

Dean's Award for Outstanding Achievement in Research Funding 2022

(Complete List of Projects)

Awardee (Dept)	Allocation Date/ Grant Approval Date	Project Title (Funding Scheme)
Prof. Jian-lei NIU (BEEE)	13 Jul 2021	Healthy and Resilient City with Pervasive LoCHs <i>(RGC Theme-based Research Scheme)</i>
Prof. Mingli CHEN (BEEE)	1 Jul 2019	Multi-parameter Observation of the Lightning Attachment to a 356-m-high Meteorological Tower in Shenzhen of China and its Interpretation with Modelling <i>(RGC General Research Fund)</i>
	1 Jul 2020	Development of a Real-time VLF/LF 3D Lightning Location Network Using Advanced Data Acquisition and Processing Algorithms <i>(RGC General Research Fund)</i>
	1 Jul 2021	Development of A Low-noise Broadband Lightning Current Measuring System with A Wide Dynamic Range from Milli-amperes to Hundreds of Kilo-amperes <i>(RGC General Research Fund)</i>
Prof. Cheuk Ming MAK (BEEE)	1 Jul 2020	Theoretical, Numerical and Experimental Investigations into the Acoustic Performance of a Periodic Helmholtz Resonators Array in A Grazing Flow Duct <i>(RGC General Research Fund)</i>
	1 Jul 2021	Development of A Psychoacoustic Machine Learning Assessment Model for Air-conditioned Building Environments <i>(RGC General Research Fund)</i>
	13 Jul 2021	Healthy and Resilient City with Pervasive LoCHs <i>(RGC Theme-based Research Scheme – sub-project)</i>
Prof. Horace MUI (BEEE)	1 Jul 2017	Improved Simulation Modelling of Cooling Energy Demand in Public Housing <i>(RGC General Research Fund)</i>
	5 Jan 2021	Effective Ventilation Strategies for Mitigating Infection Risks in Hospitals <i>(RGC Collaborative Research Fund)</i>
Prof. Linda XIAO (BEEE)	1 Jul 2019	Development of a Big Data-Driven Methodology to Characterize and Model the Energy Dynamics of Large Buildings with Complex Energy Systems <i>(RGC General Research Fund)</i>
	10 Jul 2019	SureFire: Smart Urban Resilience and Firefighting <i>(RGC Theme-based Research Scheme – sub-project)</i>
	5 Jan 2021	Development of Next-generation Key Technologies for Smart Buildings <i>(RGC Collaborative Research Fund – sub-project)</i>
Dr Tommy WEI (BEEE)	1 Jul 2021	Colour Appearance of Virtual Stimuli Produced by Augmented Reality (AR) <i>(RGC General Research Fund)</i>
	29 Dec 2021	Deeper Understanding of Color Matching Mechanism for Developing High-quality Lighting and Imaging Systems <i>(RGC Research Impact Fund)</i>

Dr Ruoyu YOU (BEEE)	1 Jul 2019	Investigating the Personalized Displacement Ventilation System with the Concurrent Operation of Gaspers for Reducing Airborne Disease Transmission in Commercial Airlines (RGC Early Career Scheme)
	1 Jul 2021	Characterization of Short-range Interpersonal Contaminant Transport in Enclosed Environments Using Ultra-sensitive Tracer Gas Method (RGC General Research Fund)
	13 Jul 2021	Healthy and Resilient City with Pervasive LoCHs (RGC Theme-based Research Scheme – sub-project)
Prof. Heng LI (BRE)	1 Jul 2020	The Development and Validation of a Non-invasive Tool to Monitor Mental and Physical Stress in Construction Workers (RGC General Research Fund)
	22 Sept 2020	A Computer Vision-enabled Digital Twin for Construction Resource and Progress Management (Innovation Technology Fund – LSCM)
	1 Jul 2021	Monitoring and Managing Fatigue of Construction Plant and Equipment Operators Exposed to Prolonged Sitting (RGC General Research Fund)
Prof. Hai GUO (CEE)	28 Feb 2018	Clear up Toxic Smog and Improve Air Quality in Hong Kong (PICO Public Policy Research)
	1 Jul 2017	有毒有害大氣污染物環境風險管理體系研究 (MOST National Key R&D Plan)
	30 Nov 2020	Organic Aerosols in Offshore Marine Atmosphere of Eastern and Southern China: Sources, Chemical Ageing, and Climate Consequence (NSFC/RGC Joint Research Scheme)
	1 Jul 2021	Deciphering the Formation and Accumulation of Photochemical Ozone in the Three Bays of China through Field Observations and Model Simulations: Relevance and Uniqueness (RGC General Research Fund)
Prof. Yuhong WANG (CEE)	1 Jul 2019	The Lifecycle Physicochemical Evolution of Polymer-modified Asphalt (PMA) and its Impacts on Performance-related PMA Properties in Pavements (RGC General Research Fund)
	1 Jul 2020	Development of High-performance Mastic Asphalt Concrete for Landmark Bridges in Hong Kong: From Multiscale Modeling to Full-scale Testing (RGC General Research Fund)
	1 Jul 2021	A New Method to Identify the Fatigue Endurance Limits of Long-life Asphalt Pavements under Actual Loading Waveforms, Evolving Aging States, and Usage Conditions in Hong Kong (RGC General Research Fund)
Dr Tak Ming CHAN (CEE)	1 Jul 2019	Experimental and Numerical Investigation of Cold-formed High Strength Steel Octagonal Hollow Section Columns (RGC General Research Fund)
	25 Jun 2019	Hong Kong Modular Integrated Construction (MiC) Innovations (Innovation Technology Fund – NAMI)
	1 Jul 2021	Influence of Shear Connectors on Behaviours of Square Concrete-filled Steel Tubular Columns (RGC General Research Fund)

Dr You DONG (CEE)	1 Jul 2018	Robust Adaptation of Coastal Bridge Decks under Typhoon-Induced Forces and Sea Level Rise (RGC Early Career Scheme)
	1 Jul 2019	Life-Cycle Management and Health Monitoring of Long-Span Bridges under Fatigue through the Coupling of SHM Data, Decision Theory, and Value of Information (RGC General Research Fund)
	30 Nov 2019	跨海集群設施服役狀態評估及智慧維養技術與裝備 (MOST National Key Technologies R&D Program – sub-project)
	18 Sept 2020	基於性能和韌性的劣化橋樑全壽命抗震設計理論研究 (NSFC General Program)
	1 Jul 2021	Structural Performance and Multivariate Fragility of Low-Lying Coastal Bridges during Storm Event (RGC General Research Fund)
Dr Chao ZHOU (CEE)	1 Jul 2020	Three-dimensional Thermo-mechanical Behaviour of Unsaturated Soils and Interfaces with Reference to Energy Piles (RGC General Research Fund)
	18 Sept 2020	非飽和土與特殊土力學 (NSFC Excellent Young Scientist Fund (HK & Macau))
Prof. Charles WONG (LSGI)	1 Jul 2019	Development of an Integrated Model for Estimating 3D Solar Energy Potential Using GIS, Remote Sensing and Deep Learning Techniques (RGC General Research Fund)
	24 Jul 2019	Next-Generation Air Pollution Physics and Chemistry Model for Urban Areas (RGC Collaborative Research Fund – sub-project)
	1 Jul 2020	An Integrated Knowledge-based Remote Sensing and GIS Dynamic Model for the Urban Thermal Environment (RGC General Research Fund)
	4 Oct 2021	Study of Artificial Intelligence for Road Surface Depression Detection Using 3D LiDAR Data (CIC Research and Technology Development Fund)