

Event



College of Engineering

The JUPAS Consultation Day was held on 20 May 2023. Around 1,000 students registered for the event. Our College offered a series of activities for these HKDSE students, including programme talks, admission consultation sessions, students and alumni sharing, lab tours, etc. It is hoped that these activities will enable the prospective students to learn more about our College and programmes.

Faculty Achievement



College of Engineering

Our excellent research capability was demonstrated by the success of our faculty members at the 48th International Exhibition of Inventions Geneva.

Research team	Project
Gold Medal	
Prof CHAN Chi-hou Prof Stella PANG Dr ZHU Shuyan Dr WU Gengbo	Terahertz Metasurface Antenna for 6G Communications
Prof LUK Kwai-man Prof Stella PANG Dr ZHU Shuyan Dr LI Yuanlong	Low-profile High-gain Terahertz Antenna for Future Wireless Applications
Dr LI Haoliang Dr WANG Shiqi Mr KONG Chenqi Miss ZHENG Kexin	Echo-FAS: Acoustic-based Face Anti-Spoofing
Prof Paul CHU Dr WANG Chao Mr RUAN Qingdong	Low Cost and Large-Scale Production of Carbon Nanotubes
Dr YU Xinge Dr LI Jiyu Dr LEI Danyuan Mr ZHOU Jingkun Mr FU Yang	Cooling Technology for Epidermal Electronics
Prof Stella PANG Dr XU Yuanhao	Neural Implant with Dynamic Electrode Position Control
Prof LU Jian Dr LI Yangyang Dr ZHOU Binbin Mr SHEN Junda	Multifunctional Detection System Based on Nano-engraved Sensor
Dr Raymond LAM Dr HUANG Wei Mr JIANG Zhongning	Label-free High-throughput Multi-physical Cell Cytometer
Prof Johnny HO Miss QUAN Quan Mr ZHANG Yuxuan Mr WANG Wei	Solar-Electrocatalytic System for Hydrogen Generation
Prof ZHI Chunyi Mr CHEN Ze Miss LI Pei Miss CUI Huitin	Aqueous Batteries with Ultimate Safety
Dr Walid DAOUD Mr ALMARDI Jasim Mohamed Jasim Mohamed	Omni-direction Omni-frequency Wave Energy Converter
Prof LU Jian Dr MAO Zhengyi Dr CAO Zhaowenbo Miss CHEN Yingxian	EcoSponge—Utilising Solar Energy for Sustainable Freshwater Production
Dr ZHU Zonglong Miss LI Bo Mr ZHANG Chunlei Mr GONG Jianqiu Mr GAO Danpeng Mr QIAN Liangchen	HarvSolar: Eco-friendly Perovskite Photovoltaics

Silver Medal	
Dr KHOO Bee-luan Dr CHUA Song-lin Miss DENG Yanlin Miss LIAO Junchen Mr LI Wei Mr ZHOU Xiang	Personalised care: PIEB Biochip
Prof Sam KWONG Dr WANG Shiqi Dr WANG Meng Mr SUN Zhenhao	Learning-based Genome Codec
Dr ZHAO Shijun Mr ZHANG Jun	Superior AI Modeling of Large Atomic Systems
Prof ZHANG Wenjun Dr LIU Bin Dr KONG Xin Mr BU Shuyu	Advanced Bifunctional Electrodes for Green Hydrogen Generation
Dr KHOO Bee-luan Mr ZOU Shangjie Mr CHEN Chun Kwan Miss HUANG Ke	Microplastic Concentrator
Prof TU King-ning Dr LIU Yingxia Dr CHEN Chang	High-performance Copper-based Filter for Fast Virus Elimination
CityU, Electrical and Mechanical Services Department (EMSD) and MTR joint-submission	Train-borne Railway Infrastructure Inspection System
Prof Thomas NG Prof Eric LEE Dr LAM Heung-fai Dr LUO Xiaowei Dr ZHANG Zijun Dr ZHAO Xiangyu	
Bronze Medal	
Prof YAN Hong Prof XIE Min Dr WANG Zhe	Holistic AI-based Battery Health Tracker
Prof JING Xingjian	New-Gen Anti-Vibration X-Seating Technology
Prof HU Jinlian Dr SI Yifan Dr GUO Chunxia Mr ZHANG Hanshui	JanusLean Electrospun Energy Eye Mask
CityU and EMSD joint-submission	Electrical Doctor-Real-time Health Diagnosis for Electricity Supply System
Dr Norman TSE Dr John CHAN	

Faculty Achievement



Department of Mechanical Engineering

Prof Takashi HIBIKI has concluded an R&D contract with the Nuclear Regulation Authority, Japan for the second consecutive year with a total budget of HK\$1M. The Nuclear Regulation Authority is an administrative body of the Cabinet of Japan established to ensure nuclear safety in Japan as part of the Ministry of the Environment.

Faculty Achievement



Department of Materials Science and Engineering

Prof Johnny HO and his research team published a paper titled Van der Waals nanomesh electronics on arbitrary surfaces in *Nature Communications*.

Faculty Achievement



Department of Materials Science and Engineering

Prof Alex JEN and his research team published a paper titled Hydrogen-bond-bridged intermediate for perovskite solar cells with enhanced efficiency and stability in *Nature Photonics*.

Faculty Achievement



Department of Mechanical Engineering

Prof JING Xingjian has secured an R&D contract of RMB0.8M from Haier, a well-known home appliance company, for innovative vibration and noise control in washing machines.

Faculty Achievement



Department of Materials Science and Engineering

A research team led by Dr LEI Danyuan published a paper titled Ultrathin, soft, radiative cooling interfaces for advanced thermal management in skin electronics in *Science Advances*.

Faculty Achievement



Department of Mechanical Engineering

Dr LI Weihong is awarded the Environmental and Conservation Fund (ECF) of HK\$0.7M. As a long-term commitment to the environment and nature conservation in Hong Kong, the Government has been providing funding support of more than HK\$4 billion to the Environmental Campaign Committee and other non-profit making organisations through the ECF for implementing green projects for nearly three decades.

Faculty Achievement



Department of Mechanical Engineering

Prof PAN Chin and his postdoc Dr CHEN Gong received HK\$0.9M from the Innovation and Technology Commission and the industry partner for his project "Research on Key Technology of Manufacturing and Application of High Performance Ultrathin Flexible Polymer Vapor Chamber" under the Guangdong-Hong Kong Technology Cooperation Funding Scheme.

Faculty Achievement



Department of Biomedical Engineering

CityU signed a collaboration agreement with the China Resources Research Institute of Science and Technology and Shenzhen Space Biotechnology Group to commence joint scientific experiments in outer space. The first project is to send dLhCG, a joint repair material developed by Prof WANG Dangan and his research team, to outer space for undergoing a 6-month experiment to study the potential impact of microgravity and radiation in outer space on the repair efficacy of dLhCG.

Faculty Achievement



Department of Architecture and Civil Engineering

Dr Jeff WANG and his research collaborator from Huazhong University of Science and Technology received the Natural Science Award 2023 from Hubei Province, China for their research project titled Multiscale mechanical behaviors and disaster mechanism of granular materials in geotechnical engineering.

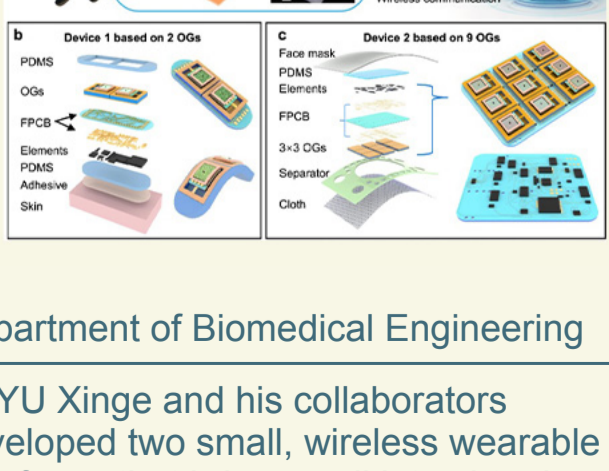
Faculty Achievement



Department of Electrical Engineering

Dr Alex YU received the 2023 IEEE Communications Society Katherine Johnson Young Author Paper Award. The awarded paper titled Robust and secure wireless communications via intelligent reflecting surfaces was published in *IEEE Journal on Selected Areas in Communications* in 2020. The award honours the author(s) of an especially meritorious paper dealing with a subject related to the Society's technical scope and who, upon the date of submission of the paper, is less than 30 years of age.

Faculty Achievement



Department of Biomedical Engineering

Dr YU Xinge and his collaborators developed two small, wireless wearable interfaces that bring smell into virtual reality. The interfaces are useful for people who have anosmia, or an inability to smell. The team's work has been published in *Nature Communications*.

