharagpur
270	Chemical Sciences	Biodegradable, Biocompatible Polyurethanes from Alternative, Non-toxic Amino Acid based Monomers	Dr. Tushar Jana	University of Hyderabad
271	Physical Sciences	Hybrid photonic-plasmonic nanostructures for quantum photonics	Dr.RamachandraraoYalla	University of Hyderabad
272	Physical Sciences	Disentangling the role of the Spin Mixing Conductance on the Spin Seebeck Effect	Dr. Sunil Nair	IISER, Pune

274	Biological Sciences	Study of the mechanisms of cell death and immunomodulatory responses triggered by Thermostable Direct Hemolysin, a major virulence factor of <i>Vibrio parahaemolyticus</i>	Dr.Kausik Chattopadhyay	IISER, Mohali
278	Chemical Sciences	Inorganic-Organic Hybrid Solids as Ion-Conduction Membranes in Charge Storage Devices	Dr. Ramanathan Vaidhyanathan	IISER, Pune
283	Chemical Sciences	Using machine learning to develop a mechanical metric for local hydrophobicity	Dr. Vishwanath Haily Dalvi	IIT, Bombay
284	Chemical Sciences	Bio-catalysis driven microscale flow at functional organic interfaces for healthcare applications	Dr.SubhabrataMaiti	IISER, Mohali
293	Physical Sciences	Study of the interaction between synthetic sequence-defined macromolecules and lipid-membrane towards developing antibacterial and anticancer drug	Dr.MintuPorel	IIT, Palakkad
296	Biological Sciences	A systems approach to decipher the mechanisms of activation of CpxAR two-component system by long-chain fatty acids, a pathway implicated in antibiotic resistance and virulence of gram-negative bacteria	Dr. Rachna Chaba	IISER, Mohali
297	Biological Sciences	Systematic evaluation of the role of cellular cathepsins in influenza infection and identification of novel anti-influenza drug targets	Dr.Indranil Banerjee	IISER, Mohali
298	Biological Sciences	Molecular and structural studies of the role of host adhesion molecules in facilitating LpqH (19 kDa surface antigen) mediated entry of <i>Mycobacterium tuberculosis</i> into pneumocytes	Dr.DibyenduSamanta	IIT, Kharagpur
302	Nano Sciences	Design and Development of Multi-bit Phase Change Memory for High Density, High Speed Non-volatile Random Access Memory (NVRAM) Applications	Dr.AnbarasuManivannan	IIT, Madras
304	Physical Sciences	Spin orbit torque driven domain wall synapse based hardware neural network	Dr.Debanjan Bhowmik	IIT, Delhi

308	Physical Sciences	Integration of 2D materials in organic and organic-inorganic hybrid solar cells: Insights into charge extraction and transport	Dr. Manoj A G Namboothiry	IISER, Thiruvananthapuram
310	Chemical Sciences	Probing the Molecular Orientation and Charge transfer Dynamics at Interfaces for the Design and Fabrication of More Efficient Optoelectronics Devices	Dr. Ravindra Pandey	IIT, Roorkee
320	Chemical Sciences	NHC-Supported Cobalt Dinitrogen Complexes: Synthesis and Application in Catalytic Transformation of Molecular Nitrogen into Ammonia	Dr.Geetharani K	IISc, Bangalore
325	Biological Sciences	Pathology on a Spinning Disc	Dr. Arnab Sarkar	IIT, BHU-Varanasi
328	Biological Sciences	Therapeutic induction of translational readthrough across thalassemia-causing premature stop codon in beta-globin mRNA	Dr. Sandeep Eswarappa	IISc, Bangalore
333	Chemical Sciences	Chemical tuning of crystal-field topology around the f-element ions to tailor single-molecule magnetism	Dr. Arun Kumar Bar	IISER, Tirupati
334	Nano Sciences	Printed 2D transition metal dichalcogenide transistors aiming at high mobility intra-flake transport	Dr.Subho Dasgupta	IISc, Bangalore
336	Nano Sciences	Investigation of nanoscale heat transport at solid-liquid interfaces for engineering tailored nanostructures in thermal interface systems	Dr.SARITH P SATHIAN	IIT, Madras
345	Physical Sciences	Effect of electron-phonon coupling on the topological phonons	Dr.Dipanshu Bansal	IIT, Bombay
358	Physical Sciences	Local probe of impurity effects in Kitaev systems	Dr.Avinash V. Mahajan	IIT, Bombay
363	Physical Sciences	Quantum point contact charge amplifiers embedded in a planar superconducting microwave resonator: Quantum-limited charge sensing and counting	Dr. Madhu Thalakulam	IISER, Thiruvananthapuram
367	Data Sciences	Physics Guided Data Science Approach for Predictive Understanding of Hydrological Processes	Dr. Udit Bhatia	IIT, Gandhinagar

369	Biological Sciences	Unravelling the molecular mechanism of DEAD-box RNA helicase 3 (DDX3X) mediated regulation of influenza virus RNA synthesis and virus life cycle.	Dr. Arindam Mondal	IIT, Kharagpur
373	Earth Sciences	Understanding the Critical Orientation for Seismic Excitation and Developing Associated GMPEs for Indian Subcontinent	Dr. Dhiman Basu	IIT, Gandhinagar
374	Chemical Sciences	Mitochondria-targeted Photo-triggered Drug Delivery System: A Strategy of Prodrug Activation and Real-time Monitoring of Drug Release	Dr.Pijus Kumar Sasmal	JNU, New Delhi
375	Chemical Sciences	Liquid Junction Solar Cells with Silicon Nanowires Photoanodes Modified with Hole Conducting Materials	Dr.Melepurath Deepa	IIT, Hyderabad
384	Biological Sciences	An integrated approach for developing a liposome based point of care paper diagnostic kit for dual detection of Dengue virus infection	Dr.SUVANKARGHORAI	SRM IST
385	Biological Sciences	Investigation on the molecular mechanism of the tumor-suppressor and anti-cancerous functions of Arginyltransferase 1 (Ate1)	Dr. Akhilesh Kumar	BHU, Varanasi
388	Data Sciences	SPADE - Stochastic ParMOON for Analysis, Design and Estimation	Dr.Sashikumaar Ganesan	IISc, Bangalore
391	Data Sciences	A multiple-point geostatistics based approach to extend the spatial extent and data period of WRF output at high-spatial resolution and to predict realizations of hourly weather data over the Northwest Himalayas	Dr. Sanjeev Kumar Jha	IISER, Bhopal
395	Data Sciences	Design and Implementation of Efficient and Secure Searchable Encryption	Dr.Debdeep Mukhopadhyay	IIT, Kharagpur
396	Physical Sciences	Quantum Emitters based on atomic defects in diamond and 2D materials	Dr. V. Praveen Bhallamudi	IIT, Madras
401	Earth Sciences	Ground Motion Prediction for Site-Specific Seismic Hazard Analysis: demonstrated case studies from Gujarat, western India	Dr. Sanjay Singh Bora	IIT, Gandhinagar

405	Nano Sciences	Electrochemical fabrication of sub-nm pores on mica and Si-nitride sheets for desalination applications	Dr.GopinadhanKalon	IIT, Gandhinagar
409	Biological Sciences	Silica-induced Nephrotoxicity: Implications in Uddanam Chronic Kidney Disease of Unknown Origin	Dr. Anil Kumar Pasupulati	University of Hyderabad
416	Biological Sciences	Unravelling the role of Phytochrome B in temperature-mediated regulation of growth and defense responses in Rice (<i>Oryza sativa</i> L.)	Dr.Sreeramaiah N. Gangappa	IISER, Kolkata
421	Nano Sciences	Design, Growth and Fabrication of InGaN/GaN Based Direct Emission Green Laser Diode Operating in the Emission Range of 500-530nm.	Dr.ApurbaLaha	IIT, Bombay
424	Biological Sciences	Investigating structure function relationship of the ATPase-GTPase duo FlhFG that critically regulates flagellar gene transcription and chemotaxis of <i>Vibrio cholerae</i>	Dr.Jhimli Dasgupta	St. Xavier's College, Kolkata
426	Chemical Sciences	Deciphering Chemical Code of Extracellular matrix in Cancer Biology	Dr. Raghavendra Kikkeri	IISER, Pune
428	Nano Sciences	Metal nanostructure assisted plasmonic hot electron induced phase transformation in 2D-transition metal di-chalcogenides for hydrogen evolution reaction	Dr.Santanu Das	IIT, BHU-Varanasi
435	Chemical Sciences	Transforming Natural Antimicrobial Peptides into Peptidomimetics to Access Potential Antibiotics	Dr.Hosahudya Gopi	IISER, Pune
440	Nano Sciences	Handheld electronic tool for impedance-sensing detection of mercury in water using aptamer templated metal nanoparticles	Dr. Chetan Singh Thakur	IISc, Bangalore
443	Nano Sciences	Design and implementation of small scale environmental energy harvesters by piezoelectric / multiferroic polymer nanocomposites	Dr.RANEESH B	Catholicate College
450	Chemical Sciences	Microelectromechanical Sensor based on Multinuclear Spin-State Switching Molecular Assemblies	Dr.Abhishake Mondal	IISc, Bangalore

454	Biological Sciences	The effect of ageing and neurodegeneration on Memory	Dr. Kavita Babu	IISER, Mohali
473	Chemical Sciences	Catalytic Reduction of CO ₂ under Ambient Condition: A Metal-free Approach using Organic Radicals	Dr.Swadhin K. Mandal	IISER, Kolkata
498	Nano Sciences	Ultra-high Sensitivity Infrared Photodetector Using Cascaded Gain	Dr.Kausik Majumdar	IISc, Bangalore
504	Earth Sciences	Novel whole-Earth models for planetary magnetism	Dr. Binod Sreenivasan	IISc, Bangalore
507	Biological Sciences	Nucleolus in control of breast tumor heterogeneity	Dr.Bramanandam Manavathi	School of Life Sciences, University of Hyderabad
508	Biological Sciences	Improved root nodule formation in groundnut by overexpressing genes linked with receptor-mediated signalling	Dr. Swarup Roy Choudhury	IISER, Tirupati
509	Nano Sciences	On the reduction of iR-losses, flow optimization and identifying alternative membranes to Nafion for 1kW-4kWh vanadium redox flow battery suitable for residential use	Dr.Kothandaraman Ramamurthy	IIT, Madras
523	Biological Sciences	Resisting Resistance: Precise Inhibitors against Ribosomal Methyltransferases involved in Antimicrobial Resistance	Dr. Ruchi Anand	IIT, Bombay
524	Biological Sciences	Benchmarking herbal Ayurvedic medicines using NMR metabolomics techniques	Dr. Kavita Dorai	IISER, Mohali
527	Nano Sciences	Optimization of nanocatalysts for sustainable conversion of food wastes into value added products	Dr.EESHANKALITA	Tezpur University
528	Biological Sciences	Designing and large scale production of recombinant single chain antibody (scFv) against human Tumor Necrosis Factor alpha (hTNF- α)	Dr.YOGENDER PAL KHASIA	University of Delhi
534	Nano Sciences	Optomechanical systems for mass spectrometry	Dr.Akshay Naik	IISc, Bangalore
537	Nano Sciences	Whispering Gallery enabled light scattering: Achieving enhanced efficiency in perovskite quantum dot sensitized mesoporous metal oxide whisperonic solar cells	Dr.Sudakar Chandran	IIT, Madras

548	Biological Sciences	Actin Cytoskeleton Mediated Regulation of Golgi Architecture and Vesicular Trafficking by trans-Golgi Associated Protein nPIST	Dr. Sankar Maiti	IISER, Kolkata
560	Chemical Sciences	Cavitand-based porous organic polymer to molecular nanocage: catalysts for metal-free CO ₂ conversion	Dr. Abhijit Patra	IISER, Bhopal
561	Physical Sciences	Borophene: a new entrant in flatland en route to synthetic materials design	Dr. Aparna Deshpande	IISER, Pune
563	Biological Sciences	Development of Light-Gated BLUF Coupled Protease Based Optogenetic Tools for Modulating Sumoylation Mediated Neural Signaling and Synapses Plasticity	Dr. Suneel Kateriya	JNU
566	Physical Sciences	Atomistic to circuit modeling of 2D channel based spin logic gates.	Dr. Aniket Singha	IIT, Kharagpur
572	Nano Sciences	Development of a novel class of wide band gap thermoelectric materials: quaternary chalcogenides Cu ₂ NiSnQ ₄ (Q=S,Se)	Dr.ANBALAGAN G	University of Madras
581	Biological Sciences	"Structural studies on Mycobacterium Ribosome-CgtA complexes by cryo-EM towards identifying potential drug target(s)"	Dr.ParthaPratim Datta	IISER, Kolkata
583	Biological Sciences	Synthesis and evaluation of diverse N-functionalized heterocyclic hybrids as multi-target directed ligands for neuroprotective and neurorestorative therapies	Dr. Senthil Raja A	IIT, BHU-Varanasi
584	Biological Sciences	Identification of novel mitochondrial substrates for dengue proteases and development of potential anti dengue virus protease molecules to protect the mitochondrial homeostasis	Dr.MusturiVenkataramana	University of Hyderabad
591	Biological Sciences	Investigating the role of anti-inflammatory drugs on migrating border cell in Drosophila oogenesis: an excellent model for studying tumor metastasis.	Dr. Mohit Prasad	IISER, Kolkata

604	Chemical Sciences	Characterization and biofouling studies on Silver incorporated Sulphonated Poly Ether Ether Ketone (SPEEK) membranes for microbial fuel cell applications	Dr. Sangeetha D	Anna University, Chennai
607	Biological Sciences	Optimizing the deployment of Host Mediated Pathogen Gene Silencing (HIGS) for enhancing resistance against Sclerotinia sclerotiorum, causal agent for stem rot in plants.	Dr. Jagreet Kaur	University of Delhi
614	Biological Sciences	Evaluation of Genetically Attenuated Whole Cell Vaccines against Multi Drug Resistant Acinetobacter baumannii and Klebsiella pneumoniae infections in Murine Model	Dr. Ranjana Pathania	IIT, Roorkee
626	Nano Sciences	Improving pulse (Chick pea and soybean) production and nitrogen content of the soil by nano iron pyrite seed treatment	Dr. Mainak Das	IIT, Kanpur
629	Chemical Sciences	Design of Efficient, Recyclable and Sustainable Immobilised Molecular-Pincer Group (VIII) Metal Catalytic Systems for Fine Chemical Synthesis Via Direct Functionalisation of Carbon Dioxide	Dr. Akshai Kumar A S	IIT, Guwahati
631	Nano Sciences	Development of Large Area Two Dimensional Layered Quantum Material for Memristor Applications.	Dr. Abhishek Misra	IIT, Madras
632	Biological Sciences	Model Development for clinician to predict the bone and soft tissue strength and quality for type 2 Diabetic patients.	Dr. NAVIN KUMAR	IIT, Ropar
634	Biological Sciences	Employing Engineered Ubiquitin to Understand the Ubiquitin Proteasome Network Dynamics	Dr. Parul Mishra	University of Hyderabad
639	Nano Sciences	Mitigation of food borne pathogens using combination of natural food grade peptides decorated on nanoparticles; development of safe and active antimicrobial packaging film.	Dr. Naveen Kumar Navani	IIT, Roorkee
641	Nano Sciences	Green synthesis and characterization of biocompatible multicolor luminescent carbon dots for bioimaging and/or sensing applications	Dr. Narayan Chandra Das	IIT, Kharagpur

643	Chemical Sciences	Integrating metabolic and protein engineering for the production of sustainable biofuels	Dr.Supratim Datta	IISER, Kolkata
647	Physical Sciences	Solid state quantum optical devices using 2D materials	Dr.SajalDhara	IIT, Kharagpur
651	Earth Sciences	Subsistence and symbolism in prehistoric India: Understanding environmental contexts in relation to Homo sapiens dispersals and adaptations	Dr.Parth R. Chauhan	IISER, Mohali
653	Nano Sciences	Development of piezo-MEMS based microfluidic density sensor for real time condition monitoring of human blood	Dr. Rudra Pratap	IISc, Bangalore
654	Nano Sciences	Phase selective CVD growth with controllable 1T-to-1H phase transition in WS ₂ monolayer for optoelectronic device applications	Dr. VISWANATH BALAKRISHNAN	IIT, Mandi
655	Chemical Sciences	Cost effective, ultralight and highly recyclable cellulose nanofabrilated hybrid aerogels for oil/water separation	Dr. Pradip Kumar Maji	IIT, Roorkee
661	Biological Sciences	Restoration of the intestinal barrier in Enteropathogenic E. coli infections: Lysosome and cytoskeleton pathways as novel drug targets.	Dr.Saima Aijaz	JNU
662	Physical Sciences	Diamond Quantum Sensors for Nanomagnetometry of Magnetic 2D Materials	Dr.Phani Kumar Peddibhotla	IISER, Bhopal
666	Biological Sciences	NANOSOL: A MULTI FUNCTIONAL ADVANCED THERAPEUTIC BURN WOUND DRESSING	Dr. Sundar Manoharan	SIST, Chennai
672	Biological Sciences	Understanding the mechanism of Mg ²⁺ mediated SOS induction in Mycobacterium tuberculosis to decipher its role in antibiotic resistance and survival in macrophage	Dr. Saravanan Matheshwaran	IIT, Kanpur
679	Nano Sciences	Development of NiCo ₂ O ₄ decorated MoS ₂ and rGO nanocomposites based flexible solid state supercapacitor for energy storage applications	Dr. R Jayavel	Anna University, Chennai
693	Earth Sciences	Ocean-Crust-Mantle Interaction: An elemental and isotopic study of the fluid-rock interaction in ocean floor and subduction zone	Dr. Rajneesh Bhutani	Pondicherry University

705	Data Sciences	Speech based articulatory visualization tool for assessment of patients with amyotrophic lateral sclerosis (ALS)	Dr. Prasanta Kumar Ghosh	IISc, Bangalore
708	Biological Sciences	Structural characterization of functional prion domain of mammalian cytoplasmic polyadenylation element-binding protein 3 (CPEB3)	Dr.Vinesh Vijayan	IISER, Thiruvananthapuram
709	Biological Sciences	Delineating the molecular basis of Rho GTPase mediated actin degradation and its implication in amoebic encystation	Dr.Sunando Datta	IISER, Bhopal
713	Nano Sciences	Photonic metasurfaces for enhanced IR absorption and its applications for sensing and heat absorbing windows	Dr. Sachin Kumar Srivastava	IIT, Roorkee
729	Biological Sciences	Structure, function and molecular mechanism of transcription regulators in Mycobacterium spp.	Dr. RAMANATHAN NATESH	IISER, Thiruvananthapuram
730	Biological Sciences	From the Gut: SUMO cycles its way into gastrointestinal disorders	Dr. Girish Shriram Ratnaparkhi	IISER, Pune
743	Earth Sciences	Operational coastal flood management through short-to-medium range (real-time) flood vulnerability mapping in the Brahmani-Baitarani River Basin integrating human and climate induced impacts	Dr.Bhabagrahi Sahoo	IIT, Kharagpur
751	Nano Sciences	Degenerate Two Dimensional Semiconductor Nanostructures for Multifunctional Applications	Dr. Vasu Kuraganti	VIT
759	Biological Sciences	Multiplexed fluorophore detection on a miniaturized optofluidic platform for affordable healthcare and other applications	Dr. Anil Prabhakar	IIT, Madras
766	Earth Sciences	Comparing the disparate impacts of Oak and Chir pine tree species on their local hydrological and hydroclimatic regimes in the west-central Himalayas	Dr. Jaya Khanna	IIT, Roorkee
774	Nano Sciences	Development of silicon photonics platform for sensing at mid-IR wavelengths	Dr. Emani Naresh Kumar	IIT, Hyderabad
778	Physical Sciences	Reprogrammable Polymer Based Soft Actuators	Dr.Dillip Kumar Satapathy	IIT, Madras

779	Biological Sciences	Investigation of autophagosome-lysosome fusion defect in a Drosophila model of MPS VII to identify potential drug targets and druggable molecules	Dr.Rupak Datta	IISER, Kolkata
782	Chemical Sciences	Developing a Recurrent Neural Network-Based Algorithm for Sustainable Design of Hydrogen Storage Materials	Dr. K V Jovan Jose	University of Hyderabad
784	Biological Sciences	Microfluidic Chip to Capture and Lyse Pathogen from Body Fluids	Dr.SuhanyaDuraismy	IIT, Hyderabad
787	Earth Sciences	Flood risk assessment in tropical rivers in the Anthropocene and under climate change scenario using hydro-geomorphic modeling	Dr. Vikrant Jain	IIT, Gandhinagar
818	Biological Sciences	Epigenetic modulation of centromeres to produce in vivo haploids by triggering uniparental genome elimination in plants	Dr. Ravi Maruthachalam	IISER, Thiruvananthapuram
820	Biological Sciences	Detection of early onset of myocardial infarction at the point of care using a hybrid nanomaterial platform	Dr.Subinoy Rana	IISc, Bangalore

Important notification to the principal investigators:

As directed by the Ministry of Human Resource Development, it is mandatory that all the host institutions should comply with the PFMS-EAT module to receive the grant. Please refer to the following documents to know about the EAT module.

EAT FAQ: https://www.mplads.gov.in/mplads/UploadedFiles/FAQEAT_39.pdf

EAT user manual: https://aim.gov.in/pdf/PFMS_User_Manual-EAT.pdf

We request the principal investigators to email us the status of their host institution with the PFMS-EAT compliance with “<proposal ID> EAT status” as subject title to support.stars@iisc.ac.in as soon as possible.
