

RANKING

CityUHK rises to 47th globally in U.S. News & World Report Best Global Universities Rankings 2026-2027, showcasing excellence in engineering and technology

City University of Hong Kong (CityUHK) has achieved outstanding results in the 2026-2027 U.S. News & World Report Best Global Universities Rankings, placing 47th among more than 2,600 universities across over 100 countries and regions - a rise of 7 places from last year. It is ranked 9th in Asia and 3rd in Hong Kong. The university continues to dominate in engineering and technology, with 10 disciplines ranking 1st in Hong Kong (8 in engineering) and 15 disciplines in the global top 50 (14 in engineering).

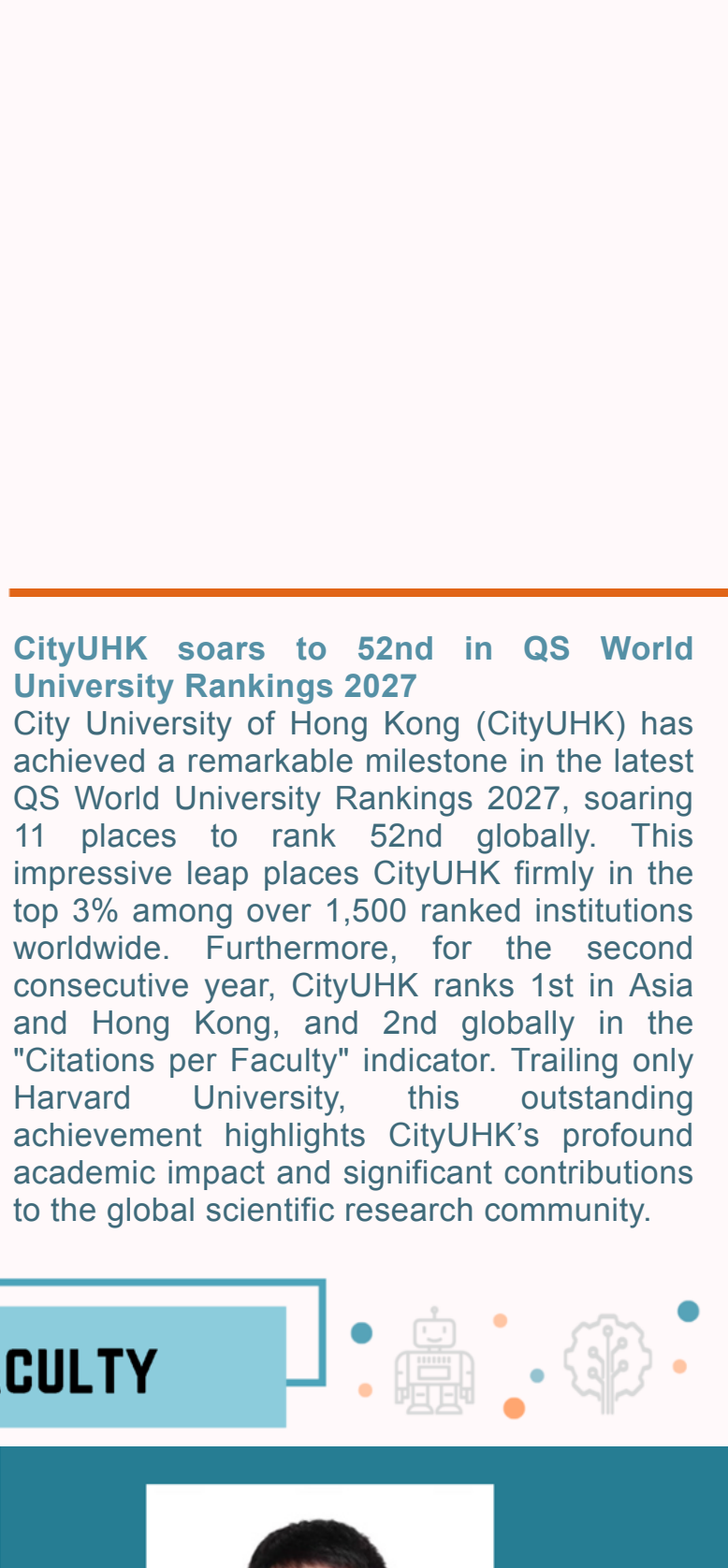
Engineering-related subjects

	World Rank	Rank within HK
Materials Science	5	1
Physical Chemistry	6	1
Condensed Matter Physics	7	1
Energy and Fuels	8	1
Nanoscience and Nanotechnology	8	1
Optics	9	1
Chemical Engineering	22	1
Electrical and Electronic Engineering	27	1

Prof XIE Wenbo, Assistant Professor of Department of Materials Science and Engineering

Prof XIE Wenbo joined the Department of Materials Science and Engineering in July 2026. Prior to his appointment at City University of Hong Kong, he worked at ShanghaiTech University. His research focuses on realistic modelling of heterogeneous catalysis and developing AI/machine learning methods to address the complexities in catalytic systems.

EVENT



CityUHK soars to 52nd in QS World University Rankings 2027

City University of Hong Kong (CityUHK) has achieved a remarkable milestone in the latest QS World University Rankings 2027, soaring 11 places to rank 52nd globally. This impressive leap places CityUHK firmly in the top 3% among over 1,500 ranked institutions worldwide. Furthermore, for the second consecutive year, CityUHK ranks 1st in Asia and Hong Kong, and 2nd globally in the "Citations per Faculty" indicator. Trailing only Harvard University, this outstanding achievement highlights CityUHK's profound academic impact and significant contributions to the global scientific research community.

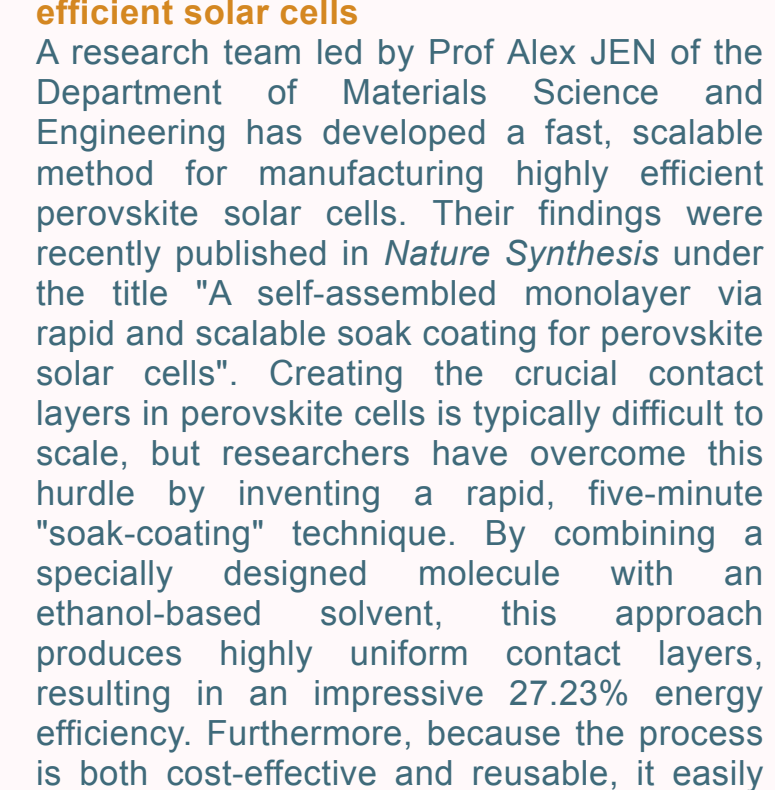
NEW FACULTY



RESEARCH

Prof Johnny HO's team reveals novel, energy-efficient catalyst designed to transform harmful wastewater nitrates into valuable ammonia in Science Advances

Prof Johnny HO's team from the Department of Materials Science and Engineering has recently published a new, energy-efficient method for cleaning polluted water, titled "Curvature-programmed nitrate electroreduction via single-atom protrusions on quantum dots" in *Science Advances*. The team designed tiny, textured catalysts made with metals such as iron and copper that use electricity to break down harmful nitrates found in wastewater. This process uses very little energy and converts nearly all the waste into valuable ammonia, which can be used as fertiliser. This finding offers a smart, practical solution for cleaning the environment while creating useful resources.



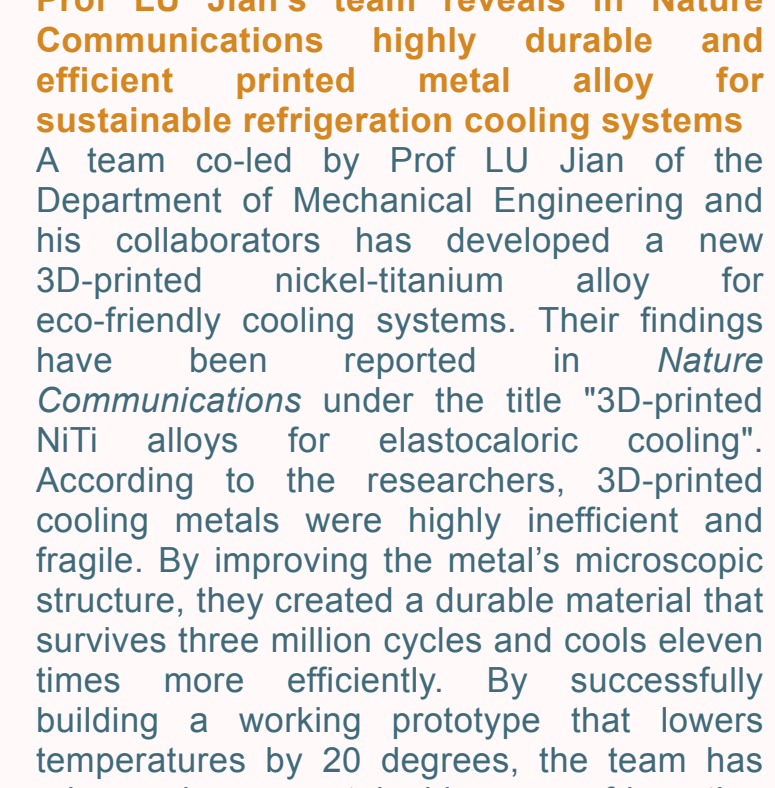
Materials science lecture advances clean energy innovation through nanomaterials and phase engineering collaboration

City University of Hong Kong (CityUHK) co-organised the "Bauhinia Academician Lecture Series: Innovation Pathways in Materials Science" with Bauhinia Culture Group and the Shenzhen CAS Academician Activity Base on 16 April 2026, bringing together leading scholars to discuss the future of materials science. Prof YU Shuhong, Academician of the Chinese Academy of Sciences and Professor at the University of Science and Technology of China, and Prof ZHANG Hua, Herman Hui Chair Professor of Nanomaterials and Director of the Hong Kong Institute for Clean Energy at CityUHK, shared insights on innovation in nanomaterials, clean energy, and the application of phase engineering of nanomaterials (PEN). Prof ZHANG explained how PEN can precisely tune atomic arrangements, create new material phases, and improve physicochemical properties, thereby enabling more efficient energy conversion. The talk also highlighted the role of advanced materials in supporting the clean energy transition and the global carbon-neutrality roadmap.

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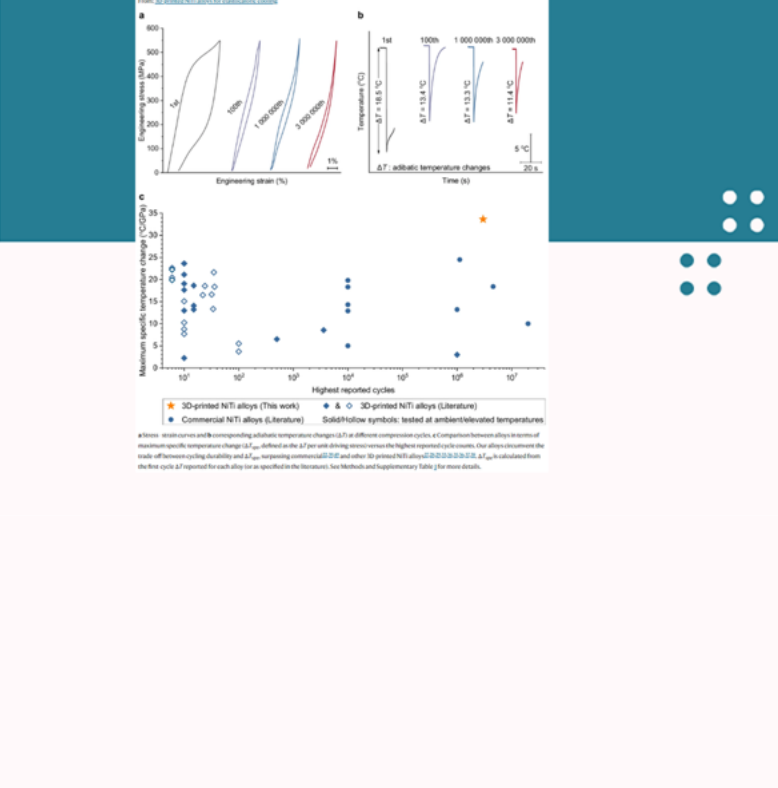
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RESEARCH

Prof LEE Duu-Jong's team develops innovative building skin and turbocharged solar hydrogen system for urban energy conservation and clean power production

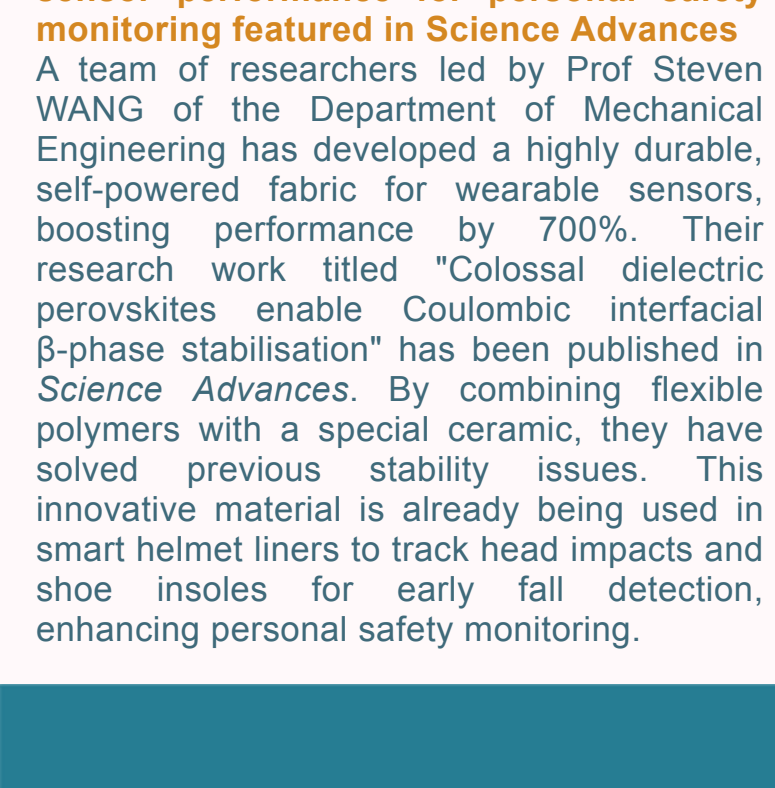
A research team led by Prof LEE Duu-Jong of the Department of Mechanical Engineering, who is also the Director of the Jockey Club STEM Lab of Circular Bio-economy at City University of Hong Kong, has successfully developed a bio-inspired "all-weather building skin" that cools in sunlight and harvests energy from rain, alongside a "turbocharged" solar hydrogen system powered by low-cost copper ions. These innovations provide a transformative pathway for urban energy conservation and clean energy production, reinforcing the Lab's commitment to translating cutting-edge research into tangible social benefits.



RESEARCH

Nature Synthesis features Prof Alex JEN's rapid manufacturing method for highly efficient solar cells

A research team led by Prof Alex JEN of the Department of Materials Science and Engineering has developed a fast, scalable method for manufacturing highly efficient perovskite solar cells. Their findings were recently published in *Nature Synthesis* under the title "A self-assembled monolayer via rapid and scalable soak coating for perovskite solar cells". Creating the crucial contact layers in perovskite cells is typically difficult to scale, but researchers have overcome this hurdle by inventing a rapid, five-minute "soak-coating" technique. By combining a specially designed molecule with an ethanol-based solvent, this approach produces highly uniform contact layers, resulting in an impressive 27.23% energy efficiency. Furthermore, because the process is both cost-effective and reusable, it easily scales up to manufacture large, flexible, and stable solar panels.



Prof LU Jian's team reveals in Nature Communications highly durable and efficient printed metal alloy for sustainable refrigeration cooling systems

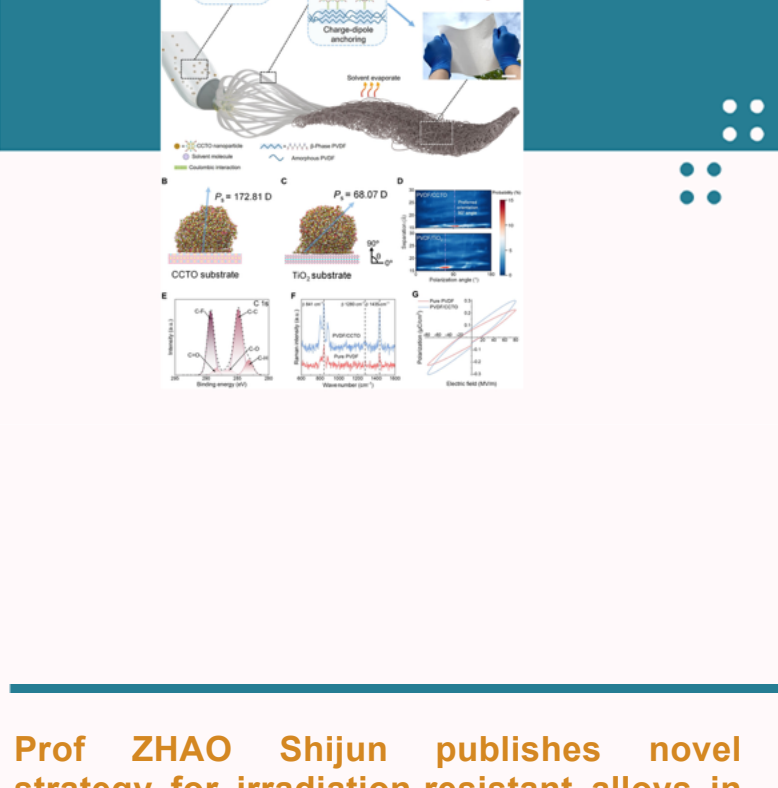
A team co-led by Prof LU Jian of the Department of Mechanical Engineering and his collaborators has developed a new 3D-printed nickel-titanium alloy for eco-friendly cooling systems. Their findings have been reported in *Nature Communications* under the title "3D-printed NiTi alloys for elastocaloric cooling". According to the researchers, 3D-printed cooling metals were highly inefficient and fragile. By improving the metal's microscopic structure, they created a durable material that survives three million cycles and cools eleven times more efficiently. By successfully building a working prototype that lowers temperatures by 20 degrees, the team has advanced sustainable refrigeration technology.



RESEARCH

Nature Sustainability showcases Prof LIU Bin's eco-friendly innovation, which transforms glycerol waste into sorbose with sunshine and enzymes

Prof LIU Bin and his team from the Department of Materials Science and Engineering have made waves in *Nature Sustainability* with their paper titled "Upgrading glycerol to sorbose via a tandem photoelectrocatalysis-enzyme catalysis relay". The team has developed a green, solar-powered method to transform glycerol, a cheap, abundant plant waste product, into sorbose, a valuable sugar used in food, cosmetics, and medicine. By combining sunlight-driven chemistry with custom enzymes, their innovative two-step system links smaller molecules together to build the larger sugar molecule. This sustainable process runs entirely on sunlight, requiring no additional electricity, offering an eco-friendly way to convert low-value waste into high-value chemicals.



RESEARCH

Prof Steven WANG's new durable, self-powered fabric that boosts wearable sensor performance for personal safety monitoring featured in Science Advances

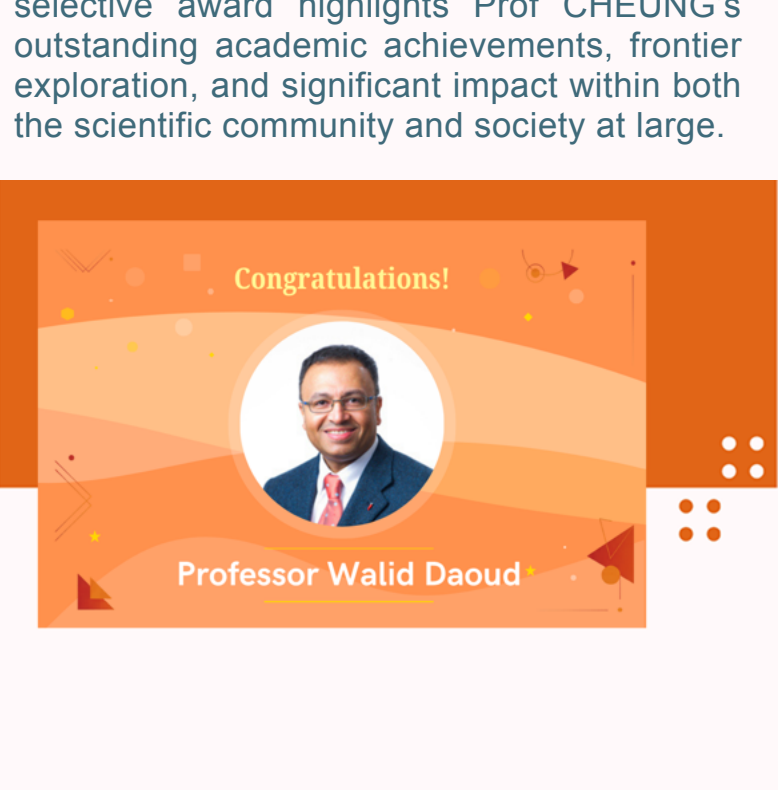
A team of researchers led by Prof Steven WANG of the Department of Mechanical Engineering has developed a highly durable, self-powered fabric for wearable sensors, boosting performance by 700%. Their research work titled "Colossal dielectric perovskites enable Coulombic interfacial β -phase stabilisation" has been published in *Science Advances*. By combining flexible polymers with a special ceramic, they have solved previous stability issues. This innovative material is already being used in smart helmet liners to track head impacts and shoe insoles for early fall detection, enhancing personal safety monitoring.



RESEARCH

Prof LU Jian's 4D-printed ceramic enhances tunable radar wave absorption, published in Science Advances

Prof LU Jian's research team from the Department of Mechanical Engineering introduces a 4D-printed material that absorbs electromagnetic waves, which is vital for radar and wireless communications. Their study titled "4D printing of hierarchically porous carbon-supported high-entropy ceramic metamaterial for tunable microwave absorption" has been featured in *Science Advances*. Unlike traditional materials with fixed shapes and limited ranges, this innovative ceramic blend changes shape when heated, allowing it to adjust and absorb a significantly wider range of signal frequencies with great efficiency. This technology paves the way for smarter, highly versatile communication and advanced radar systems.



RESEARCH

Prof ZHAO Shijun publishes novel strategy for irradiation-resistant alloys in Nature Communications

A recent paper titled "Realising irradiation-resistant metallic alloys by immobilising induced defects" by Prof ZHAO Shijun's research team from the Department of Mechanical Engineering has been featured in *Nature Communications*. Realising that future nuclear reactors require materials capable of withstanding extreme radiation, Prof ZHAO's team has discovered that intentionally distorting the atomic structure of mixed metals can prevent radiation damage. Notably, a highly distorted nickel-molybdenum alloy has exhibited almost no damage under irradiation. This innovative approach provides a simple, effective method for designing stronger, longer-lasting materials for nuclear technologies.



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FACULTY ACHIEVEMENT

CENG Outstanding Teaching Award 2025-26

Congratulations to the following faculty members on receiving the Outstanding Teaching Award of the College of Engineering (CENG):

Department	Awardee
Electrical Engineering	Prof Ray CHEUNG
Mechanical Engineering	Prof Walid DAOUD
Materials Science and Engineering	Prof ZHONG Xiaoyan



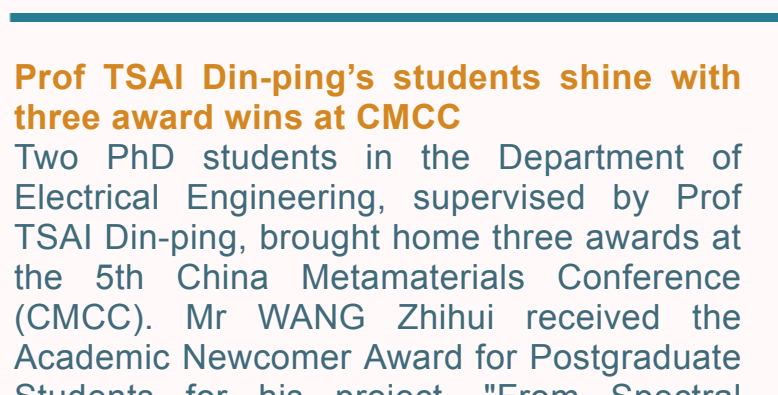
Prof Walid DAOUD named inaugural Overseas Research Fellow for global energy and smart wearable research

Prof Walid DAOUD from the Department of Mechanical Engineering has been named an Inaugural Overseas Research Fellow under the Research Grants Council, which has supported seven CityUHK scholars. Professor DAOUD is known for his work on energy harvesting, smart wearables, and storage solutions, and his team has won three Gold Medals at the Geneva Inventions Exhibition. With the fellowship, he will collaborate with researchers in France, Sweden, and Australia on flexible devices for AI and energy applications.



Prof TAN Siew Chong honoured with 2026 IEEE award

Prof TAN Siew Chong from the Department of Electrical Engineering has been honoured with the prestigious 2026 IEEE Modelling and Control Technical Achievement Award for his contributions to nonlinear and robust control of power electronics systems. This recognition is a testament to his outstanding research and continued leadership in electrical engineering. He will be officially presented with the award at the upcoming IEEE Workshop on Control and Modelling for Power Electronics, to be held from 20 to 23 July in Cambridge, the United Kingdom.



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Prof XIE Min and his team win Best Applications Paper Award in IISE Transactions

Prof XIE Min's team from the Department of Systems Engineering, in collaboration with professors from Tsinghua University, has recently received the prestigious Best Applications Paper award in *IISE Transactions*, the flagship journal of the Institute of Industrial and Systems Engineers. Their award-winning paper, "Two-stage distributionally robust optimisation for joint system design and maintenance scheduling in high-consequence systems", was presented at the 2026 IISE Annual Conference, highlighting their highly significant contributions to modern systems engineering research. IISE stands for the Institute of Industrial and Systems Engineers.

