



**Department of Science & Technology  
(International Bilateral Co-operation Division)**

**Result**

**India-Slovenia Bilateral Scientific and Technological Cooperation  
Projects for Slovenian-Indian scientific cooperation  
2022–2024**

Based on the Agreement between the Government of the Republic of India and the Government of the Republic of Slovenia on Scientific and Technological Cooperation, the call for proposals for joint research projects, announced by the Ministry of Science and Technology of the Republic of India and the Slovenian Research Agency respectively.

A total of 112 joint projects were received and evaluated independently on both sides. After the extensive evaluation process, the following 20 projects were recommended for support in principle after getting mutual consent from both sides. The individual letter will be sent to the respective Principal Investigator.

S. Nos.	Indian PI and Host Institution	Slovenian PI and Host Institution	Project Title
1	B. Venkata Manoj Kumar Indian Institute of Technology Roorkee, U.P	Mitjan Kalin University of Ljubljana, Faculty of Mechanical Engineering	Wear resistant self-lubricating Cu-based materials for electrical sliding contact applications
2	Pradipta Bandyopadhyay Jawaharlal Nehru University, New Delhi	Tomaž Urbič University of Ljubljana, Faculty of Chemistry and Chemical Technology	Path toward an ultrafast model of solvation of molecules and its connection to complex processes in biology
3	Abhishek Vaish Indian Institute of Information Technology, Allahabad, Prayagraj, U. P.	Simona Sternad Zabukovšek University of Maribor, Faculty of	A Hybrid Platform for real time intrusion detection framework based on Cyber Security Intelligence monitoring system

		Economics and Business	
4	Surender Kumar Sharma Dept. of Physics, Central University of Punjab, Bathinda, Punjab	Darko Makovec Jožef Stefan Institute	Investigation of ferrimagnetic vortex iron oxide (FVIO) based nanoparticles for magnetic hyperthermia applications
5	Satyendra Singh Special Centre for Nanoscience, Jawaharlal Nehru University, New Delhi	Hana Uršič Nemevšek Jožef Stefan Institute	ABO <sub>3</sub> -type perovskite structured ferroelectric ceramics for future sensors, actuators and solid-state refrigerators
6	Nitin Labhsetwar CSIR-National Environmental Engineering Research Institute (CSIR- NEERI), Nagpur	Gregor Žerjav National Institute of Chemistry	Methane-CO <sub>2</sub> Dry-reforming over Nano-shaped Bimetallic CeO <sub>2</sub> and Ni based Catalysts with In-situ/Operando of their Working States
7	Sakya Singha Sen CSIR-national Chemical Laboratory, Pune	Gašper Tavčar Jožef Stefan Institute	Silicon and Fluorine: A Swiss-Army-Knife Combination for New Mixed Polymerization Blocks, Protection of Ozone Layer and CF <sub>3</sub> transfer
8	P. Satish Kumar Department of Electrical Engineering, University College of Engineering, Osmania University, Hyderabad	Vrtič Peter University of Maribor, Faculty of energy technology	Performance Enhancement of Grid Connected Multilevel Inverter based Wind Energy Conversion System with Low Voltage Ride Through Capability using Power Conditioners
9	Satish Kumar Singh Indian Institute of Information Technology Allahabad, Prayagraj U. P.	Franc Solina University of Ljubljana, Faculty of Computer and Information Science	Thermo-Visible Deep Multimodal Ocular Biometric Recognition and Facial Thermal Profiling in COVID-19 Reality
10	Josmin P. Jose Department of Chemistry, Mar Thoma College, Tiruvalla	Miran Mozetič Jožef Stefan Institute	Facile Preparation of Superhydrophobic Cellulose nanofibers and Compounding with PLA for Packaging Applications
11	Dhiman Chatterjee Indian Institute of Technology, Madras	Matevž Dular University of Ljubljana, Faculty of Mechanical Engineering	On the role of ultrasound contrast agents in detecting early stages of atherosclerosis
12	Vineet Vashista Indian Institute of Technology Gandhinagar, Gujarat	Zlatko Matjačić University Rehabilitation	Swing Phase Gait Training and Assistance of Stroke Patients using a Cable Driven Robot

		Institute, Republic of Slovenia	
13	Kunal Pal National Institute of Technology Department of Biotechnology and Medical Engineering, Rourkela, Odisha	Nataša Poklar Ulrih University of Ljubljana, Biotechnical Faculty	Developing biphasic nutraceutical candy formulations enriched with folate, vitamin D, and vitamin C for the expecting mothers
14	Amal Kanti Bera Dept. of Biotechnology, Indian Institute of Technology Madras, Chennai	Robert Zorec University of Ljubljana, Faculty of Medicine	Effect of SARS-COV-2 proteins on calcium signaling, vesicle dynamics and secretion in neuron and astrocytes
15	Basant Agarwal Indian Institute of Information Technology (IIIT Kota), Jaipur	Marko Robnik Šikonja University of Ljubljana, Faculty of Computer and Information Science	Cross-lingual knowledge transfer for social media analysis in less-resourced languages during COVID-19 epidemic
16	Vijayan Krishnaraj PSG College of Technology, Coimbatore	Henri Orbanić University of Ljubljana, Faculty of Mechanical Engineering	Process chains for high volume manufacturing of microreactor systems
17	Asit Kumar Khandra National Institute of Technology (NIT) Warangal, Warangal	Roman Šturm University of Ljubljana, Faculty of Mechanical Engineering	Development of Al-Ni-RE Alloys for High Temperature and Tribological Applications
18	Bendadi Hanumantha Rao School of Infrastructure, Bhubaneswar, Odisha	Vesna Zalar Serjun Slovenian National Building and Civil Engineering Institute	Green and Sustainable Construction Materials from waste Industrial By-products - Red Mud and Waste Gypsum
19	Rakesh K Sharma Indian Institute of Technology Jodhpur, Jodhpur	Blaž Likozar National Institute of Chemistry	Solid Acid Catalyst for Biomass Conversion to Fuel and Fine Chemicals
20	R. Arockia Kumar Dept. of Metallurgical and Materials Engineering National Institute of Technology Warangal, Warangal	Matej Bračič University of Maribor, Faculty of mechanical engineering	Development and characterization of novel bioresorbable zinc alloys for biomedical applications

