

**June 21, 2024 (13:00-15:00)**

**Topic A - Biocatalysis**

<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
A-0145-P-C	Ming-Jing He	Institute of Environmental Engineering, National Central University	Synthetic copolymer of polylactic acid hydrolyzed lactic acid and malic acid
A-0237-P-C	Wei-Chen Liu	National Taipei University of Technology	Intracellular Enzymatic Reactions Attenuate Product Noise
A-0264-P-C	Subhankar Dhar	Ming Chi University of Technology	Synthesis of Methyl 3-(R)-Hydroxybutyrate from Carbon Dioxide Using Whole Cell Biocatalysis

**Topic B - Electrocatalysis**

<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
B-0033-P-C	Yu-Chieh Ting	National Tsing Hua University	Synergistic Fe and Co binary single atoms based air cathodes for high performance and ultrastable Zn-air batteries
B-0075-P-C	Cheng Han Lin	National Tsing Hua University	"Development of Porous Nickel Structures as Catalyst Supports for Air Cathodes of Zinc-Air Batteries"
B-0088-P-C	YU-XUAN LEE	National University of Kaohsiung	Cyano group-modified melem hydrate: synthesis and enhanced performance in contact-electrocatalysis
B-0113-P-C	Nam Quoc Ha	National Taiwan University of Science and Technology	Efficient alkaline water electrolysis at high current densities via designing the metals-doped nickel sulfide nanorod arrays
B-0129-P-C	Adane Gebresilassie Hailemariam	National Yang Ming Chiao Tung University	Enhanced Charge Transfer Kinetics and Long-term Cyclability of Li <sub>2</sub> FeS <sub>2</sub> Cathode via Highly Electronegative Anionic Incorporation for Lithium Ion Batteries
B-0132-P-C	Asia Aboutaleb Abdelgalil	Academia sinica, institute of chemistry	Surfactant-Mediated Enhancement of Electrochemical CO <sub>2</sub> Conversion to Formate Using Porous 3D BiOCl Catalyst

B-0139-P-C	Fikiru Temesgen Angerasa	National Taiwan University of Science and Technology	Highly Dispersed Pt Nanoparticles on the Stable Hybrid Material for Oxygen Reduction Reaction
B-0169-P-C	Sumika Fujita	Department of Applied Chemistry, Graduate School of Engineering, Mie University	Electrochemical reduction of CO <sub>2</sub> at CuO-doped g-C <sub>3</sub> N <sub>4</sub> electrode in methanol
B-0170-P-C	Cham Wah CHEUNG	The University of Hong Kong	Post-Translational Modification of Proteins through Electrochemical Phosphorylation
B-0185-P-C	Mengstu Etay Ashebir	Institute of Atomic and Molecular Sciences	Electronic Structure Engineering of Nickel Single Atom Catalyst to Boost Electrochemical CO <sub>2</sub> Reduction in Acidic Media
B-0196-P-C	ChengYu Wu	National Tsing Hua University	A Series of Metastable High-Entropy-Alloy Atomic Layers with Square Configurations Including Iron- and Platinum-Group Metals as Catalysts
B-0199-P-C	Wei-Sheng Liao	National Taiwan University of Science and Technology	Synthesis of noble metal phthalocyanine single-atom catalyst via one-step method for partial oxidation of ethylene glycol
B-0201-P-C	JUNG SHEN	National Taiwan University of Science and Technology	Evaluation of the efficacy of M-N <sub>4</sub> macrocyclic metal phthalocyanine in oxygen reduction reaction
B-0202-P-C	Yu Wei Hsu	National Tsing Hua University	Novel Design of Anode with Sub-catalyst Layer for Proton Exchange Membrane Water Electrolyzer with Low Iridium Loading
B-0203-P-C	Hsuan Yu Wu	National Tsing Hua University	Creating a hydrophobic catalyst microenvironment in bi-polar membrane cell system to reduce CO <sub>2</sub> to formic acid

B-0236-P-C	Shan-Ni Lin	National Taiwan University	Electrocatalytic Hydrogenation of Furfural on Copper Electrode Decorated with Copper-Nitrogen-Carbon Catalyst
B-0246-P-C	Shih-Sin Wang	National Kaohsiung University of Science and Technology	Concave Palladium@Platinum Core-Shell Nanocrystals as Neutral Glucose Oxidation Catalysts
B-0249-P-C	Tzu-Ting Liu	Chemical Engineering	F-doped Graphene Quantum Dots Decorated Carbon Nanotube as An Efficient Electrocatalyst for Hydrogen Peroxide Formation
B-0250-P-C	THILAK SABAREESH MALAYALAM AMARNATH	National Taipei University of Technology	A Desirable Different GN ratio of CuAlO <sub>2</sub> (GN=1, 1.3, 1.5, 2.0) Synthesis: An Efficient and Selective Electrocatalyst for Detection of Benzimidazole Fungicides of Carbendazim
B-0259-P-C	HSIANG PO WU	National Kaohsiung University of Science and Technology	Research on the iron-based metal-organic framework materials for application in high-efficiency hydrogen production from seawater electrolysis
B-0270-P-C	Hemarani Annadurai	National Taipei University of Technology, Taiwan	Synthesis and Characterization of Two-Dimensional (2D) Paper-like Graphene Oxide (GO) Coating on Three-Dimensional (3D) Cerium Oxide Nanospheres (CeONS) via Stoichiometric Synthesis for Non-Enzymatic Neurotransmitter Detection
B-0274-P-C	Woldesenbet Bafe Dilebo	National Taiwan University of Science and Technology	Hierarchical CoNiP/NiS Heterostructure Nanorods as Highly efficient Electrocatalysts for Hydrogen Evolution Reaction
B-0275-P-C	Vinothini Sivaramakrishnan	National Taipei University of Technology	Electrocatalytic reduction of carbon dioxide over copper delafossite complexes

B-0277-P-C	Hsuan-Yu Chen	National Taiwan University (NTU-MST); Center for Condensed Matter Sciences, NTU	Mechanistic Insights into the Formation of CO and HCOOH during Electrochemical CO <sub>2</sub> Reduction Reaction
B-0279-P-C	Chemeda Barasa Guta	National Taiwan university of science and Technology	Efficient H <sub>2</sub> O <sub>2</sub> Synthesis Enabled by an Electrocatalyst with Abundant Oxygen Vacancies for Two-Electron Water Oxidation.
B-0280-P-C	Habib Gemechu Edao	National Taiwan University of Science and Technology	Interfacial Engineered Bimetallic Layered Double Hydroxides Heterostructure on Surface-Amended Titanium Substrate as Efficient Self-Supported Electrocatalysts for Boosting Oxygen Evolution Reactions
B-0281-P-C	Fadila Arum Rhamadani	National Taiwan University	Regulating the Local Coordination of Cobalt Single Atom Catalyst for Improved Electrochemical CO <sub>2</sub> Reduction Reaction
B-0282-P-C	Yu Ru Liu		High-entropy Prussian blue analogues derived metal phosphite for electrocatalytic hydrogen evolution reaction
B-0292-P-C	Kristine Clair Gabisan Gasco	University of the Philippines Diliman	Bi-Fe Dual Atom Catalyst ZIF8-derived as Electrocatalyst for Alkaline OER Water Splitting
B-0294-P-C	Shu-Ting Chang	Tunghai University Department of Chemistry	Amorphous CoNiFe Oxide Film as Highly Active Electrocatalysts for Oxygen Evolution Reaction and Urea Oxidation Reaction
B-0300-P-C	Meng Cheng Chen	National Yang Ming Chiao Tung University	"Self-Assembling Neatly-Arranged Nickel Single Atom Catalyst on Carbon Nanofiber for Industrial CO <sub>2</sub> -to-CO Conversion"
<b>Topic C - Photocatalysis</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
C-0030-P-C	Yu-Cheng Tsai	Feng Chia University	Cuprous Oxide Grafted Biomimetic Polyimide-Graphitic Carbon Nitride Hybrid Films for Photocatalytic Applications

C-0031-P-C	Pinyi Wu	Feng Chia University	Preparation and Characterization of TiO <sub>2</sub> -Bi <sub>2</sub> WO <sub>6</sub> Photocatalyst for CO <sub>2</sub> Reduction
C-0032-P-C	SHANG-YAN XIE	Feng Chia University	Preparation of Cu <sub>2</sub> O/ZnO Nanocomposites for Photocatalytic Conversion of Carbon Dioxide
C-0093-P-C	Shigen Watanabe	Mie University	Effect of thiophene introduction to graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) on the photocatalytic H <sub>2</sub> evolution
C-0112-P-C	Yo-Hsun Liu	National Taiwan University	Cuprous oxide nanoparticles / graphene / MoS <sub>2</sub> thin film indirect Z-scheme heterostructures for photocatalytic CO <sub>2</sub> reduction
C-0142-P-C	Mayu Kawaguchi	Mie university	Effect of introduction of functional group into TpPa-COF photocatalyst on dye decolorization mechanism
C-0155-P-C	Chun Lin Yeh	National Taiwan University	A Novel 2D Heterostructural Photocatalyst for H <sub>2</sub> Evolution
C-0156-P-C	Miyu Sato	Mie University	Photocatalytic Cr(VI) reduction in aqueous solution with S-doped g-C <sub>3</sub> N <sub>4</sub> /ZnO using EDTA hole scavenger
C-0162-P-C	Yujian Shi	The University of Sydney	Enable High Efficient Solar Driven Sugar Transformation by Nitrogen-Anchored Gallium(III) on Alumina
C-0177-P-C	Sheng-Hsiang Hsu	National Taiwan University of Science and Technology	Boosting hydrogen generation on p-Co <sub>3</sub> O <sub>4</sub> /n-Li-doped Zn(O,S)-nanodiode @SiO <sub>2</sub> nanospheres under simulated solar-light illumination
C-0181-P-C	Chia-Hsing Hsieh	National Taiwan University of Science and Technology	Preparation of S-WO <sub>x</sub> @Co <sub>3</sub> O <sub>4</sub> nanocomposites for effective adsorption, and photodegradation of organic dyes under solar light irradiation
C-0233-P-C	Khanh Do Gia Huynh	National Tsing Hua University	Construction of Triphenylene-Based Two-Dimensional Covalent Organic Frameworks for Boosting Photocatalytic Hydrogen Evolution

C-0238-P-C	Yu Lin Chen	National Taiwan University of Science and Technology	Utilize a photocatalytic membrane reactor for filtering and degrading microplastics in water
C-0245-P-C	Anuradha Chowdhury	National Taipei University of Technology	Synergistic Enhancement of CO <sub>2</sub> Photoreduction to C <sub>1</sub> Products: Harnessing Sulfur Defects in CdS-Nanoflowers/g-C <sub>3</sub> N <sub>4</sub> Heterojunction Photocatalyst
C-0248-P-C	Pin-Chun Lee	National Taipei University of Technology	Efficiently Catalyzing Photo-Oxidation of Water by Surface Engineering of Bismuth Vanadate with Nickel Molybdenum Oxide Coverages
C-0256-P-C	Dung Chau Kim Hoang	National Tsing Hua University	Rational Design of Heptazine-based Covalent Organic Framework as Versatile Photocatalyst for Hydrogen Evolution from Water
C-0257-P-C	Ying Rang Zhuang	National Tsing Hua University	Development of Conjugated Polymer Nanoparticles with NIR-II Fluorescence and Photocatalytic Hydrogen Production for In Situ Hydrogen-Photothermal Therapy of Glioblastoma
C-0260-P-C	Wei-Cheng Lin	National Tsing Hua University	Surfactant-Free Process of Bulk Heterojunction Particles Facilitated Polaron Generation for Boosting Photocatalytic Hydrogen Evolution
C-0265-P-C	Harikrishnan Venkatesvaran	National Taipei University of Technology, Taiwan	ZnO-NRs embedded guar-gum derived CS@HNTs: A bifunctional catalyst for electrochemical detection and photocatalytic applications
C-0266-P-C	Sridharan Balu	National Taipei University of Technology	In-co-doped Bi <sub>1-x</sub> VO <sub>4</sub> drenched sulfur-doped g-C <sub>3</sub> N <sub>4</sub> nanocomposite: A type-II photo(electro)catalytic system for visible-light-driven water-splitting and toxic removal applications
C-0268-P-C	Kuo-Wei Lan	National Taipei University of Technology, Taipei, Taiwan	Investigation of Different Cation (Fe <sup>3+</sup> , In <sup>3+</sup> , Mn <sup>3+</sup> ) Substitution on BiVO <sub>4</sub> for the Photoelectrochemical Water Splitting Applications
C-0283-P-C	ZI-YUAN Su	Feng Chia University	Truncated octahedral Zn-doped Cu <sub>2</sub> O photocatalysts with high photocatalytic H <sub>2</sub> production activity

C-0284-P-C	Huai-En Tsai	Feng Chia University	Cu <sub>2</sub> S@ZnS nanorod array-loaded Cu foam as immobilized photocatalysts with enhanced H <sub>2</sub> production activity
C-0290-P-C	YU-DIAN CHEN	Tunghai University	Synthesis of Amorphous Copper Doped 2D/3D hybrid cesium lead halide perovskites through hot injection method
<b>Topic D - Photoelectrocatalysis</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
D-0242-P-C	Bo-Yang Chuang	Taipei tech university	Facilitating Light Utilization and Electron Transfer of TiO <sub>2</sub> Nanotube Arrays for Catalyzing Photoelectrochemical Water Reduction via Acid Etching and Copper Doping
D-0261-P-C	Hubert C. Chen	National Taiwan university	Photoelectrocatalytic Hydrogenation of Furfural over Defective TiO <sub>2</sub> Electrodes
<b>Topic E - Thermocatalysis</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
E-0011-P-C	Chuan-Bin Du	Department of Chemical Engineering, National Tsing Hua University	Aerosol MOF-derived Ni-Zn-Al Hybrid Catalyst for Efficient Methane Bi-reforming
E-0046-P-C	Li Yu Wang	National Tsing Hua University	Study on the impact of graphitization degree of mesoporous carbon supports for mild ammonia synthesis over Cs-promoted Ru catalysts
E-0052-P-C	CHIH YING CHI	Feng Chia University	Methanation Activity of Bi-metal (Ni and La) / Samarium Doped Ceria Catalysts and Effect of Synthesis Conditions
E-0074-P-C	Jui Teng Huang	National Tsinghua University, Department of Chemistry	K <sub>2</sub> CO <sub>3</sub> Promoted Carbon-Doped Iron Nitride as Highly Efficient Catalyst for Reverse Water-Gas Shift Reaction
E-0090-P-C	Elicia Kusuma	National Taiwan University	CO <sub>2</sub> Hydrogenation for Methanol Production using Two Reactor System at Medium-High Pressure

E-0103-P-C	YONGQIANG GU	University of Toyama	Tailoring the product distribution of CO <sub>2</sub> hydrogenation via engineering of Al location in zeolite
E-0119-P-C	Chi-Hsin Huang	National Taiwan university of science and technology	Using Ni-Cu bimetallic nanoparticle to prepare NiCu/LZC catalysts for steam reforming of ethanol
E-0120-P-C	Yi-Cheng Wang	National Taiwan University of Science and Technology	Water splitting reaction over reduced cerium-iron mixed oxide and cerium-indium mixed oxide
E-0122-P-C	CHING-HUNG CHU	National Central University	Utilization of Fe-Ni Bimetallic Catalysts for Dry Reforming and Oxidative Dehydrogenation of CO <sub>2</sub> and C <sub>2</sub> H <sub>6</sub>
E-0172-P-C	Jui-Lin Fang	National Taiwan University	High Performance De-NO <sub>x</sub> Catalysts Coated on Honeycomb and Activity Test
E-0178-P-C	Viet-Phuong Bui	Department of Chemical Engineering, National Taiwan University	Biomass-derived Co <sub>3</sub> O <sub>4</sub> /n-SiO <sub>2</sub> for Producing 2- Furoic Acid by Furfural Oxidation
E-0179-P-C	I-Heng Lee	National Taiwan University of Science and Technology	Producing Alpha-olefins via Alcohol Dehydration Reactions Using Zirconia as Catalyst
E-0194-P-C	Yu-Chia Chang	National Taiwan University	Enhanced Plastics-to-Single-walled Carbon Nanotube (SWCNT) Conversion through Layered Double Hydroxide (LDH)-Derived Mixed Metal Oxide
E-0243-P-C	Zhi Pin Law	National Taiwan University	One-Pot Depolymerization of Poly(ethylene terephthalate) with Methanol Generated from CO <sub>2</sub> Hydrogenation with Isopropanol
<b>Topic F - Computational Catalysis</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
F-0016-P-C	Yu-Hao Liu	National Tsing Hua University	Thermodynamic Insights into Hydrogen Coverage on Ru Surfaces: A DFT Study



F-0017-P-C	Yeh Cheng-Hsi	Department of Engineering and Systems Science, National Tsing Hua University	Enhancing Ammonia Synthesis Efficiency and Mitigating Hydrogen Poisoning: Investigating the Role of Cs Promotion in Ru-Based Catalysts
F-0018-P-C	Che-Chih Chu	National Taiwan University of Science and Technology	Theoretical Insights on BaAO <sub>2</sub> N (A=Ta and Nb) for efficient electrocatalytic Nitrogen Reduction to Ammonia
F-0042-P-C	Yuchi Kao	National Taiwan University	Polymeric Ionic Liquid Catalyst for Green Synthesis of Glycerol Carbonate from Glycerol and CO <sub>2</sub> : Experimental and Theoretical Insights
F-0239-P-C	Han-Chung Chang	National Taiwan University	Overcoming Data Limitations in Reaction Barrier Prediction: Exploring Transfer Learning, Feature Engineering, and Delta-Learning Methods
<b>Topic G - Characterization and Porous Materials</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
G-0006-P-C	Yi Ching Chuah	National Tsing Hua University	Continuous Aerosol Synthesis of MOF-Derived Hybrid Catalysts for Methanol Production via Combined CO <sub>2</sub> and CO Hydrogenation
G-0007-P-C	Ngoc Khanh Tran	Department of Chemical Engineering, National Tsing Hua University	Metal-Organic Framework-derived Base Catalyst for Conversion of Dimethyl Carbonate to Glycerol Carbonate
G-0008-P-C	Yen-Te Lee	National Tsing Hua University	Aerosol-assisted Synthesis of Cu@C Hybrid Catalysts for Dimethyl Carbonates Synthesis Through Oxidative Carbonylation
G-0063-P-C	Yun-Cheng Hsieh	Department of Chemical Engineering and Materials Science, Yuan Ze University	Preparation and Characterization of Zinc/Amino-Modified SBA-15 for Application in Carbon Dioxide Conversion to Propylene Carbonate

G-0080-P-C	Ching-Wen Hsiao	National Sun Yat-sen University	Highly Stable Hybrid Porous Polymers Containing Polyhedral Oligomeric Silsesquioxane (POSS)/Dibenzo[g,p]chrysene and Dibenzo[b,d]thiophene Units for Efficient Rhodamine B Dye Removal
G-0083-P-C	Pei Tzu Wang	Department of Materials and Optoelectronic Science, National Sun Yat-sen University	Construction and Characterization of Fully $\pi$ -Conjugated and Diyne-linked Conjugated Microporous Polymers for High-Performance Energy Storage
G-0092-P-C	Nian Ping Chen	National Sun Yat-sen University	Anthraquinone-Enriched Conjugated Microporous Polymers as a high-performance electrode for supercapacitors
G-0095-P-C	Han-Yu Wang	National Taichung University of Education	Synthesis of Glycerol Carbonate from Glycerol and Dimethyl Carbonate using $M_xN_yO_z$ (M=Li, Na, K) as Catalyst
G-0107-P-C	Yi-Shun Li	National Sun Yat-sen University	Construction of Ferrocene-based porous organic polymers derived high-Performance Electrode for Energy Storage
G-0134-P-C	Pin-Han Chen	National Sun Yat-sen University	Construction Ultrastable of Porous Organic/Inorganic Polymers Based on double decker silsesquioxane (DDSQ) Units as a high-performance electrode for supercapacitor
G-0136-P-C	Wei-Chun Huang	National Sun Yat-sen University	Designed and synthesis of N-doped microporous carbons derived from tetraphenylethene with anthracene moieties based on microporous conjugated polymers for CO <sub>2</sub> capture and Energy Storage
G-0152-P-C	Gebretinsae Yeabyo Nigussie	Academia Sinica	Efficient Epoxidation of Propylene over ZnO/ZnO <sub>2</sub> Catalysts with Hydrogen Peroxide Assisted by Acetonitrile
G-0154-P-C	RAMESHWAR KALAPPA SWAMI	Academia Sinica	Selective Oxidation of Light Alkanes to Value-Added Chemicals Catalyzed by Vanadium Oxide Nano-catalysts
G-0175-P-C	Hayoon Park	Korea Institute of Industrial Technology	Effect of carbon treatment of Pd/C catalysts for phenol hydrogenation

G-0195-P-C	Donghwan Cheon	Korea Institute of Industrial Technology	Preparation and characterization of nitrogen doped carbon blacks at different melamine contents
<b>Topic H - Reaction Engineering and Industrial Applications</b>			
<b>No.</b>	<b>Name</b>	<b>Institution</b>	<b>Title</b>
H-0089-P-C	Chih-Wei Chu	National Sun Yat-sen University	Study of hydrogen bonding of miscible blends of CO <sub>2</sub> /cyclohexene oxide/anhydride copolymer and poly(vinyl phenol)
H-0126-P-C	Ping-Hsien Li	Department of Chemical Engineering, Ming Chi University of Technology	Study on the Isomerization of Supported Platinum Catalysts in 3,4-Diacetoxy-1-butene
H-0133-P-C	Siriboon Supajaruwong	Chulalongkorn University	Preparation of carbon based solid acid catalyst from polymer waste for fructose dehydration
H-0161-P-C	Yi-Chun Chen	National Taiwan University	3-way reforming to enhance CO yield from coke- oven and blast-furnace gases by Ni catalysts