

## The DGIST (ESE) – NUS (ChBE) Workshop

**Date:** 18<sup>th</sup>-19<sup>th</sup> Dec. 2023

**Locations:** 9 Engineering Drive 1, Singapore 117575 (18<sup>th</sup> Dec.)  
1 Engineering Drive 3, Blk E8, Singapore 117580 (19<sup>th</sup> Dec.)

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**Sunday**  
17<sup>th</sup> Dec

Arrival in Singapore

**Monday**  
18<sup>th</sup> Dec

**Engineering Auditorium; EA**  
**9 Engineering Drive 1, Singapore 117575**

<b>9:00-9:20</b>	Prof. Saif Khan (HOD)	Welcome Remark & Introduction of ChBE
<b>9:20-9:45</b>	Dr. Yamin Zhang**	Battery-Powered, Light-Controlled, Bioresorbable Platforms for Programmed Drug Delivery ( <b>via ZOOM</b> )
<b>9:45-10:10</b>	Prof. Hongkyung Lee	Magnetically Guided Diagnosis and Therapy for Uniform Current Distribution Inside Lithium Batteries
<b>10:10-10:35</b>	Dr. Yi Hou	Unlocking the Potential of Perovskite Solar Cells: from Single-Junction to Tandem
<b>10:35-11:00</b>	Coffee Break	
<b>11:00-11:25</b>	Prof. Jiwoong Yang	Controlled Synthesis of Colloidal Quantum Dots for Light-Emitting and Photodetecting Devices
<b>11:25-11:50</b>	Dr. Andrew B. Wong	Strategies for Improving the Microenvironment in Electrochemical CO <sub>2</sub> Reduction
<b>11:50-12:15</b>	Dr. Dae-Hyun Nam	Nano-Metallurgy based Catalyst Design for Selective CO <sub>2</sub> Electroreduction to Multi-Carbon Products
<b>12:15-2:00</b>	Lunch	Open to workshop delegates only
<b>14:00-14:25</b>	Dr. Lei Wang	Electrochemical conversion of CO <sub>2</sub> to Fuels and Chemicals
<b>14:25-14:50</b>	Dr. Chanyeon Kim	Engineering of Microenvironments near Cu Catalyst for Electrochemical CO <sub>2</sub> Reduction
<b>14:50-15:15</b>	Dr. Yanwei Lum	Understanding the mechanisms of electrocatalytic CO <sub>2</sub> reduction
<b>15:15-15:40</b>	Prof. Ju-Hyuck Lee	Engineering of Functional Polymers for Triboelectric Nanogenerators
<b>15:40-16:00</b>	Coffee Break	

<b>16:00-16:25</b>	Dr. Sergey Kozlov	The effects of metal-oxide charge transfer in electrochemistry
<b>16:25-16:50</b>	Prof. Chiyong Park	Supramolecular Hybrid Materials for Sustainable Applications through Reciprocal Association of Multi-components
<b>17:15-17:25</b>		Concluding Remark
<b>18:30</b>	Dinner	