

# POLYU Junior Researcher Mentoring Programme 2024



<b>Code:</b>	JRMP2024_22
<b>School / Department:</b>	Department of Applied Biology and Chemical Technology
<b>Name of Research Team Member(s):</b>	Dr Ge Jingjie, Assistant Professor
<b>Research Topic:</b>	Electrocatalytic hydrogen production: The design of anodic catalysts and reactions
<b>Short Description of the Research Project:</b>	<p>This project seeks to enhance the efficiency of hydrogen production through proton exchange membrane water electrolysis. It focuses on creating effective manganese-based oxygen evolution catalysts and developing novel anodic electro-oxidative reactions for biomass energy and aromatic hydrocarbons.</p> <p>This approach aims to improve anodic reaction kinetics for high-efficiency hydrogen production and the generation of valuable liquid chemicals. The project will contribute to overcoming the low efficiency of anodic kinetics in water electrolysis and thereby advance green hydrogen development in Hong Kong.</p>
<b>No. of Places Offered:</b>	2
<b>Frequency of Meetings:</b>	Bi-weekly
<b>Special Requirement(s):</b>	It is preferable for the participating students to have taken Chemistry and/or Materials Science.

\* The information presented above is subject to change.