Prof. Lawrence Yoon Suk Lee

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Prof. Lawrence Yoon Suk Lee received his Ph.D. in Physical Chemistry from McGill University, Canada, in 2006. Following his postdoctoral training, he joined the Department of Applied Biology and Chemical Technology at The Hong Kong Polytechnic University in 2013, where he currently serves as an Associate Professor and the Programme Leader of the Master of Science in Sustainable Technology for Carbon Neutrality. Prof. Lee's research centers on the design and development of advanced semiconductor nanomaterials and their hybrid composites for applications in photocatalytic and electrocatalytic water splitting, CO_2 reduction, and next-generation energy storage technologies. A key focus of his work is elucidating the activation and deactivation mechanisms of electrocatalysts under realistic operating conditions at the atomic scale. These fundamental insights enable the rational design of high-performance catalysts, electrode materials, and electrochemical sensors for sustainable energy conversion and storage. Recent breakthroughs from his research group include the development of highly active acidic oxygen evolution reaction (OER) electrocatalysts and robust seawater electrocatalysts derived through the upcycling of spent Li-ion batteries, advancing both clean-energy technologies and circular-economy principles.