

Outputs Arising from Dean's Research Fund

Ninth Round

Individual Research Scheme (IRS)	
Project Leader	Dr Wong Yee Hang Mathew, SSPS
Project Title (<i>Ref No.</i>)	Assessing China's External Investments: A Review (<i>IRS-1</i>)
Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> Wong, Mathew* Downes, James, Journal of Chinese Political Science (2023 under review) <p>Conference</p> <p>Year: 2023</p> <p>Name: Mid-West Political Science Association Conference</p> <p>Title: Building Influence or Buying Friends? Reconsidering Participation and Impact of China's Belt and Road Initiative (With James F. Downes)</p> <p>External Grant</p> <ol style="list-style-type: none"> GRF <p>Reconsidering the Impact of China's Belt and Road Initiative and Foreign Economic Linkages (Date of application: November 2022)</p>
Project Leader	Dr Au Ka Man, SES
Project Title (<i>Ref No.</i>)	Synthesis of biologically compatible metal-organic frameworks based on main group metals (<i>IRS-2</i>)
Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> Chen Wu, Kam-Hung Low, Vonika Ka-Man Au*, Efficient removal and sensing of copper(II) ions by alkaline earth metal-based metal-organic frameworks. J. Solid State Chem. 2023, 322, 123936. (2023) Chen Wu, Kam-Hung Low, Vonika Ka-Man Au*, Efficient removal and sensing of copper(II) ions by alkaline earth metal-based metal-organic frameworks. J. Solid State Chem. 2023, 322, 123936. (2023) Chen Wu, Kam-Hung Low, Vonika Ka-Man Au*, Efficient removal and sensing of copper(II) ions by alkaline earth metal-based metal-organic frameworks. J. Solid State Chem. 2023, 322, 123936. (2023 Not Yet Published)
Project Leader	Dr Li Wai Chin, SES
Project Title (<i>Ref No.</i>)	The role of root system architectures on cadmium accumulation in rice and the underlying mechanisms (<i>IRS-3</i>)

Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> 1. CHI, Y., TAM, N. F., LI, W. C.* & YE, Z., Multiple geochemical and microbial processes regulated by redox and organic matter control the vertical heterogeneity of As and Cd in paddy soil, <i>Science of the Total Environment</i>. 839, 156229. (2022) 2. XIAO, A., CHI, Y., HUANG, L., LI, W. C.* & YE, Z.*, Effects of cultivar, water condition and their interactions on Cd accumulation in rice grains, <i>Ecotoxicology and Environmental Safety</i>. 262, 115168. (2023) 3. ROKONUZZAMAN, M., YE, Z., WU, C. & LI, W. C.*, Arsenic elevated groundwater irrigation: Farmers' perception of rice and vegetable contamination in a naturally arsenic endemic area, <i>International Journal of Environmental Research and Public Health</i>. 20 (6), 4989. (2023) <p>External Grant</p> <ol style="list-style-type: none"> 1. GRF Effects of Mn Oxidizing Bacteria on Mn Transformation, and Cycling of Nutrients and Heavy Metal(loid)s in Mn Mine Tailing (Date of application: November 2022)
Project Leader	Dr Man Yu Bon, SES
Project Title (<i>Ref No.</i>)	Health Risk Assessment of Persistent Toxic Substances in Freshwater Fish Fed by Fly Larvae (<i>IRS-4</i>)
Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> 1. HUANG, Z-L., YANG, Z-B., XU, X-X., LEI, Y-J., HE, J-S., YANG, S., WONG, M. H., MAN, Y. B.* & CHENG, Z.*, Health risk assessment of mercury in Nile tilapia (<i>Oreochromis niloticus</i>) fed housefly maggots, <i>Science of the Total Environment</i>. 852, 158164. (2022) 2. GAO, M., YANG, Z-B., XU, X-X., XIAN, J-R., YANG, Y-X., YANG, S., MAN, Y. B. & CHENG, Z.*, Using fly larvae to convert food waste for growing Oujiang color common carps: Health risk assessment of polycyclic aromatic hydrocarbons. <i>Environmental Science and Pollution Research</i>. 30, p. 43496-43504 (2023) 3. PENG, R. J., ZHENG, C., YANG, Z. B., XU, X. X., WONG, M. H., MAN, Y. B. & CHENG, Z.*, Selenium toxicity and bioaccumulation in selenium-enriched fly (<i>Chrysomya megacephala</i>) maggots. <i>Environmental Geochemistry and Health</i>. 45, p. 4493-4503 (2023)

	<p>External Grant</p> <p>1. GRF</p> <p>Activated charcoal/biochar supplemented diet to limit uptake of microplastics and metals in Nile tilapia: Effect on gut microbiota and liver metabolisms (Date of application: November 2022)</p>
Project Leader	Prof So Wing Mui Winnie, SES
Project Title (<i>Ref No.</i>)	Teachers' intention towards and competency for implementing interdisciplinary STEM education (<i>IRS-5</i>)
Output:	<p>Journal/ book</p> <p>1. So Wing Mui Winnie, Examining factors affecting primary teachers' STEM teaching intention (<i>2024 Under Preparation</i>)</p>
Project Leader	Dr Deng Wenjing, SES
Project Title (<i>Ref No.</i>)	Disinfection by-products in natural aquatic environment and drinking water (<i>IRS-6</i>)
Output:	<p>Journal/ book</p> <p>1. LIU, J., HU, L-X., DENG, WJ*, YING, G-G., HONG, H., TSANG, P. K. E. & BARCELÓ, D., DBPs in natural water in Hong Kong after COVID-19 pilot study of pollution characteristics and ecological risk of disinfection by-products in natural waters in Hong Kong, Oct 2022, In: Environmental Toxicology and Chemistry. 41, 10, p. 2613-2621 (2022)</p> <p>2. LIU, J., DENG, WJ*, YING, G-G., TSANG, P. K. E. & Hong, H-C., Occurrence and distribution of antibiotics in surface water, Sept 2022, In: Ecotoxicology. 31, 7, p. 1111-1119 (2022)</p> <p>External Grant</p> <p>GRF</p> <p>Factors associated between Chinese children's dietary patterns and their serum concentrations of perfluorinated compounds (Date of application: September 2023)</p>
Project Leader	Dr Pei Qing, SSPS
Project Title (<i>Ref No.</i>)	Climate change and southward nomadic migration across the Yangtze River during mid-to-late imperial China (<i>IRS-10</i>)
Output:	<p>Journal/ book</p> <p>1. Yiru Pei, Qing Pei, Harry F Lee Mengyuan, Qiu Yuting Yang, Epidemics in pre-industrial Europe: Impacts of climate change, economic well-being, and population / Anthropocene (2022)</p> <p>2. Mengyuan Qiu, Qing Pei, Ziyuan Lin. The geography of religions:</p>

	Comparing Buddhist and Taoist sacred mountains in China/Geographical Research (2023)
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Interdisciplinary Research Scheme (IDS)	
Project Leader	Prof Chow Cheuk Fai, SES
Project Title (<i>Ref No.</i>)	Heterobimetallic Catalysts for C-H Activation and Functionalization (<i>IDS-1</i>)
Output:	<p>Journal/ book</p> <p>1. Cheuk-Fai Chow, Qian Tang, Cheng-Bin Gong. Catalytic Chemosensing Assay for Tandem Detection and Catalytic Amplification of Dimethoate Organophosphate Pesticide. (2023 <i>Under preparation</i>)</p> <p>External Grant</p> <p>1. GRF</p> <p>Catalyst displacement assay: design and synthesis of Prussian blue analogs-modified g-C₃N₄/TiO₂ for selective detection, signal amplification, and degradation of organophosphate pesticides (Date of application: October 2023)</p>
Project Leader	Dr Cheng Kwok Shing Gary, MIT
Project Title (<i>Ref No.</i>)	A personalized task recommendation system for vocabulary learning based on context readability and task diversity for university graduates (<i>IDS-3</i>)
Output:	<p>Journal/ book</p> <p>1. Ruofei Zhang, Gary Cheng*, Di Zou. Effectiveness of game elements of digital game-based vocabulary learning in engaging learners and developing English as a foreign language vocabulary knowledge. Computers & Education (<i>Under Review</i>)</p> <p>2. Ruofei Zhang, Gary Cheng, Di Zou*, Zhencheng Zhou. Interactions among EFL proficiency levels, application of self-regulated learning strategies, fear of failures, and motivation in self-regulated mobile-assisted vocabulary learning. Asia Pacific Journal of Education (<i>Under Review</i>)</p> <p>Conference</p> <p>Year: Dec 2023 Bangkok, Thailand</p> <p>Name: The 6th International Conference on Technology in Education</p> <p>Title: Towards the design of a personalized vocabulary learning system for university graduates based on context readability and task diversity</p>

Project Leader	Dr Tan Weiqiang, SSPS
Project Title (<i>Ref No.</i>)	Urban Education Resources and Corporate Labor Costs in China (<i>IDS-4</i>)
Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> 1. Weiqiang Tan, Chenxin Xie*, Dezhu Ye*, Do urban educational resources affect corporate labor costs? (<i>2023</i>) <p>External Grant</p> <ol style="list-style-type: none"> 1. GRF Customized Financial Literacy Education Programme in Rural Village in China: A Randomized Control Trial (Date of application: October 2022)

Dean's Research Fund – Strategic Research Area Scheme (SRAS)	
Project Leader	Prof Yu Leung Ho Philip (MIT)
Project Title (<i>Ref No.</i>)	An Intelligent Platform for Desk Behavior Assessment via Joint Action and Attention Analysis (<i>SRAS-1</i>)
Output:	<p>Journal/ book</p> <ol style="list-style-type: none"> 1. R. Li, H Fu*, Y. Zheng, S. Gou*, J. Yu, X. Kong, H. Wang. "Behavior Analysis with Integrated Visual-Motor Tracking for Developmental Coordination Disorder", <i>IEEE Transactions on Neural Systems & Rehabilitation Engineering</i>, Vol. 31, pp. 2164-2173, 2023. 2. B. Li, R. Li, W. Wang, H. Fu*. "Serial-Parallel Multi-Scale Feature Fusion for Anatomy-Oriented Hand Joint Detection", <i>Neurocomputing</i>, Vol. 536, pp. 59-72, June, 2023. 3. X. Yue, H. Fu, and Philip L. H. Yu. Computational study and recognition performance for the closed-loop coordination between visual perception and finger motor: A Systematic Review in Special Education. (2023 under preparation) <p>External Grant</p> <ol style="list-style-type: none"> 1. NSFC/RGC Joint Research Scheme 2023/24 Artificial Intelligence Aided Diagnosis of Developmental Coordination Disorder in Children Based on Neuroimaging and Behavioral Representations with Multimodal Collaborative Learning (Date of application: February 2023)