

## Ministry of Science and Technology Department of Science & Technology International Division

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Under the joint call for proposal-2023 with German Academic Exchange Service (DAAD) and the Department of Science and Technology (DST), total 32 common proposals were jointly received and shortlisted for evaluation for the financial support for exchange visits between scientists and researchers of India and Germany. Based on scientific merit, complementarities of the project objectives, scientific strengths of the project coordinators and national priorities, the Department of Science & Technology, India and German Academic Exchange Service (DAAD) have jointly decided to support following 15 proposals. Project coordinators are being informed separately to complete administrative formalities for release of DST grant

SI.	TPN	Project Title	Indian PI	German PI
1.	103870	Succinct Representation of Grammars Theory and Applications	Dr. Lakshmanan Kuppusamy, Vellore Institute of Technology, Vellore	Dr. Henning Fernau, Universität Trier, Trier
2.	103904	Merging approaches to improve estimates of methane emissions from wetlands	Dr. Alka Singh, Amrita Vishwa Vidyapeetham Amritapuri Campus, Amritapuri	Prof. Mark O Gessner, Leibniz Institute of Freshwater Ecology and Inland Fisheries IGB, Berlin
3.	103896	Studying Field Cancerization in Controlled Patterns	Dr. Medhavi Vishwakarma, Indian Institute of Science, Bangalore	Prof. Elisabetta Ada Cavalcanti Adam, University of Bayreuth, Bayreuth
4.	103869	Fate of Microplastics in Wastewater Recycling Systems for Indirect Groundwater Recharge and its Application in Irrigation Practices	Dr. Lakshminarayana Rao Indian Institute of Science, Bangalore	Prof. Christina Bogner, University of Co-logne, Co- logne
5.	101423	Sand dune migration and dust emission mitigation through scaled wind tunnel investigations and numerical program SAND STOP models	Dr. Pradeep Kumar Dammala, Indian Institute of Technology Jodhpur	Prof. Eric Josef Ribeiro Parteli, University of Duisburg-Essen, Duisburg

6.	103976	Development and analysis of higher- order structure- preserving numerical methods for hyperbolic balance laws	Prof. S V Raghurama Rao, Indian Institute of Science, Bangalore, Karnataka	Prof. Maria Lukacova, Johannes Gutenberg- University, Mainz
7.	104001	Next generation N- heterocycle enriched organic scaffold mediated suitable MOFs following proper nano-material embedment advancement in POCT device-based VOC sensing	Dr. Priyabrata Banerjee, Central Mechanical Engineering Research Institute, Durgapur	Dr. Christoph Janiak, Heinrich-Heine University Düsseldorf, Düsseldorf
8.	103967	Machine Learning- Driven Capacity Assessment for Lightweight Shell Structures	Dr. Kshitij Kumar Yadav, IIT-BHU, Varanasi	Dr. Georgios Tzortzinis, Technische Universität Dresden, Dresden
9.	103857	Towards free-space quantum key distribution platform using tethered balloons	Prof. Sushil Mujumdar, Tata Institute of Fundamental Research (TIFR), Mumbai	Prof. Harald Weinfurter, Ludwig Maximilian University of Munich, Munich
10.	103898	Advanced Mechanical Characterization of Bituminous Binders and Mastic Using Innovative Rheological Tools and Computational Models	Prof. Murali Krishnan, Indian Institute of Technology Madras, Chennai	Dr. Pengfei Liu, Institute of Highway Engineering ISAC, Aachen
11.	103930	Towards more resilient oil crops understanding barriers to use of crop wild relatives in rapeseed and rapeseed-mustard improvement	Dr. Mahesh Rao, National Institute for Plant Biotechnology - ICAR, New Delhi	Prof. Annaliese S Mason, Institute of Crop Science and Resource Conservation INRES, Bonn
12.	103867	Three-dimensional Atomic Level Characterization of Defects, Interfaces and Strain in Wet Chemically Synthesized 2D Heterostructures using Advanced Electron	Prof. Ravishankar N, Indian Institute of Science, Bengaluru	Prof. Knut Muller Caspary, Ludwig-Maximilians- Universität München, Munich

		Microscopy and Simulation Techniques		
13.	103840	Integrated Sensing and Communication for V2X Networks in Sub- THz band Analytical Modelling and Prototype Implementation of Air Interface	Dr. Atul Kumar, IIT BHU Varanasi	Dr. Ahmad Nimr, TU Dresden, Germany
14.	103935	Granular materials and dense suspensions – complex mechanics and complex flow	Prof. Prabhu R Nott, Indian Institute of Science, Bengaluru	Prof. Sven Grundmann, Rostock University, Rostock
15.	102697	Cellulose Aerogels as Multifunctional and Sustainable Alternatives for Thermal and Acoustic Insulation Applications for Aerospace and Automobiles	Dr. Pradip Kumar Maji, Indian Institute of Technology Roorkee	Prof. Ameya Rege, German Aerospace Center DLR, Cologne