**Dean's Award for Outstanding Achievement in Research Funding 2024**

(Complete List of Projects)

| Awardee (Dept) | Allocation Date | Project Title (Funding Scheme) |
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| Dr Xinyan HUANG (BEEE) | 1 Jul 2023 | A Fundamental Study on the Critical Oxygen Supply of the Persistent Deep-Layer Smouldering Peat Fires *(RGC General Research Fund)* |
| | 24 Aug 2023 | 阴燃林火 *(NSFC Excellent Young Scientist Fund (HK & Macau))* |
| Prof. Heng LI (BRE) | 11 Feb 2020 | Solving Public Housing Problem in Hong Kong by Adopting Modular Integrated Construction (MiC) to Build the Transitional House *(CEPU Public Policy Research Fund)* |
| | 21 Mar 2022 | Trial: Vision-based Badminton Match Analysis *(Innovation Technology Fund – LSCM)* |
| | 21 Feb 2023 | Construction Progress Monitoring and Contract Performance by Integrating Computer Vision and Blockchain *(Innovation Technology Fund – TCFS)* |
| | 7 Mar 2023 | Using Carbon Regulation to Promote the Adoption of Modular Integrated Construction in Hong Kong: An Evolutionary Game-based Study *(CEPU Public Policy Research Fund)* |
| | 1 Jul 2023 | Non-invasive non-contact mental workload and stress monitoring of construction equipment operators *(RGC General Research Fund)* |
| Prof. Geoffrey SHEN (BRE) | 1 Jul 2022 | Stakeholder Analysis in the Dynamic and Complex Environment of Megaprojects *(RGC General Research Fund)* |
| | 10 Nov 2023 | The Mechanism and Policy Optimisation of Multi-stakeholder Cross-regional Collaboration in the Construction Industry of the GBA *(NSFC/RGC Collaborative Research Scheme)* |

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| Prof. Meng NI (BRE) | 5 Jan 2021 | Durable and high-performance zinc-air flow batteries for energy storage *(RGC Collaborative Research Fund)* |
| | 1 Jul 2023 | Triple conducting cathode materials with in-situ exsolution of nanoparticles and anion doping for protonic ceramic fuel cells *(RGC General Research Fund)* |
| Prof. Zhen LENG (CEE) | 1 Jul 2023 | Strength Formation Mechanism Characterization and Performance Optimization of Waterborne Epoxy Modified Asphalt Emulsion as A High-performance Low-carbon Paving Binder *(RGC General Research Fund)* |
| | 22 Dec 2023 | Durable Low-carbon Asphalt Pavement Built with Recycled Waste Polyolefin Plastics through Reactive Extrusion *(RGC Research Impact Fund)* |
| Prof. Yong XIA (CEE) | 1 Jul 2021 | Temperature Behavior of Long-span Cable-stayed Bridges through the Integration of Field Monitoring and Advanced Computational Techniques *(RGC General Research Fund)* |
| | 22 Nov 2023 | Digital Twin–based Long-span Bridge Health Monitoring *(Smart Traffic Fund)* |
| | 22 Dec 2023 | Enhancing energy harvesting and typhoon resilience of offshore wind turbines in the Guangdong-Hong Kong-Macau Greater Bay Area under climate change *(RGC Research Impact Fund – sub-project)* |
| Prof. Songye ZHU (CEE) | 1 Jul 2023 | Self-centering Seismic-resistant Eccentrically Braced Frames with Superelastic Shape Memory Alloy Angles *(RGC General Research Fund)* |
| | 10 Nov 2023 | Develop Next-generation Typhoon-resistant Deep-sea Offshore Floating Hybrid Wind-wave Energy Converters: From Coupling Load Mechanism to Vibration Mitigation Technology *(NSFC/RGC Collaborative Research Scheme)* |
| Dr You DONG (CEE) | 1 Jul 2022 | Dynamic Response and Vulnerability of Coastal Bridges Subjected to Wave Impacts using Coupled Simulation, Experiment, and Deep Learning *(RGC General Research Fund)* |
| | 13 Jul 2023 | INTACT: Intelligent tropical-storm-resilient system for coastal cities (CEE-3) *(RGC Theme-based Research Scheme – sub-project)* |
| | 13 Oct 2023 | Smart and Flexible Climate Change Adaptation of Coastal Infrastructure (SMACHA) *(ANR/RGC Joint Research Scheme)* |

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| Dr Huan-Feng DUAN (CEE) | 1 Jul 2019 | Development of a holistic transient-based method for characterizing and diagnosing different pipe anomalies in urban water supply pipeline systems *(RGC General Research Fund)* |
| | 5 Jan 2023 | Coastal Urban Flooding under Climate Change: Evolution Mechanisms and Intelligent Analysis *(RGC Young Collaborative Research Grant)* |
| Dr Shao-Yuan LEU (CEE) | 1 Jul 2019 | Metabolites induced thermochemical lignin modification to facilitate cellulolysis of lignocellulosic substrate in anaerobic process *(RGC General Research Fund)* |
| | 20 Sept 2021 | Reducing transmission of novel coronavirus and other infectious diseases using food waste-derived medical textiles via electrospinning for healthcare apparel and personal protective equipment (CEE) *(RGC Collaborative Research Fund – sub-project)* |
| | 4 Jan 2022 | Study of Carbon Sequestration in Hong Kong's Vegetation: from Present to Future Prediction under Climate Change (CEE) *(RGC Collaborative Research Fund – sub-project)* |
| | 1 Dec 2023 | Study of Ammonia Pretreatment-Power Generation System toward Complete Valorization of Food Waste Digestate *(Green Tech Fund)* |
| Dr Alessandro STOCCHINO (CEE) | 1 Jul 2022 | Marine litter transport in the Pearl River Estuary and its impact on Hong Kong waters: formulation and application of a novel Lagrangian numerical model *(RGC General Research Fund)* |
| | 5 Jan 2023 | Hong Kong Coastal HF-Radar Network *(RGC Collaborative Research Fund)* |
| Dr Qi ZHAO (CEE) | 1 Jul 2021 | Direct Observation of the Evolution of Joint Surface Roughness and Associated Seismic Signatures *(RGC Early Career Scheme)* |
| | 1 Jul 2022 | Hydromechanical fatigue of rock joints under fluctuating pore pressure: microscopic observation under micro-CT and constitutive modelling *(RGC General Research Fund)* |
| | 1 Jul 2023 | Quantifying shear induced joint surface damage using acoustic emission and machine learning *(RGC General Research Fund)* |

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| Prof. Xiao-li DING (LSGI) | 1 Jul 2022 | New Multi-Temporal InSAR Technique for Monitoring Stability of Civil Infrastructures *(RGC General Research Fund)* |
| | 24 Aug 2023 (Date of Approval) | 基于时序 PolInSAR 技术的地下水管道 探漏研究 *(NSFC Key Program (重點項目))* |
| Dr Xintao LIU (LSGI) | 1 Jul 2019 | User Satisfaction-based Urban Freight Sharing Optimization Using Crowdsourced Big Data and Machine Learning *(RGC Early Career Scheme)* |
| | 22 Dec 2023 | An AI-enabled Geospatial Platform for Smart Facility Management and Smart Mobility of People with Disabilities (PwDs) *(RGC Research Impact Fund)* |