



Indian Institute of Technology Delhi

Major International Sponsored Research Projects Undertaken Through IRD Unit During The Financial Year 2022-23

Project Title	Sponsoring Agency / Collaborating Institutes	Principal Investigator / Department
Nutrition Innovation Hub for LSFF Scale up	Bill & Melinda Gates Foundation United States	Jatindra Kumar Sahu Centre for Rural Development & Technology
Experimental Characterization and CFD Simulations of Three-Phase Slurry Flows in Slurry-Phase Hydrocracking Reactor	Kellogg Brown & Root LLC United States	Vivek Vitthal Buwa Dept. of Chemical Engineering
Development of composite cement with slag and fly ash in India	Ecocem Materials Limited France	Shashank Bishnoi Dept. of Civil Engineering
Artificial Intelligence-driven Acceleration of Cement Manufacturing	Global Cement and Concrete Association (GCCA) United Kingdom	Anoopkrishnan Naduvath Mana Dept. of Civil Engineering
Protecting Human Health Through a One Health Approach	IWMI Sri Lanka	Shaikh Ziauddin Ahammad Dept. of Biochemical Engineering & Biotechnology
Digitally enabled participatory methods to strengthen the livelihoods of vulnerable households through improved natural resource management	Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH Germany	Aaditeshwar Seth Dept. of Computer Science & Engineering

Natural neuro active mechanical meta materials	European Research Council Executive Agency (ERCEA), United Kingdom (through University of Bristol, UK)	Bipin Kumar Dept. of Textile & Fibre Engineering
Multi-modal Sensor Fusion for Autonomous Driving	Semiconductor Research Corporation United States	Seshan Srirangarajan Dept. of Electrical Engineering
Interventions to increase immunisation coverage among children 12-23 months of age in India through participatory learning and community mobilisation	Canadian Institutes of Health Research (CIHR) Canada (through Centre Hospitalier de l'Université de Montréal (CHUM), Canada)	Sumeet Agarwal Dept. of Electrical Engineering
Research to Support Large Scale Investments in Bicycling in the Cities of Low- and Middle-Income Countries	The University of Chicago United States	Rahul Goel Transportation Research and Injury Prevention Centre (TRIPC)
Uncertainty in Graphs	Google Asia Pacific Pvt Ltd Singapore	Keerti Choudhary Dept. of Computer Science & Engineering
Composable ML workflows	Google Asia Pacific Pvt Ltd Singapore	Abhilash Jindal Dept. of Computer Science & Engineering
Development of Organometallic Complexes for Biosensing Applications	Viva Bio LLC United States	Kuntal Manna Dept. of Chemistry
Development and Trial of a Multi-Purpose Customized Splint for Activities of Daily Living in Patients with Spinal Cord Injury	AO Spine Singapore	Arnab Chanda Centre for Biomedical Engineering

Development of patient-specific additively-manufactured mandibular implants with biotechnology-inspired functional lattice structures	Indo-German Science & Technology Centre (IGSTC) Foreign <u>Collaborating Institutes/organization</u> : wbk Institute of Production Science, Karlsruhe Institute of Technology (KIT) OTEC Präzisionsfinish GmbH, Germany	Kaushik Mukherjee Dept. of Mechanical Engineering
Development and study of methods for reliability enhancement of tethered high-altitude unmanned telecommunication platforms	International Cooperation Division, DST <u>Foreign Collaborating Institutes</u> : V. A. Trapeznikov Institute of Control Sciences of Russian Academy of Sciences, Russia	S Dharmaraja Dept. of Mathematics
Designing and Investigation of Piezo-resistive based Electro-Textile Sensor Matrix for Health Monitoring	International Bilateral Cooperation Division, DST <u>Foreign Collaborating Institute</u> : Institute of Natural Fibers and Medicinal Plants, Poland)	Bipin Kumar Dept. of Textile & Fibre Engineering
UAV air-corridor integration with cellular network	Through International Bilateral Cooperation Division, DST <u>Foreign Collaborating Institute</u> : Politecnico di Torino, Italy	Swades Kumar De Dept. of Electrical Engineering
Long-term effects of nanoparticles containing wastewater on greenhouse gas emissions and relevant soil microbial changes during rice production	Through International Bilateral Cooperation Division, DST <u>Foreign Collaborating Institute</u> : Yamagata University Japan	Arun Kumar Dept. of Civil Engineering
Estimation of the potential impact on human health of cyanobacteria and microalgae and their toxins in the bioaerosols of the coastal zone: a comparative assessment between India and Poland	International Bilateral Cooperation Division, DST <u>Foreign Collaborating Institute</u> : Institute of Oceanography, University of Gdansk, Poland)	Sagnik Dey Centre for Atmospheric Sciences

Major International Consultancy Jobs Undertaken Through IRD Unit During The Financial Year 2022-23

Title	Sponsoring Agency	Consultant Incharge / Department
Preparation of Revised National Clean Air Plan for 2024 to 2030 with Sectorial Specific Feasible Control Strategies	Centre for Research on Energy and Clean Air, Finland	Sri Harsha Kota Dept. of Civil Engineering
Role of Digital Interventions and Public Private Partnerships in Oxygen Management in India during COVID-19	PATH United States	Sanjay Dhir Dept. of Management Studies
Building the Next Generation Task-Oriented Dialog Systems	Cognius.ai Singapore	Mausam Dept. of Computer Science & Engineering
Support to the Appraisal Mission for the IKI Project/Innovation Regions for a Just Energy Transition	GIZ German Development Cooperation	Rohit Chandra School of Public Policy