

Student Oral Presentation Competition

Qualification

Only students (undergraduate, master, PhD) with valid student ID are eligible. Postdoctoral fellows are excluded. Students interested in participating in the competition should indicate it clearly during the registration process and successfully complete the registration.

Time and Location

- **Location:** 工四館 Engineering Building 4 (EC108, EC 109, EC 302, EC 303, EC 503, and EC 504)
- **Presentation Time:** from 11:00 to 12:20 on July 2.

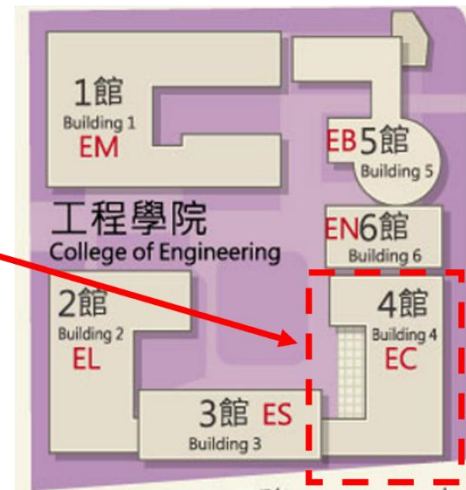
Instructions

1. Contestants must arrive at the reporting location 5 min before the start of the designated period (10:55 on July 2).
2. Regular oral presentation: **8 min in total (6 min for presentation + 2 min for Q&A).**
3. The alarm and time-control rules are as follows:
 - (A) **1st alarm (one short ring):** At **5 min** (1 minute of presentation time remaining).
 - (B) **2nd alarm (two short rings):** At **6 min** (Presentation time ends; contestants must stop presenting immediately and proceed to the Q&A session).
 - (C) **3rd alarm (one long ring):** At **8 min** (Total time ends; the Q&A session must conclude immediately).
4. The oral presentation must be presented in **English**.
5. The scoring criteria include research innovation, research completeness, presentation organization and reporting skills.

Awards

1. Best Oral Award, Excellence Award, and Honorable Mention will be selected according to the proportion of entries.
2. The list of award finalists will be officially announced on July 2, the day of the event, and the final list of award recipients will be announced during the closing ceremony.
3. Award recipients must attend the closing ceremony in person to receive their awards.

工四館 Engineering Building 4



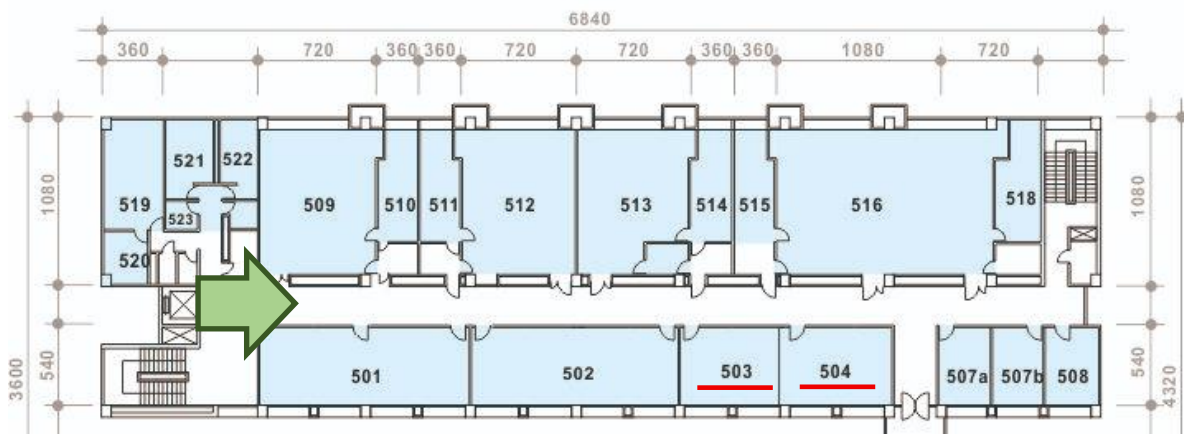
工四館 Engineering Building 4 – 1F



工四館 Engineering Building 4 – 3F



工四館 Engineering Building 4 – 5F



Student Oral Presentation Competition

Oral Competition (O1)

Room No.: EC108 (1F)

#	Time	Title	Presenter
1	11:00~11:08	Plasma-Engineered Universal Anchoring of Multimetal Catalysts Enables Atomic Synergy and Enhanced Multicatalysis	Tammy Laysandra (#236)
2	11:08~11:16	Durable and Regenerable MOF-Derived Beta@UiO66/Zn Bifunctional Catalysts for Ethanol-to-Butadiene Conversion	Duo-Syuan Lin (#208)
3	11:16~11:24	Modified h-BN Support for Enhanced Cu Dispersion in CO ₂ Hydrogenation to Methanol	Ying-Chen Chen (#193)
4	11:24~11:32	Hollow silica-supported high-loading Ni catalysts are used for highly ammonia-to-hydrogen conversion	Cheyu Lin (#187)
5	11:32~11:40	Unveiling the Impact of Structure-Dependent Cu/CeO ₂ Solid Solutions on Active Site Evolution for the RWGS Reaction	Wei-Ting Hsu (#79)
6	11:40~11:48	Catalytic Dehydrogenation of Cycloalkanes-Based for Liquid Organic Hydrogen Carriers	Chen Wei Yu (#70)
7	11:48~11:56	CO ₂ Hydrogenation to Methanol Enhanced by Regulating the Hydrophilic/Hydrophobic Properties of Cu-Based Catalysts	Yu-Chen Lin (#63)

Oral Competition (O2)

Room No.: EC302 (3F)

#	Time	Title	Presenter
1	11:00~11:08	Towards Industrialization: Cu–Carbon Interface Engineering for High-Current-Density Electrochemical CO ₂ Reduction to Multi-carbon Products	Kang-Shun Peng (#238)
2	11:08~11:16	Anatase-Rutile TiO ₂ @V ₄ C ₃ T _x MXene for Omnidirectional Electrocatalytic Water Splitting	Neermunda Shabana (#221)
3	11:16~11:24	Potential-Dependent Interfacial Processes of NiO _x Electrodes during the Oxygen Evolution Reaction	Ryohei Ishihara, (#220)
4	11:24~11:32	Nitrogen Doped Carbon Materials Derived from Nickel-organic Materials for Electrocatalytic Reduction of Carbon Dioxide	Ching-Yu Chen (#215)
5	11:32~11:40	Synthesis of Rose-like Layered Nanosheets Bismuth Oxide Acetate Composites for Electrocatalytic CO ₂ Reduction to Formate	Chan-Cheng Yeh (#199)
6	11:40~11:48	Fe/Mn and Dual-Heteroatom Co-Engineered Porous Carbon for Enhanced Oxygen Reduction Reaction in Air-Cathode Microbial Fuel Cells	Tesfay Gebremikael Teklehaimanot (#198)
7	11:48~11:56	Thin-flake Oxide Solid-state Electrolyte Lithium–Sulfur Cells	Yu-Jhen You (#147)

Oral Competition (O3)**Room No.: EC303 (3F)**

#	Time	Title	Presenter
1	11:00~11:08	Engineering Hierarchical Core–Sheath Heterostructures of P-Doped Hybrid Ni/Co-Molybdates on Fe-Nanobelts for Robust Electrochemical Seawater Splitting	Soraya Tuekprakon (#115)
2	11:08~11:16	Elucidating Nitrogen-Content-Dependent Properties of Tungsten Nitride (WN _x) for Alkaline Electrochemical Nitrate Reduction	Hsin-Kai Lee (#109)
3	11:16~11:24	Metastable Phase Engineering in Cation Doping Ni ₃ S ₂ for High-Performance Furfural Electrooxidation	Van-Nho Tran (#106)
4	11:24~11:32	Coordination-Driven Ion Exchange Synthesis of High-Entropy Single-Atom Electrocatalysts Unraveled by Operando XAS	Ashok vallal Saravanan (#102)
5	11:32~11:40	Surface Modification of Cu Electrode with Metallo-Supramolecular Polymer for Electrocatalytic Reduction of Furfural	En-Chi Ho (#89)
6	11:40~11:48	3-d element induced charge redistribution within bimetallic η-phase carbides leads to high performance electrocatalysts for highly efficient anion exchange membrane water electrolysis	Tzu-Hsiang Lin (#62)
7	11:48~11:56	Synergistic electronic and structural tailoring of RuO ₂ with Zn and Sn for stable acidic OER	Yu-Chen Chien (#31)

Oral Competition (O4)**Room No.: EC109 (1F)**

#	Time	Title	Presenter
1	11:00~11:08	Highly stable Covalent modified-Metal Organic Frameworks (C-MOF) for photoreforming of low-density polyethylene into value-added products	Guan Yu Chen (#183)
2	11:08~11:16	Controlled Modulation of Carboxylic Acid Group Density in Covalent Organic Frameworks for Enhanced Photocatalytic Hydrogen Evolution	Le Thi Thuy Vy (#156)
3	11:16~11:24	Utilizing Spherical Photocatalysts in a Fluidized Bed System to Optimize the VOCs Decomposition	Yu-Ting Huang (#128)
4	11:24~11:32	Self-Floating Ag/Biobr@MIL-53(Fe) Janus Membrane: Harnessing Asymmetric Wettability for Synergistic Solar-Driven Wastewater Remediation	Temesgen Takele Niguso (#124)
5	11:32~11:40	Optimizing Amino-Functionalized Bi-MOFs via Ligand–Metal Ratio Engineering for Selective Photocatalytic Oxidation of Glycerol	Ayalew Manahilie Dinkirie (#114)
6	11:40~11:48	Distinctive Two-Dimensional Heterostructural Photocatalysts For Water Splitting Reaction	Yen Thi Hoang Le (#95)
7	11:48~11:56	Study of Photocatalysis by Combined Upconversion Nanoparticle and Photocatalysts under Infrared Light Irradiation	Po-Yen Feng (#69)

Oral Competition (O5)**Room No.: EC503 (5F)**

#	Time	Title	Presenter
1	11:00~11:08	A 3D Continuum Modeling Framework with Automated Parameter Estimation for Predicting Degradation and Lifetime of Oxygen Evolution Electrocatalysts	Bing-Xun Zhong (#85)
2	11:08~11:16	Ion-Size-Driven Catalytic Activity in Co-Fe Prussian Blue Analogues for H ₂ O ₂ Reduction	Jing-Yan Wu (#74)
3	11:16~11:24	Machine learning-assisted Density Functional Theory study of High-Entropy Oxide Electrocatalyst Screening for Hydrogen Evolution Reaction	Sirapat Tiwtusthada (#64)
4	11:24~11:32	Beyond Single-Facet Limits: Unveiling Dynamic N ₂ Activation on Iridium Nanoparticles via Enhanced Sampling and Machine Learning Potentials	Liang-Ting Wu (#56)
5	11:32~11:40	On-line Optimization of Integrated Carbon Capture and Conversion Process via the Ratings Concept: A Combined DFT and Microkinetic Modeling Approach	Jakapob Noppakhun (#49)
6	11:40~11:48	Precursor Dependent Interfacial Properties of Synthesized ZnO Nanocrystals Deposited on TiO ₂ Nanorods for Dye Wastewater Treatment	Parinya Chaichana (#212)
7	11:48~11:56	Plasmonic Au/NbS ₂ Heterostructures for Enhanced Charge Transfer and Photoelectrochemical Hydrogen Evolution Reaction	Alex Sam (#186)
8	11:56~12:04	Investigation of Interfacial Electron Transfer Behavior in Niobate Nanosheet/g-C ₃ N ₄ Heterostructures for S-scheme and Z-scheme Photocatalytic Reactions	Zhe-Jie Li (#184)

Oral Competition (O6)**Room No.: EC504 (5F)**

#	Time	Title	Presenter
1	11:00~11:08	Chemical Stability of a Zirconium-Based Metal–Organic Framework in Aqueous Electrolytes: Guidelines for the Use in Electrocatalysis	Cheng-Yan Hsieh (#192)
2	11:08~11:16	Torrefaction to Enhance Zirconium-based Metal-Organic Framework (MOFs) Catalyst.	Han Nguyen (#181)
3	11:16~11:24	Morphology-Dependent Structural Evolution of MIL-88(Fe) and Its Impact on Cr(VI) Adsorption Performance	Syeda Fareesa Hassan (#168)
4	11:24~11:32	Synthesis and Characterization of a Porous NH ₂ -MIL-53(Fe)-Based Composite for Cr(VI) Removal from Wastewater	Thi Kim Cuong Nguyen (#167)
5	11:32~11:40	Proposing Nickel-Organic Materials for Capture and Electrochemical Reduction of Carbon Dioxide	Chieh-Wei Shao (#133)
6	11:40~11:48	Engineering the Acidity and Porosity of Zeolite Beta via Sequential Dealumination-Desilication Treatments for Hydrocracking	Ting-Han Chen (#123)
7	11:48~11:56	Temperature-tuned Co-ZIF-67@Fe-MIL(101) derived catalysts for advanced peroxymonosulfate activation in enrofloxacin removal from water	Uzma Razzaq (#35)

Student Poster Competition

Qualification

Only students (undergraduate, master, PhD) with valid student ID are eligible. Postdoctoral fellows are excluded. Students interested in participating in the competition should indicate it clearly during the registration process and successfully complete the registration.

Time and Location

- **Location:** Aisle Areas (1F & 2F), International Conference Hall
- **Poster Display Period:** from **8:30 on July 2** to **15:00 on July 3**.
- **Judging Session:** **11:00-12:20 on July 2**

Instruction and Rules

1. **Program & Results Announcement:** Group assignments, session schedules, presentation order, venue information, and the list of award finalists will be announced on the conference website.
2. **Attendance & Evaluation:** Authors who fail to display their posters within 5 minutes after the start of the session (11:05 on July 2), or who are absent when the judges arrive, will forfeit their eligibility for evaluation and awards.
3. **Poster Display:** Posters must be displayed by **8:30 on July 2**, and removed by **15:00 on July 3**.
4. **Presentations:** Presenting authors must remain at their poster boards during the judging period (11:00-12:20 on July 2) to present their work in **English** and answer questions from the judges.
5. **Poster Size:** Posters should be prepared in **A0 portrait format (841 mm (W) × 1189 mm (H))**.

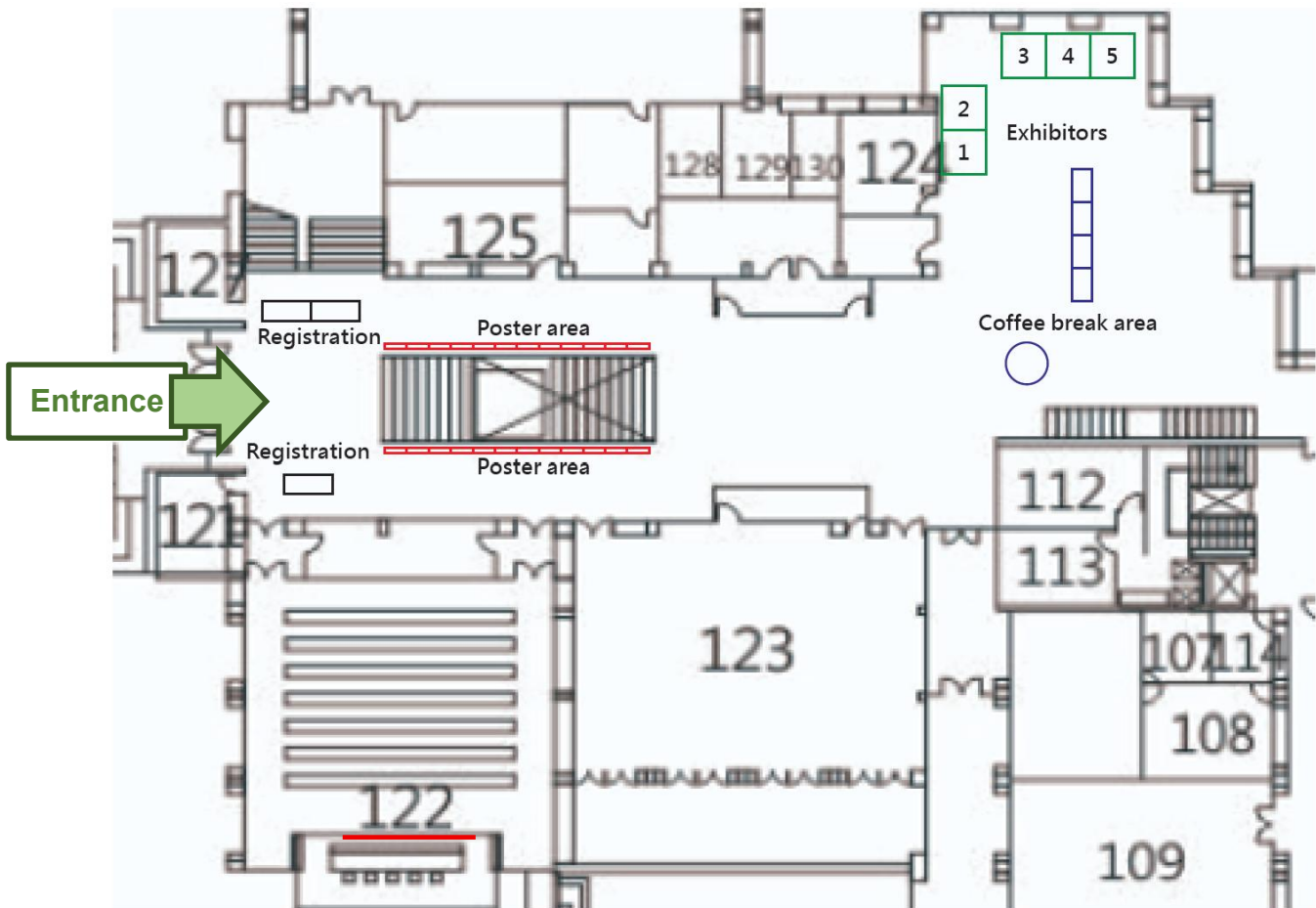
Awards

1. Best Oral Award, Excellence Award, and Honorable Mention will be selected according to the proportion of entries.
2. The list of award finalists will be officially announced on July 2, the day of the event, and the final list of award recipients will be announced during the closing ceremony.
3. Award recipients must attend the closing ceremony in person to receive their awards.

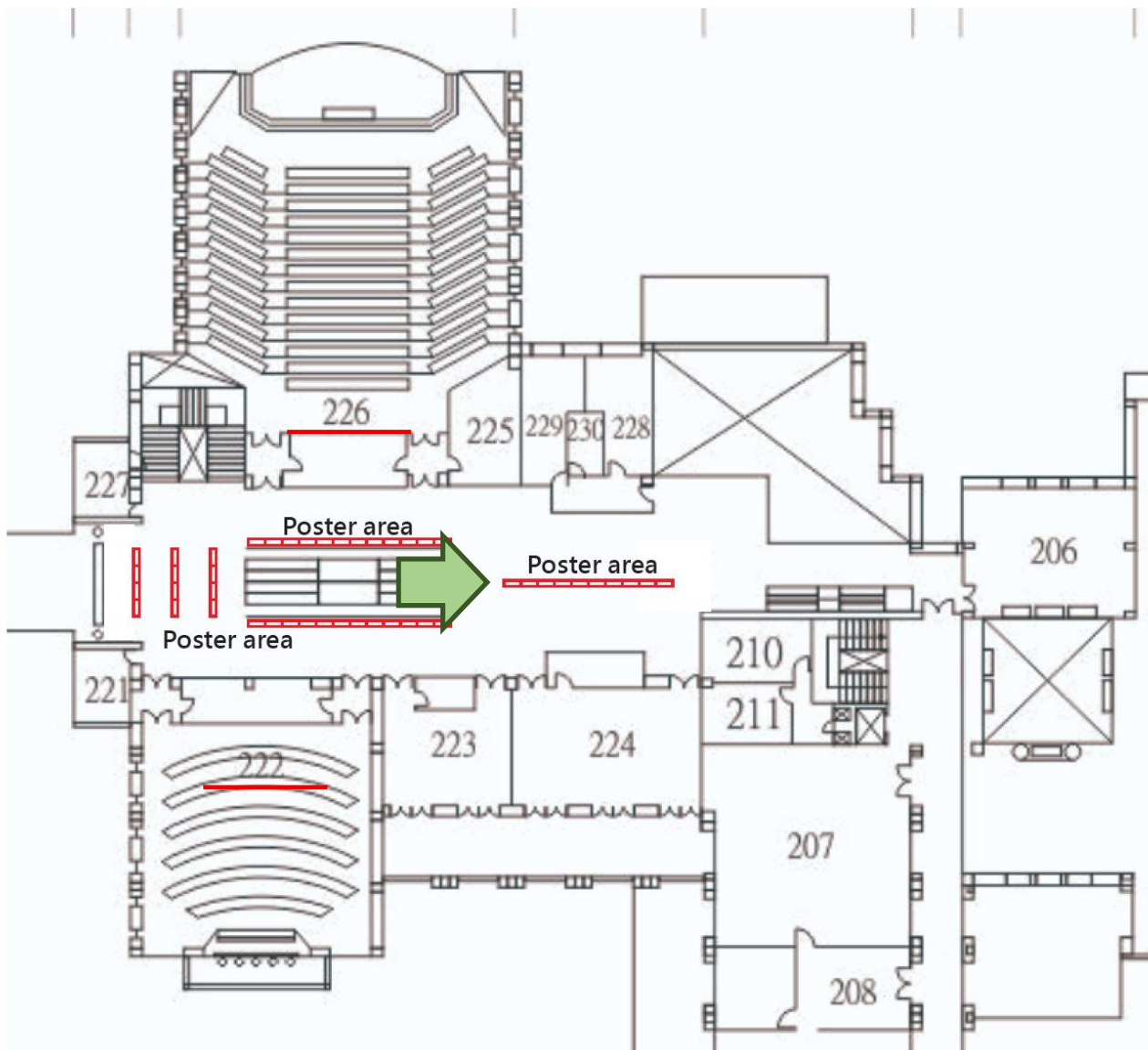
Best Poster Popularity Award

1. **Voting Period:** From **8:30 on July 2** to **12:00 (Noon) on July 3**.
2. **Voting Mechanism:** Voting stickers will be distributed to all conference attendees upon registration. Attendees can vote for their favorite posters by placing the stickers on the respective poster boards.
3. **Winner Selection and Awards:** A total of **three winners** will be selected based on the number of votes cast by conference attendees. The three posters receiving the highest number of votes will be awarded an official certificate.
4. Award recipients must attend the closing ceremony in person to receive their awards.

International Conference Hall – 1F



International Conference Hall – 2F



Poster Competition (P1) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P1-01	High-Entropy Alloy Catalysts for Hydrogen Production via Ammonia Decomposition	Rou-Yi Lin (#243)
P1-02	Investigation of High Entropy Phosphide Catalysts in the Reverse Water–Gas Shift Reaction	Cheng-Chia Kuo (#196)
P1-03	Hydrodeoxygenation of Biomass-Derived Furanics over Bimetallic CuNi/TiO ₂ Catalyst for Sustainable Aviation Fuels Production	Nhu Huynh Nguyen (#162)
P1-04	Ethanol-to-Ethylene Conversion over Hexaaluminate Catalysts	Ching-Chun Chang (#155)
P1-05	Distinct Roles of Cu/ZnO/CeO ₂ and CuZnCeZrAlO _x catalyst in Ethanol-Assisted CO ₂ Hydrogenation to Methanol	Hsiao-Yuan Chao (#148)
P1-06	Exploration of Reactive Oxygen Species on Cu/MnO ₂ Catalyst	Yun-Rong Hsieh (#144)
P1-07	Influence of Hydrophobic Surface Modification and Mg/Ce Doping on Cu/ZnO Catalysts for Ethanol-Assisted CO ₂ Hydrogenation to Methanol	Suvapit Kulphanan (#122)
P1-08	Study on the Optimization of Direct Carbonylation of Glycerol over Cerium Oxide/Zirconium Oxide	Ya-Chen Yu (#121)
P1-09	Understanding Flue Gas-based Calcium Looping Integrated with Methane-CO ₂ Reforming via Bimetallic NiPd-based Dual Functional Nanostructured Materials	Chien-Wei Wu (#97)
P1-10	Cobalt Precursor—Silica Surface Interactions and Its Influence on the Performance of Reverse—Water—Gas—Shift Reaction	Sheng–Hung Chang (#80)

Poster Competition (P2) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P2-01	Enhanced CO ₂ Hydrogenation to CH ₄ on Ni-Pt/TiO ₂ Catalyst Enabled by Hydrogen Spillover Effect	Cheng-Yan Yao (#143)
P2-02	Silver Distribution Regulates Reactive Oxygen Speciation in Manganese Dioxide	Jen-Yu Chang (#141)
P2-03	Calcium-based Mineralization with Methane-CO ₂ Reforming for Syngas Production	Chien-Wei Wu (#116)
P2-04	High Entropy Alloy Catalysts for CO ₂ Hydrogenation to Methanol: A Study on FeCoNiCuZn System	Pei-I Li (#112)
P2-05	Study on Dry Reforming of Methane to Syngas over Zeolite-BEA-supported Cobalt-Cerium Oxide Catalysts	Yu-Wei Chang (#108)
P2-06	Study on One-Step Hydrotreatment of Palm Oil over Bimetallic Co-Ni/Zeolite Y Catalysts for Biofuel Production	Chih-Kai Chang (#107)
P2-07	Elucidating the Influence of Pd on the Dynamic Structural Evolution and Oxidation State of MoO _x during the Reverse Water-Gas Shift Reaction	Huang-Ting Chen(#81)
P2-08	Development of a 316L Stainless Steel Self-Catalytic Reactor by Metal 3D Printing for CO ₂ Hydrogenation	Aoyama Ririko (#73)
P2-09	Development of PdAg/Na ₂ Ti ₃ O ₇ catalysts for Formic acid Synthesis and Expanding Catalyst Design to Metal 3D-printed Self-Catalytic Reactor	Naoyuki Hayashida (#72)
P2-10	Mo promoter modified PdZn catalyst for CO ₂ hydrogenation to methanol	Pin-Yu Huang (#68)

Poster Competition (P3) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P3-01	Interfacial Synthesis of Cs ₂ PtCl ₆ Perovskite for Strong Coupling with V ₄ C ₃ T _x MXene Toward Efficient Hydrogen Evolution and Urea Oxidation	Punnoli Muhsin (#233)
P3-02	Designing Ruthenium Single-Atom Catalyst with Fluorine Doping for Efficient Nitrogen Reduction Reaction	Rais Fakhrrazin (#232)
P3-03	Electronic Structure Engineering of MoS ₂ via Cobalt Doping for Enhanced Alkaline Hydrogen Evolution	Chen Hsu (#231)
P3-04	Composition-Balanced P-Doped FeCoNiMnMo High-Entropy Alloy Electrocatalyst for Efficient and Durable Alkaline Seawater Splitting	Shu-Yun Cheng (#227)
P3-05	Self-Supporting High-Entropy Alloy Mesh Electrodes from 3D-Printed Photocurable Gels for Bifunctional Alkaline Water Electrolysis	Chun-Lung Huang (#226)
P3-06	Pd Single-Atom-Decorated FeCoNiCuMo High-Entropy Alloy as a Bifunctional Electrocatalyst for Ethanol Oxidation-Coupled	Tzu-Ting Sung (#225)
P3-07	Modulating the Electronic Structure of ZnFe Prussian Blue Analogues via Fluorine Doping to Enhance Selectivity for Electrocatalytic Hydrogen Peroxide Production	Yu-Hua Chen (#219)
P3-08	Effects of different secondary metals on the electrochemical properties and ORR activity of Fe-M@MOF/BC cathode materials	Hsin-Yen Lan (#217)
P3-09	Synthesis and Kinetic Analysis of Element-Doped High-Entropy Sulfide Nanocatalysts for Hydrogen Evolution Reaction	Hsin-I Lee (#135)
P3-10	Electrodeposition of Self-supported Ruthenium-Tin Catalyst on Titanium Substrate as Anode in Proton Exchange Membrane Water Electrolysis	Zun-Wei Wang (#55)

Poster Competition (P4) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P4-01	Zinc Phthalocyanine/N-Doped Graphene Quantum Dot Functionalized Graphene toward Highly Selective 2e ⁻ Oxygen Reduction for H ₂ O ₂ Formation	Kuan-Ling Liu (#224)
P4-02	Nickel Iron Phosphide Electrocatalysts for Efficient Oxygen Evolution Reaction in Alkaline Seawater Media	Shih-Wei Lee (#216)
P4-03	Green Microwave-assisted Extraction of Chitosan from Black Soldier Fly Exuviae as a Bio-based Membrane Precursor for Microbial Electrolysis Cells	Guan-lin Huang (#205)
P4-04	Development and Optimization of an Insect Chitosan/Biochar Composite Proton Exchange Membrane by Electrospinning for Efficient Hydrogen Production in Microbial Electrolysis Cells	Shu-Ting Cheng (#202)
P4-05	Urea-Assisted Template-Free Synthesis of Co ₃ O ₄ Morphology for Efficient Electrocatalytic Hydrogen Evolution Reaction	Wen-Ting Li (#185)
P4-06	Effect of Carbon Sources on Polyhydroxybutyrate Synthesis in an Algal-Bacterial Cathodic Microbial Electrosynthesis System	Kuan-Chieh Huang (#182)
P4-07	Electrocatalytic Oxidation of Furfural over NiFe Layered Double Hydroxide on Nickel Foam	Pei-Ru Chen (#149)
P4-08	Confinement-Enhanced Frustrated Lewis Pairs in Hollow BCN Enable Selective Electrocatalytic Nitrogen Reduction	Yu-Syuan Chu (#146)
P4-09	Study on Hydrogen Gas Sensing Properties of Co-Doped V ₂ O ₅ Thin Films	Kuan-Chang Lee (#138)
P4-10	Electrolyte Engineering for Bicarbonate Reduction in Proton Exchange Membrane Electrolyzers	Li-Chi Lu (#50)

Poster Competition (P5) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P5-01	開發鎢銻金屬前驅物催化劑以提高鹼性水電解中析氧反應效率	Yi-Hsiu He (#211)
P5-02	Cu Phthalocyanine/F-Doped Graphene Quantum Dot Functionalized Carbon Nanotubes toward Highly Selective Nitrate Reduction Reaction for Ammonia Formation	Hsin-Jen Jung (#230)
P5-03	Food Byproduct-Derived Hydroxyapatite Aerogel/Yogurt Anodes for Improved Bioelectrochemical System Performance	Shu-Wei Liang (#179)
P5-04	AFM-SECM Insights into the Interfacial Reactivity of 2D TMDC Electrocatalysts	Sumangaladevi Koodathil (#131)
P5-05	Application of NiCoP and CoFe Layered Double Hydroxides in Flow Cell for Electrocatalytic Selective Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid	Hsin-Yu Lin (#127)
P5-06	Enhancing OER in Anion Exchange Membrane Water Electrolysis via the Redox-Active Organic Catalysis Promoter	Ah-Young Kim (#99)
P5-07	Tuning Selectivity toward Ethanol in Electrochemical CO ₂ Reduction on Ni-Cu Nanoalloys	Guan-Yao Wu (#96)
P5-08	Iridium-Doped Nickel Oxide with Oxygen Vacancies as a High- Performance Cathode Catalyst for Lithium-Oxygen Batteries: LiO ₂ Intermediate Stabilization, RRDE Analysis, and Mechanistic Insights	Hassan Shabbir (#76)
P5-09	Aminopolymer Modification of Ag-encapsulated Hollow Carbon Catalyst for Electrochemical CO ₂ Reduction	Yuma Terada (#36)
P5-10	Performance Evaluation of CuO Thin-Film Based Nonenzymatic Cholesterol Biosensor	Wen-Ying Lin (#34)
P5-11	Tuning Electrode-Electrolyte Interface by Co-Solvent to Enhance Multi-Carbon Products	Kuan-Hung Kuo (#32)

Poster Competition (P6) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P6-01	Design of Ag/Ni Co-decorated TiO ₂ Aerogels for Synergistic Photocatalytic CO ₂ Conversion	Wei-Zhen Li (#241)
P6-02	Photodeposition Synthesis of Nd@TiO ₂ Photocatalyst for Photocatalytic Reduction Reactions	Ying-Jin Chen (#240)
P6-03	Modulating Photogenerated Charge Carrier Kinetics via Single-Atom Ni and Pt Co-catalysts for Overall Water Splitting	Wei-Cheng Liao (#222)
P6-04	Construction of S-doped g-C ₃ N ₄ /NiAl-LDH Heterostructures for Enhanced Photocatalytic Degradation of Organic Pollutants	Qing-Xin Zhang (#210)
P6-05	Engineering SnS ₂ Nanosheet Arrays for Photocatalytic CO ₂ Reduction	Ching-An Chang (#203)
P6-06	Confined grown and supported g-C ₃ N ₄ for Visible-Light Photocatalytic Hydrogen Production	Mei-Yu Chien (#188)
P6-07	High-Throughput and Machine Learning-Assisted Discovery of Efficient Ternary Block Copolymers for Sacrificial Photocatalytic Hydrogen Evolution	Wan-Hua Lee (#177)
P6-08	Near-Infrared-Activated Upconversion Nanoparticle/ZnIn ₂ S ₄ Composites for Efficient Photocatalytic Dye Degradation	Shoaib Siddique (#126)
P6-09	Effects of ionic liquids on the morphology, surface properties, and activities of BiVO ₄ /BiOBr photocatalysts	Jian-Hua Mai (#83)
P6-10	Studies on the Photovoltaic Parameters of Dye-Sensitized Solar Cells with the Photoanodes Modified by Bi ₂ SiO ₅ /g-C ₃ N ₄ Composited TiO ₂ Nanofibers as an Additional Layer	Wei-Hua Zheng (#7)

Poster Competition (P7) Location: 2F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P7-01	Morphology Engineering of Cu ₂ O/CeO ₂ Heterojunction Photocatalysts with Oxygen Vacancies for Photocatalytic CO ₂ Reduction	Chien-Yu Wei (#239)
P7-02	Bimetallic Nickel Iron Phosphide/Ti ₃ C ₂ T _x MXene composite for photothermal enhanced-catalytic degradation of organic pollutants via persulfate activation	Shih-Yu Tseng (#178)
P7-03	Tuning oxidation selectivity via side-chain engineering in linear conjugated polymers for photoreforming of waste into high-value chemicals and hydrogen	Wan-Ling Chang (#174)
P7-04	Tailoring Asymmetric Coordination in Single-Atom Catalysts for Highly Efficient and Selective Photocatalytic CO ₂ Reduction	Sharmila Sainath Singh (#132)
P7-05	Effects of ionic liquid and pH on the morphology and H ₂ production performance of Bi ₃ O ₄ Br and BiOBr photocatalysts	Li-Yao Huang (#91)
P7-06	Hollow Silica Spheres Encapsulating MoO _x and Pt Nanoparticles for Photothermal CO ₂ Hydrogenation	Takuei Hase (#66)
P7-07	Interfacial Engineering of Ag Nanoparticles on CuO for Highly Efficient UV and Visible Light-Driven Photocatalysis	Xiang-Ci Chang (#51)
P7-08	Enabling Stable Chemical Looping CO ₂ -splitting with Strontium-shielded Structurally Reversible Strontium-doped Iron Oxygen Carriers	Chun-I Chou (#65)
P7-09	Design of Nonstoichiometric Ni-Based Quinary Alloy Nanoparticle Catalysts for Selective CO ₂ Hydrogenation to Methane	Kazuki Ikushima (#38)
P7-10	Converter Slag as a Catalyst for the Reverse Water-Gas Shift Reaction	Haruki Fukumuro (#37)

Poster Competition (P8) Location: 1F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P8-01	Enhanced photocatalytic water splitting on MoS ₂ /AlN heterostructures: A computational approach	Ruttiya Chaepatoom (#234)
P8-02	DFT studies on single atom catalysts supported on edge-functionalized nanographene for CO ₂ reduction to methanol	Yen-Che. Lee (#176)
P8-03	Synergistic Effects in Dual-Atom Catalysts for Oxygen Electrocatalysis: Linking Electronic Structure and activity via DFT and ML	Shalini Fatehpuriya (#165)
P8-04	Exploring Carbon Monoxide Transport Kinetics in Diverse Silica Supports via First-Principles Calculations and Machine-Learning Interatomic Potentials	Wei-Siang Lo (#94)
P8-05	First-Principles Insights into Hydrolytic Instability of Zr-MOF-808 via Formate Dissociation and Ligand Exchange	Chun-Yen Yang (#93)
P8-06	Mechanistic Insights into Ni Doping-Induced Defects in ZnIn ₂ S ₄ Piezophotocatalysts for Concurrent Hydrogen Evolution and Selective Chemical Valorization: Multi-Scale Simulation and Thermodynamic Analysis	Wei-Xiang Zhou (#86)
P8-07	Descriptor-Based First-Principles Discovery of Two-Dimensional MOF Catalysts for Oxygen Evolution via Thermodynamic, Magnetic, and Electronic Descriptors	Kuan-Lun Chen (#82)
P8-08	Bayesian Optimization-Guided Catalyst Design via Machine Learning	Tzu-Hung Wen (#24)
P8-09	Effect of Exposed Facet of Ceria Catalysts on the Conversion of CO ₂ -Captured Ethylenediamine into Urea Derivatives	Shogen Mihara (#28)
P8-10	One-Pot Epimerization of Methyl Glucoside into Rare Sugar Derivative via Dehydrogenation and Hydrogenation over Supported-Ru Catalyst	Kei Sato (#27)

Poster Competition (P9) Location: 1F Aisle, International Conference Hall

#	Title	Presenter (Abstract No.)
P9-01	Response surface methodology-optimized insect frass biochar/bimetallic MOF-derived porous oxide composites as functional catalytic anodes for microbial fuel cells	Yi-Fang Lin (#209)
P9-02	Fe/Mn Bimetallic MOF–Biochar Composite Granular Cathodes with High Reaction Area for Enhanced Bioelectro-Fenton Performance	Yi-Hong Chen (#206)
P9-03	Development of a Black soldier fly-derived Chitosan Porous Carbon-shell Cathode for Enhanced Catalytic Performance in Bioelectrochemical systems	Min-Xiu Wu (#201)
P9-04	Bayesian Optimization-Guided Design of Hierarchical ZIF-8 via Chemical Etching : Impact between Porosity and Active Site	Yuan-Yi Huang (#197)
P9-05	Metal-Migrated Biochar-Based 3D-Printed Cathodes for High-Performance Electro-Fenton Systems	Bo-Jyun Lin (#180)
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