

Melbourne India Postgraduate Academies (MIPA) – Joint PhD Projects: Successful Applicants

2026

IIT Kanpur			
Melbourne PI	Faculty	Partner PI	Project Title
Dr Elisa Lumantarna	FEIT	Professor Durgesh Rai	Improving the Seismic Performance of Traditional Masonry Construction in the Himalayan Mountain Region
Professor Udaya Paramalli	FEIT	Dr. Angshuman Karmakar	NIST standardization and beyond : Solving practical problems for seamless transition to post-quantum cryptography
Dr Wallace Wong	Science	Professor Monica Katiyar	Advanced Optoelectronic Materials for Next-generation Light Emitting and Photovoltaic Devices
Dr Ludovica Monti	Science	Professor Sandeep Verma	Discovering new biomarkers and therapeutic targets: Targeting DNA secondary structures to eliminate bacterial infections

IISER Tirupati			
Melbourne PI	Faculty	Partner PI	Project Title
Dr Nilupa Herath	FEIT	Dr Nirmala Krishnamurthy	Bridging the Gap: Exploring Academic, Cultural, and Personal Factors in Indian B.Sc. Graduates' Transition to Australian M.Eng. Programs
Dr Ivanhoe Leung	Science	Associate Professor Raju Mukherjee	Integrative analysis of metabolic regulation in Mycobacterium tuberculosis under nutrient and antibiotic stress

IIT Madras			
Melbourne PI	Faculty	Partner PI	Project Title
Dr Melissa Kozul	FEIT	Associate Professor Vadlamani Nagabhushana Rao	Riblet-Based Drag Reduction for Jet-engine Compressors: High-speed and End-wall Effects
A/Prof Brad Clarke	Science	Professor Ravikrishnan Vinu	Microplastics as vectors of plastic-associated emerging contaminants: integrated analytical harmonisation and environmental health risk assessment

A/Prof Sam John	FEIT	Prof Sujatha Srinivasan	Brain-Machine Interface-Driven Stroke Rehabilitation: EMG-Guided Adaptive Training with Closed-Loop EEG Neurofeedback
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IIT Kharagpur			
Melbourne PI	Faculty	Partner PI	Project Title
Professor Tansu Alpcan	FEIT	Professor Goutam Das	Autonomous Networking in 6G
A/Prof Gang Li	FEIT	Dr Suverna Trivedi	Integrated Biomass Conversion and Pressure Swing Adsorption Systems for High-Efficiency Hydrogen Recovery
Dr Leon Chan	FEIT	Assistant Professor Priyam Chakraborty	Digital Twin-Driven Bioinspired Aerodynamics and Aeroacoustics for UAV Interaction and Pest Swarm Mitigation
Dr Sara Pinho	Science	Dr Dibyendu Kamilya	Understanding the energy–environment nexus in inland freshwater aquaculture systems: an integrated sustainability assessment

2025

IIT Kanpur			
Melbourne PI	Faculty	Partner PI	Project Title
Prof David Kennedy	Science	Prof Tajdarul Hassan Syed	Blue Carbon and Methane Dynamics in the Mangrove Ecosystem of Ganga- Brahmaputra- Meghna Delta: Implication of Climate Change
Dr Christian Brandl	FEIT	A/Prof Rajdip Mukherjee	Multiscale modelling of interface free energy in multicomponent alloys
Dr Lucas Hackl	Science	Dr Diptarka Das	Quantum information at the interface of high energy theory and quantum chaos
A/Prof. Sam John	FEIT	A/Prof Nikunj Bhagat	Design and development of an endovascular neural stimulator to restore hand movements following tetraplegia
A/Prof Jimmy Philip	FEIT	Prof Sathesh Mariappan	Uncovering hidden physics of environmental flows using physics-informed machine learning
Prof. Andrew Ooi	FEIT	Dr. Tushar Sikroria	Numerical and experimental investigation of high-speed high-enthalpy impinging jets

Dr Edward Hinton	Science	Prof Ishan Sharma	Entrainment and transport of boulders by shallow granular flows
Dr Farhad Farokhi	FEIT	A/Prof Abhishek K Gupta	Design and Analysis of Multi-User Quantum Key Distribution Networks

IISER Tirupati			
Melbourne PI	Faculty	Partner PI	Project Title
Dr Jagannath Aryal	FEIT	Prof Santanu Bhattacharya	Developing Regional Crop Digital Twin for Precision Agriculture Using Satellite and Ground-Based Sensing
A/Prof Dorin Gupta	Science	Dr Annapurna Devi Allu	Innovative Strategies for Climate-Resilient Crops: Integrating Priming and Silicon-Induced Conditioning as Sustainable Solutions Through Physiological and Molecular Approaches