College of Engineering
香港城市大學
City University of Hong Kong

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Faculty Achievement

College of Engineering

Congratulations to the following faculty members for winning the NSFC/RGC funds.

Collaborative Research Scheme (CRS)

Project Coordinator	Proposal
Prof Johnny HO, Department of Materials Science and Engineering	1D van der Waals Atomic Chains for 3D-integrated Retinomorphic Optoelectronics
Prof ZENG Xiaocheng, Department of Materials Science and Engineering	Theoretically Guided Material Design, Syntheses and Device Engineering for Efficient and Stable Perovskite/Organic Tandem Solar Cells

Joint Research Scheme (JRS)

Project Coordinator	Proposal
Prof CHEN Jie, Department of Electrical Engineering	Efficient, Trustworthy and Safe Learning-Based Controller Design and Analysis
Prof Michael TSE, Department of Electrical Engineering	Research on basic scientific issues and applied technologies for electric-field coupled wireless power transfer systems

Faculty Achievement

Department of Architecture and Civil Engineering

Prof CHEUNG Sai On received the 2024 QS Award of Excellence from the Quantity Surveying Division of the Hong Kong Institute of Surveyors for his innovations in quantity surveying education and pioneering construction dispute research. This biannual award is presented to honour quantity surveyors for their significant and valuable contribution to the development and promotion of the quantity surveying profession in and extending beyond Hong Kong.

Faculty Achievement

Department of Electrical Engineering

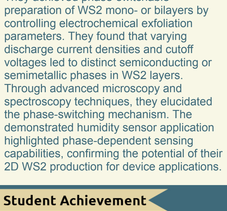
A collaborative research team led by Prof GUO Yongxin and scholars from Nanjing University of Science and Technology published a paper titled Urban skies safeguarded: innovative drone detection with programmable metasurface periscope in *Nature Communications*. It introduces an angle-insensitive programmable metasurface for drone detection in urban areas, enabling successful tracking even in non-line-of-sight scenarios obstructed by buildings.

Faculty Achievement

Department of Systems Engineering

Prof HUANG Jing-kai has been honoured with the Early Career Award by the Research Grants Council (RGC) for his outstanding research contributions. His project, titled Comprehensive Exploration and Application of Bismuth Silicate as an Advanced vdW Dielectric, has been successfully granted funding under the RGC Early Career Scheme (ECS) 2024/25 cycle. From a total of 634 applications for the ECS in 2024/25, thirteen emerging scholars were selected to receive the Early Career Awards, with Prof Huang being among the distinguished recipients.

Faculty Achievement

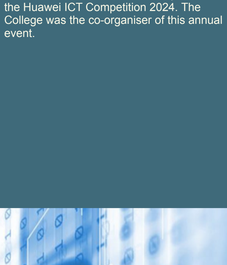


Department of Electrical Engineering

Congratulations to the following teams on their outstanding performance at the 4th Asia Exhibition of Innovations and Inventions.

Prize	Project Title	Team Members
Gold Award	Integrated Lithium Niobate Microwave Photonic Processing Engine (Kokoxili Photonics Limited, HK Tech 300)	• Prof WANG Cheng (team leader) • Dr CHEN Zhaoxi • Dr FENG Hanke • Dr ZHANG Ke • Mr GE Tong
Silver Award	Autonomous Energy Routing and Redistribution Technology for Large-Scale Battery Storage Systems with Health Monitoring Capabilities	• Prof Henry CHUNG (team leader) • Prof Ricky LAU • Mr WEI Zhengqi • Dr CHENG Chun Sing • Mr LIU Chun For

Faculty Achievement



Department of Electrical Engineering

Prof Alex YU has been awarded the 2024 IEEE Communication Society Asia-Pacific Outstanding Young Researcher Award for his contribution to multi-input, multi-output communications with large-scale arrays and surfaces. The award is the highest honour to recognise young researchers under the age of 35 for their creativity, research impact and contributions to the Society.

Faculty Achievement

Department of Materials Science and Engineering

Prof ZENG Zhiyuan and his team published a paper titled Phase-switchable preparation of solution-processable WS2 mono- or bilayers in *Nature Synthesis*. They achieved phase-switchable preparation of WS2 mono- or bilayers by controlling electrochemical exfoliation parameters. They found that varying discharge current densities and cutoff voltages led to distinct semiconducting or semimetallic phases in WS2 layers. Through advanced microscopy and spectroscopy techniques, they elucidated the phase-switching mechanism. The demonstrated humidity sensor application highlighted phase-dependent sensing capabilities, confirming the potential of their 2D WS2 production for device applications.

Student Achievement

Department of Electrical Engineering

Mr CHAN Ka Shing and two other teammates from the Department of Computer Science and the College of Business have clinched the third prize in the Huawei ICT Competition 2024. The College was the co-organiser of this annual event.

Student Achievement

Department of Electrical Engineering

Mr ONGGOWARSITO Raymonk Surya won the IET Prize 2024 for his exemplary academic achievements and active participation in out-of-classroom activities, including community services. IET stands for the Institution of Engineering and Technology.