

### List of Funded Projects for MRF2023

Reference No.	Project Title	Principal Investigator	Affiliated University	Project Duration (Months)
BAU-23002	Catalytic Conversion of Municipal Solid Waste to Hydrogen as a Clean Fuel for Sustainable Transportation	Dr Jun ZHAO	Hong Kong Baptist University	36
CHU-23001	222-nm Far UVC Light for Effective and Safe Infection Control in MTR Trains	Prof. Chun CHEN	The Chinese University of Hong Kong	36
HKU-23002	Embracing Mobility, Technology, and Resilience (MTR) after the Pandemic: Data-Informed Design, Planning, and Operations Management of Tomorrow's Railway Systems	Dr Yong Hong KUO	The University of Hong Kong	36
LNU-23001	Creating an Age-friendly MTR System: Sensory Challenges, Walking Environments and Wellbeing of the Elderly MTR Users	Dr Tak Hin CHAN	Lingnan University	24
LNU-23005	Social Tourism in Later Life: Unlocking the Potential of Public Transport to Facilitate Social Participation of Older Adults	Dr Tingting LI	Lingnan University	24
PTU-23001	Promoting Environmental Social and Governance (ESG) in MTR for Pursuing Sustainable Development Goals and Better Service Quality	Dr Jingzheng REN	The Hong Kong Polytechnic University	36
PTU-23005	Intelligent Emergency Digital Twin System in Metro Station for Fire Evacuation	Dr Xinyan HUANG	The Hong Kong Polytechnic University	36
PTU-23010	Development of a New Inerter-based Rail Damper to Mitigate Railway-induced Ground-borne Noise by a Physics-Informed Deep Learning Framework	Dr Siu Kai LAI	The Hong Kong Polytechnic University	30
PTU-23018	Planning and Operation of Future Railway System with Autonomous Modularized Trains and Virtual Coupling Signaling	Dr Hongbo YE	The Hong Kong Polytechnic University	36
PTU-23019	Coupling Fire and Toxicity Predictions using CFD-MD Simulations for Enhanced Pedestrian Movement Modelling and Fire Resilience Designs of Metro Stations	Dr Chun Yin YUEN	The Hong Kong Polytechnic University	36
PTU-23024	Developing an Electromagnetic Energy Harvesting System to Energize Monitoring Systems in the Hong Kong MTR System	Prof. Chi-yung CHUNG	The Hong Kong Polytechnic University	36
UST-23008	An Ultra-Broadband Spectral Selective Window Film for Passenger Comfort and Energy Saving of MTR Trains	Prof. Baoling HUANG	The Hong Kong University of Science and Technology	22