# International Symposium on Bioenergy and Biorefinery (ISBB 2026)

Detailed Session Profile & Technical Program Overview

## ▪ Session Overview

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| **Session Number:** | Session #2 |
| **Session Title:** | **Bio and Molecular Catalysis (BMC)** |
| **Scope & Focus:** | Advances in biocatalysis, molecular catalyst engineering, enzyme technologies, and heterogeneous pathways for sustainable chemical synthesis and low-carbon transformations. |

## ▪ Committee & Invited Speakers

**SESSION CHAIR**

### Prof. Molly LI

The Hong Kong Polytechnic University
Email: molly.li@polyu.edu.hk

Prof. Molly Meng-Jung Li is an Assistant Professor in the Department of Applied Physics at The Hong Kong Polytechnic University, where she leads research in heterogeneous catalysis and sustainable energy conversion. Her work spans catalyst design, reactor development, system scale-up, and advanced synchrotron-based characterisation, with a focus on translating catalysis and green chemistry into practical low-carbon technologies. She has published more than 80 papers in leading journals, including Nature Energy, Nature Catalysis, Advanced Materials, Nature Communications, ACS Catalysis, Angewandte Chemie International Edition, Chemical Engineering Journal, and Applied Energy. She also brings strong translational and industry experience through collaborations with partners such as Johnson Matthey and Sinopec, as well as patented and licensed catalytic and energy technologies for real-world applications.

**KEYNOTE SPEAKER**

### Prof. Duu-Jong LEE

City University of Hong Kong
Email: tuclee@cityu.edu.hk

Professor Lee explores sustainable energy solutions and environmental engineering. With a total research funding of over 10 M USD, he published over 1,300 peer-reviewed journal papers, thirty-one book chapters, nine edited books, and twenty patents. His publication has received 81,000 citations by Google Scholar, giving an h-index of 137. Dr Lee ranked top 0.019% globally in category "Biotechnology" in top 2% researcher ranking and was listed as the Highly Cited Researcher by Clarivate Analytics.
Lee's team developed a novel process for simultaneously removing carbon, sulfur, and nitrogen from industrial wastewater, successfully handling over 60,000 m3/day in pharmaceutical and chemical industries. A novel anaerobic granulation process was also proposed and practiced in over 80 sites to biologically treat more than 100,000 m3/day recalcitrant wastewaters of BOD/COD ratio less than 0.1. Prof. Lee was the Dean (Engineering) and Vice President of National Taiwan University of Science and Technology. He was the President of the Taiwan Institute of Chemical Engineers, the International Bioprocessing Association, and the International Society of Bioprocess and Sustainability. Prof. Lee was a Fellow of the Taiwan Institute of Chemical Engineers, the Royal Society of Chemistry, the Hong Kong Institute of Engineers, the International Bioprocessing Association, and the International Academy of Drying Science and Technology. He was a Corresponding member of the International Academy of Engineering of Russia.

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| | **KEYNOTE SPEAKER**<br>**Prof. Changwei HU**<br>Sichuan University<br>Email: changweihu@scu.edu.cn<br>Biography details are currently being finalized and will be updated shortly. Prof. Hu's research focuses on chemical engineering and green catalytic pathways at Sichuan University. |