



# Detailed Schedule

## Opening Ceremony & Plenary Lecture

Location: 3F, Yukun Hall

### Friday Morning, May 29

Time	Item	Speaker	Title
<b>Chair: Zifeng Ma</b>			
08:30-09:10	<b>Opening Ceremony</b>		
<b>Chairs: Chunming Xu Jinghong Li</b>			
09:10-09:35	PL	<b>Buxing Han</b> <i>Institute of Chemistry, CAS</i>	Properties of Green Solvents and Applications in Green Chemistry
09:35-10:00	PL	<b>Suojiang Zhang</b> <i>Henan University</i>	2035 Vision: Ionic Liquid Matrices Beyond Solvents
<b>10:00-10:20 Coffee Break</b>			
<b>Chairs: Jianji Wang Xiangping Zhang</b>			
10:20-10:45	PL	<b>Wanbin Zhang</b> <i>Shanghai Jiao Tong University</i>	Recent Advances in Green Synthesis of Chiral Drugs
10:45-11:10	PL	<b>Patricia Hunt</b> <i>Victoria University of Wellington</i>	Quantum Chemical Insight into Cluster-Ion Behaviour in Ionic Liquid Electrospray Thrusters
11:10-11:35	PL	<b>Yunfeng Lu</b> <i>Beijing University of Chemical Technology</i>	Energy Harvesting and Utilization: From High-Performance Electrochemical Devices to Autonomous Navigation Therapeutics
11:35-12:00	PL	<b>Zhangxing Chen</b> <i>Eastern Institute of Technology, Ningbo</i>	Progress in Low-Carbon Hydrogen Production Technologies and Large-Scale Underground Hydrogen Storage
<b>12:00-13:30 Lunch</b>			

## Plenary Lecture & Awards & Closing Ceremony

Location: 3F, Yukun Hall

### Sunday Morning, May 31

Time	Item	Speaker	Title
<b>Chairs: Chuan Zhao Zhimin Liu</b>			
09:00-09:25	PL	<b>Ulrica Edlund</b> <i>KTH Royal Institute of Technology</i>	3D Spatiochemical Mapping of Biopolymers in Biomass Processing
09:25-09:50	PL	<b>Xiaohua Lu</b> <i>NanjingTech University</i>	Micro-Interfacial Thermodynamics and Transport
09:50-10:15	PL	<b>Minhua Shao</b> <i>The Hong Kong University of Science and Technology</i>	Key Materials for Fuel Cells and Electrolyzers
<b>10:15-10:35 Coffee Break</b>			
<b>Chairs: Ulrica Edlund Minhua Shao</b>			
10:35-11:00	PL	<b>Ralf Ludwig</b> <i>Universitaet Rostock</i>	Hydrogen Bonding Motifs in Hydroxy- and Carboxy-Functionalized Ionic Liquids
11:00-11:25	PL	<b>Chuan Zhao</b> <i>University of New South Wales</i>	Bridging the Gap in Earth-Abundant Electrocatalysts for Hydrogen Energy Conversion Systems
<b>Chair: Jianji Wang</b>			
11:25-12:00	<b>Awards &amp; Closing Ceremony</b>		



## Session 1

### AI-Driven Ionic Liquid Design and Functional Modulation

**Chairs: Xiaoyan Ji, Zhiwen Qi, Jianling Zhang**  
**Convenors: You Han, Xiaomin Liu, Zhijian Zhao**

Location: 2F, 666 Hall

#### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Yinglong Wang Feng Huo</b>			
13:30-13:50	KL	<b>Xiaoyan Ji</b> <i>Luleå University of Technology</i>	Modeling Complex Fluids
13:50-14:10	KL	<b>Zhen Zhou</b> <i>Henan University</i>	AI-Powered Green Ammonia Synthesis Technology
14:10-14:25	IL	<b>Liwen Mu</b> <i>Nanjing Tech University</i>	Functional design for high-viscosity fluids at the interface towards lubrication application
14:25-14:40	IL	<b>Kun Dong</b> <i>Institute of Process Engineering, CAS</i>	Exploring the Structure-Property Relationship of Ionic Liquids Using Machine Learning
14:40-14:55	IL	<b>Guokai Cui</b> <i>Zhejiang University of Technology</i>	AI-Driven Investigations on CO <sub>2</sub> Absorption Performance of Functionalized Ionic Liquids
14:55-15:10	IL	<b>Yaqin Zhang</b> <i>Hehai University</i>	From Electronic-Structure Engineering to Machine-Learning-Accelerated Design of Two-Dimensional Electrocatalysts
15:10-15:30 <b>Coffee Break</b>			
<b>Chairs: Zhen Zhou Yanlei Wang</b>			
15:30-15:50	KL	<b>Huabin Xing</b> <i>Zhejiang University</i>	Automation and AI-Enabled Design of Ionic Porous Materials for Gas Separations
15:50-16:10	KL	<b>Chunran Chang</b> <i>Xi'an Jiaotong University</i>	Frustrated Ion Pairs for CO <sub>2</sub> Cycloaddition
16:10-16:30	KL	<b>Xianqiang Huang</b> <i>Liaocheng University</i>	Polyacid-Catalyzed Valorization of Sulfides
16:30-16:45	IL	<b>Cheng Lian</b> <i>East China University of Science and Technology</i>	Mesosopic Thermodynamics for Battery Design
16:45-17:00	IL	<b>Weilu Ding</b> <i>Institute of Process Engineering, CAS</i>	Multilevel AI-Driven Prediction and Generation of Ionic Liquid
17:00-17:15	IL	<b>Dongliang Jin</b> <i>Changzhou University</i>	Predicting the Thermodynamics of Ionic Liquids at Metal Surfaces Using Virtual Thomas-Fermi Fluids
17:15-17:25	OL	<b>Mingzhen Shi</b> <i>Northwest University</i>	Efficient Hydrogen Sulfide Separation from Carbon Dioxide Achieved by Carbonyl-Functionalized Ionic Liquids for Natural Gas Upgrading
17:25-17:35	OL	<b>Mengyang Qu</b> <i>Kanazawa University</i>	In Silico Discovering of Novel Cationic Cores in Ionic Liquids for Cellulose Dissolution
19:00 <b>Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Hao Li Xiaomin Liu</b>			
08:30-08:50	KL	<b>Zhiwen Qi</b> <i>East China University of Science and Technology</i>	Strategies for Solvent Screening in Process Intensification via Integrated Multi-Scale and High-Throughput Methods
08:50-09:10	KL	<b>Hao Li</b> <i>Tohoku University</i>	Digital Materials Ecosystem: A Digital Platform Driven Closed-Loop Framework for AI+ Materials
09:10-09:25	IL	<b>Xin Ge</b> <i>Fuzhou University</i>	Intelligent Design of High-Performance Functional Wet Electronic Chemicals
09:25-09:40	IL	<b>Zhijun Zhao</b> <i>Beijing Institute of Petrochemical Technology</i>	Experiment and Simulation on Solubility of CO <sub>2</sub> and H <sub>2</sub> S in Ionic Liquids and Deep Eutectic Solvents
09:40-09:55	IL	<b>Chen Chen</b> <i>Zhengzhou University</i>	Fe(III)-Based Deep Eutectic Solvent-Modified Nano Barium Titanate Composite Hydrogel for Photothermal-Sonodynamic Synergistic Treatment of Periodontitis
09:55-10:05	OL	<b>Jinlong Li</b> <i>Changzhou University</i>	Absorption Refrigeration Cycle System: Screening, Experiment and Performance Evaluation of Ionic Liquid Working Pairs
10:05-10:15	OL	<b>Yunlei Shi</b> <i>Henan Normal University</i>	Ionic Liquid-Assisted Emulsifier Preparation and Temperature/CO <sub>2</sub> -Responsive Pickering Emulsions
<b>10:15-10:30 Coffee Break</b>			
<b>Chairs: Zhiwen Qi You Han</b>			
10:30-10:50	KL	<b>You Han</b> <i>Tianjin University</i>	AI Empowers the Reaction Mechanism Study in Complex Chemical Processes
10:50-11:10	KL	<b>Tiancheng Mu</b> <i>Renmin University of China</i>	AI Aided Design Deep Eutectic Solvents and Electrocatalysts
11:10-11:25	IL	<b>Gangqiang Yu</b> <i>Beijing University of Technology</i>	Data- and Mechanism-Driven Molecular Thermodynamic Modeling of Ionic Liquids and Deep Eutectic Solvents for Separation Processes
11:25-11:40	IL	<b>Xin Chang</b> <i>Tianjin University</i>	Predictive Models Empowering Green and Sustainable Catalyst Design for Alkane Dehydrogenation
11:40-11:55	IL	<b>Yanzhen Zheng</b> <i>Jimei University</i>	Characterization of Ionic Liquid-Cosolvent Microstructures and Their Functional Application in Food Waste Valorization
11:55-12:10	IL	<b>Jianguang Qi</b> <i>Qingdao University of Science and Technology</i>	Prediction of Physical Properties of Ionic Liquids Based on Machine Learning
<b>12:10-13:30 Lunch</b>			



## Session 2

# Ionic Liquids for Green Catalysis and Reaction Engineering

**Chairs: Chunshan Li, Xianghai Meng, Yong Wang**  
**Convenors: Cheng Lian, Ruixia Liu, Yunxiang Pan**

Location: 3F, Qiushui Hall

### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Haoran Li Chunshan Li</b>			
13:30-13:50	KL	<b>Haoran Li</b> <i>Zhejiang University</i>	Applications of Ionic Liquids and Oxoammonium Cations in Oxidation Reactions
13:50-14:10	KL	<b>Zhaofu Fei</b> <i>Swiss Federal Institute of Technology Lausanne</i>	Decoding Lignin Depolymerization: From "Water of Life" to Jet Fuel
14:10-14:30	KL	<b>Chunshan Li</b> <i>Institute of Process Engineering, CAS</i>	Mild Ionic Liquid Catalytic System Construction and Application
14:30-14:45	IL	<b>Rong Tan</b> <i>Hunan Normal University</i>	Interfacial Ionic Liquid Bridge Maximizes the Interface Effects in Pickering Emulsion Catalysis
14:45-15:00	IL	<b>Huiyong Wang</b> <i>Henan Normal University</i>	Structure-Performance Relationships in Two-Dimensional Covalent Organic Frameworks for Photocatalytic CO <sub>2</sub> Reactions
15:00-15:15	IL	<b>Weizhong Zheng</b> <i>East China University of Science and Technology</i>	Additive-Mediated Interfacial Mass Transfer Enhancement of H <sub>2</sub> SO <sub>4</sub> Catalyzed C <sub>4</sub> Alkylation from Molecular Design to Industrial Intensification
<b>15:15-15:35 Coffee Break</b>			
<b>Chairs: Baohua Xu Xiaofu Sun</b>			
15:35-15:50	IL	<b>Baohua Xu</b> <i>Beijing Institute of Technology</i>	Catalytic Conversion of C1 Molecules at Ionic Liquid Interfaces
15:50-16:05	IL	<b>Xinjiang Cui</b> <i>Lanzhou Institute of Chemical Physics, CAS</i>	Heterogeneous Catalysts for Carbonyl Chemicals Synthesis
16:05-16:20	IL	<b>Kuan Huang</b> <i>Fuzhou University</i>	Construction and Application of Oil-Soluble Ionic Liquid-Based Catalytic System for Slurry-Phase Hydrodeoxygenation of Oils and Fats
16:20-16:35	IL	<b>Xiaofu Sun</b> <i>Institute of Chemistry, CAS</i>	Electrochemical Conversion of Renewable Resource Molecules
16:35-16:50	IL	<b>Yuchao Li</b> <i>Shandong University of Technology</i>	NHC-Mediated Oxidative Esterification of Aldehydes: From Ionic Liquid to Porous Ionic Liquid Catalysis
16:50-17:05	IL	<b>Zhihui Zhang</b> <i>Changzhou University</i>	Adsorption Electro-Neutralization of Ionic Liquids in Thorium-MOFs for Enhanced Photocatalytic CO <sub>2</sub> Reduction
17:05-17:20	IL	<b>Chengwei Liu</b> <i>Shanghai Jiao Tong University</i>	An Imidazolium-Based Ionic Liquid Composite Catalyst for Coupling CO <sub>2</sub> with Epoxides to Cyclic Carbonates
17:20-17:35	IL	<b>Lijuan Shi</b> <i>Wuhan Institute of Technology</i>	Ionic Liquid Framework Materials for Low-Energy CO <sub>2</sub> Capture and Mild Conversion
17:35-17:50	IL	<b>Zhengang Ke</b> <i>Shihezi University</i>	Study on Hydrogen-Bond Ionic Liquid Mediated Transition Metal-Catalyzed Amination Reaction
17:50-18:00	OL	<b>Wei Qian</b> <i>Anhui University of Science and Technology</i>	Synthesis of Bio-Based Polycarbonate Catalyzed by Ionic Liquids
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Youting Wu Xianghai Meng</b>			
08:30-08:50	KL	<b>Youting Wu</b> <i>Nanjing University</i>	Ionic liquid-Mediated Reactive Extraction Coupling Processes
08:50-09:10	KL	<b>Wei Zhang</b> <i>East China Normal University</i>	Microenvironment-Controlled Low-Temperature Plastic Waste Upcycling by Ionic Liquids
09:10-09:30	KL	<b>Xianghai Meng</b> <i>China University of Petroleum (Beijing)</i>	Application of Ionic Liquids in Petroleum Processing
09:30-09:45	IL	<b>Yingying Cao</b> <i>Henan University</i>	Catalytic Preparation of Cyclopropane-Based High-Energy Fuels from Olefins
09:45-10:00	IL	<b>Lili Deng</b> <i>Shenyang University of Technology</i>	Construction of Spatial Microenvironment in Metalloporphyrin Ions Frameworks for Enhancing Urea Alcoholysis
10:00-10:15	IL	<b>Lu Chen</b> <i>Shanghai Advanced Research Institute, CAS</i>	Engineering Green Catalytic Pathways through Rational Design and <i>In-Situ</i> Techniques
<b>10:15-10:30 Coffee Break</b>			
<b>Chairs: Rui Huang Hui Wang</b>			
10:30-10:45	IL	<b>Rui Huang</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Redesigning Hydrogen-Involving Catalytic Processes
10:45-11:00	IL	<b>Saisai Wang</b> <i>Zhejiang University of Technology</i>	Regulation of Single-Atom Spatial Localization by Ionic Liquids: A Strategy for Enhancing Mass Transfer in Acetylene Hydrochlorination
11:00-11:15	IL	<b>Yun Tian</b> <i>Zhengzhou University</i>	AI-Enhanced Multiscale Simulation for Accelerated Development of High-Performance Solid-State Electrolytes
11:15-11:30	IL	<b>Yanwei Cao</b> <i>Lanzhou Institute of Chemical Physics, CAS</i>	Creation of Ionic Liquids for Carbonylation
11:30-11:40	OL	<b>Sibo Chen</b> <i>Shaoxing University</i>	Plasma-Assisted Nitrogen Fixation and Its High-Value Nitrogen Conversion
11:40-11:50	OL	<b>Zongge Li</b> <i>Liaocheng University</i>	Enhancement of Electrocatalytic Reaction Performance by Synergistic Effects of Single-Atom and Nanoparticles/Clusters
<b>12:00-13:30 Lunch</b>			



## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Tierui Zhang Ye Liu</b>			
13:30-13:50	KL	<b>Tierui Zhang</b> <i>Technical Institute of Physics and Chemistry, CAS</i>	Defective Layered Double Hydroxide Based Nanostructured Photocatalysts for N <sub>2</sub> Fixation
13:50-14:10	KL	<b>Ye Liu</b> <i>East China Normal University</i>	Ionic P,N-hybrid Phosphine for Pd-Catalyzed Hydroaminocarbonylation-Cyclization Tandem Reaction for the Synthesis of $\alpha,\beta$ -Unsaturated $\gamma$ -Lactams from Alkynol
14:10-14:25	IL	<b>Feng Han</b> <i>Shandong Agricultural University</i>	Functionalized Ionic Liquids Catalyzed Transformation of Alcohols in Green Solvent
14:25-14:40	IL	<b>Ran Liu</b> <i>Hebei University of Science and Technology</i>	Ionic Liquids for Deep Oxidative Desulfurization: From Catalytic Reaction Media to Interfacial and Microenvironment Regulation
14:40-14:55	IL	<b>Wei Dai</b> <i>Zhejiang Normal University</i>	Study on the Liquid-Phase Adsorption Performance of Microporous Bimetallic MOF-on-MOF
14:55-15:10	IL	<b>Wang Hao</b> <i>Kanazawa University</i>	Synthesis of Mixed Cellulose Esters in EmimOAc/DMSO Co-Solvent System: Effect of Reagent Addition Sequence on Regioselectivity and Physical Properties
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Wei Jiang Lei Shi</b>			
15:30-15:45	IL	<b>Hang Xu</b> <i>Henan University of Science and Technology</i>	Mechanism and Kinetics of Desulfurization of Persulfate by Cobalt-Containing Ionic Liquids
15:45-16:00	IL	<b>Lei Li</b> <i>Anyang Normal University</i>	Construction of Terpyridine-Based Coordination Polymer for Degradation of Organic Dyes
16:00-16:15	IL	<b>Wei Jiang</b> <i>Jiangsu University</i>	Acidic Deep Eutectic Solvents for Coupled Oxidative Desulfurization and Sulfur Upcycling
16:15-16:30	IL	<b>Huazhen Chang</b> <i>Renmin University of China</i>	Catalysis Decomposition of Carbamate during Amine-Based CO <sub>2</sub> Capture
16:30-16:45	IL	<b>Lei Shi</b> <i>Shenyang University of Chemical Technology</i>	Efficient Synthesis of Carbonates Catalyzed by Ionic Liquids and the Industrial Applications
16:45-17:00	IL	<b>Yuying Dang</b> <i>Lanzhou Institute of Chemical Physics, CAS</i>	Application of Carbon Surface Ionic Liquid Reactors in Catalytic Reactions
17:00-17:10	OL	<b>Baojian Zhang</b> <i>Hebei University of Science and Technology</i>	Long-Term Purification Performance of Diesel Engine Exhaust by Ordered Macroporous Integral Catalysts under Green Catalytic Guidance
<b>18:00 Dinner</b>			

## Session 3

# Ionic Liquid-Mediated Low-Carbon Separation Technology

**Chairs: Quanfu An, Wanqin Jin, Lin Zhang**  
**Convenors: Liang Wu, Zhi Xu, Shaojuan Zeng**

Location: 3F, Yukun B Hall

### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Gongping Liu Shuangjiang Luo</b>			
13:30-13:50	KL	<b>Lin Zhang</b> <i>Zhejiang University</i>	Nanofiltration Membranes for Ion-Selective Separation
13:50-14:10	KL	<b>Zongbi Bao</b> <i>Zhejiang University</i>	Ionic Liquid-Mediated Extraction Separation of Bile Acid Isomers
14:10-14:25	IL	<b>Xuehua Ruan</b> <i>Dalian University of Technology</i>	Structure Optimization and Synthesis for Imidazole-Functionalized Polyimide Membrane Materials
14:25-14:40	IL	<b>Kecheng Jie</b> <i>Nanjing University</i>	Porous Liquids for Gas Separation and Conversion
14:40-14:55	IL	<b>Shilong Li</b> <i>Jinggangshan University</i>	Atomic-Level Flatness Driving the Growth of Ultrathin Two-Dimensional MOF Films
14:55-15:10	IL	<b>Jing Yang</b> <i>Hangzhou Normal University</i>	Polymer Membrane for Ionic Liquid Separation and Utilization
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Xuehua Ruan Kecheng Jie</b>			
15:30-15:50	KL	<b>Haihui Wang</b> <i>Tsinghua University</i>	MXene Membranes for Separation
15:50-16:05	IL	<b>Gongping Liu</b> <i>Nanjing Tech University</i>	Mixed-Matrix Membranes for Energy-Efficient Molecular Separation
16:05-16:20	IL	<b>Weiyi Zhang</b> <i>Donghua University</i>	Task-Specific Adsorbents for Radionuclides and Precious Metals
16:20-16:35	IL	<b>Linglong Shan</b> <i>Institute of Process Engineering, CAS</i>	New Process for Green and Efficient Separation of Rare Earths
16:35-16:45	OL	<b>Zhiyong Xu</b> <i>Kunming University of Science and Technology</i>	Design of Ionic Liquid/Amine Composite Absorbents and Study on Acidic Gas Capture
16:45-16:55	OL	<b>Xinyi Wan</b> <i>Zhejiang University</i>	Healing Intercrystalline Defects of ZIF-8 Membrane by Hydrophobic and Sterically Hindered Ionic Liquid for Humid Propylene/Propane Separation
<b>19:00 Dinner</b>			



## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Shaojuan Zeng Yuan Peng</b>			
08:30-08:50	KL	<b>Zhigang Lei</b> <i>Shihezi University / China University of Petroleum (Beijing)</i>	Extraction of Polycyclic Aromatic Hydrocarbons from Fluid Catalytic Cracking Diesel with Ionic Liquids and Predictive Molecular Thermodynamics
08:50-09:10	KL	<b>Xiangping Zhang</b> <i>China University of Petroleum (Beijing)</i>	Molecular Design of Ionic Liquids for CO <sub>2</sub> Capture and Utilization
09:10-09:25	IL	<b>Xili Cui</b> <i>Zhejiang University</i>	Research on Ionic Materials and Gas Adsorption Separation
09:25-09:40	IL	<b>Duanjian Tao</b> <i>Jiangxi Normal University</i>	Regulation of Ionic Liquids Microenvironment and Process Intensification
09:40-09:55	IL	<b>Lingyao Wang</b> <i>Zhejiang Normal University</i>	Carborane Anion Hybrid Metal–Organic Frameworks for Gas Separation
09:55-10:10	IL	<b>Peiwen Wu</b> <i>Jiangsu University</i>	Reaction-Intensified Selective Separation and Resource Recovery of Heterocyclic Compounds from Diesel Fuel
<b>10:10-10:25 Coffee Break</b>			
<b>Chairs: Xili Cui Duanjian Tao</b>			
10:25-10:45	KL	<b>Wanqin Jin</b> <i>Nanjing Tech University</i>	Design and Preparation of MOF-Based Membranes for Molecular Separation
10:45-11:00	IL	<b>Shaojuan Zeng</b> <i>Institute of Process Engineering, CAS</i>	Ionic Liquid-Based Materials for CO <sub>2</sub> Capture Applications
11:00-11:15	IL	<b>Yuan Peng</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Microporous Framework Membranes and Dual Functional Gas Separation Applications
11:15-11:30	IL	<b>Wenbo Zhao</b> <i>Kunming University of Science and Technology</i>	Optimal Control for The Capture Process of Acid Gas
11:30-11:45	IL	<b>Wentao Bi</b> <i>Nanjing Normal University</i>	Construction of In-situ Deep Eutectic Systems and Their Application in Green Separation
11:45-11:55	OL	<b>Chao Pan</b> <i>China University of Petroleum (Beijing)</i>	Sustainable Intensification Separation of Isopropyl Acetate/Isopropanol Using Ionic Liquid: Thermodynamic Mechanism and Process Design
<b>12:00-13:30 Lunch</b>			

## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Tianxiang Zhao Yinge Bai</b>			
13:30-13:50	KL	<b>Yanzhao Yang</b> <i>Shandong University</i>	Application of Novel Ionic Liquids in Precious Metal Separation
13:50-14:05	IL	<b>Zhiyong Li</b> <i>Henan Normal University</i>	Light-Gated CO <sub>2</sub> Capture and Release by Smart Ionic Liquid Microemulsions
14:05-14:20	IL	<b>Guoxuan Li</b> <i>Qingdao University of Science and Technology</i>	Separation of Naphthalene Aromatic Hydrocarbons by Cyclodextrin-Based Supramolecular Ionic Liquid
14:20-14:35	IL	<b>Xiaomin Zhang</b> <i>Nanjing University</i>	Separation of Carbon Dioxide and Hydrogen Sulfide Enhanced by Ionic Medium
14:35-14:50	IL	<b>Jinxiao Dou</b> <i>University of Science and Technology Liaoning</i>	Insight into the Synergistic SO <sub>2</sub> Removal by Activated Carbon Loaded with Amino Acid-Based Deep Eutectic Solvents: Mechanism, DFT Calculation
14:50-15:05	IL	<b>Chenhua Shu</b> <i>Shangrao Normal University</i>	Synthesis of a Porous Deep Eutectic Solvent-Based on Supramolecular Deep Eutectic Solvent and Its Application in Extractive-Oxidative Desulfurization
		<b>15:05-15:25</b>	<b>Coffee Break</b>
<b>Chairs: Zhiyong Li Guoxuan Li</b>			
15:25-15:45	KL	<b>Weize Wu</b> <i>Beijing University of Chemical Technology</i>	Machine Learning Prediction of CO <sub>2</sub> Solubility in Ionic Liquids and Deep Eutectic Solvents
15:45-16:05	KL	<b>Ibrahim El-Tantawy El-Sayed</b> <i>Menoufia University</i>	Ionic Liquids: Driving Innovation in Environmental Sustainability and Biomass Transformation
16:05-16:20	IL	<b>Tianxiang Zhao</b> <i>Guizhou University</i>	Ionic Framework Materials for CO <sub>2</sub> Gas Separation and Conversion
16:20-16:35	IL	<b>Yinge Bai</b> <i>Institute of Process Engineering, CAS</i>	Flow-Transport Phenomena and Engineering Scale-Up Applications in Ionic Liquid-Based Carbon Capture Process
16:35-16:50	IL	<b>Chao Guo</b> <i>Chengdu University of Technology</i>	Computer-Aided Ionic Liquid Design Integrated with Process Parallel Optimization for Enhanced C <sub>4</sub> Hydrocarbon Separation
16:50-17:05	IL	<b>Dechao Wang</b> <i>Xi'an University of Science and Technology</i>	Regulation of Nanoconfined Interfacial Microenvironment and Enhanced Mass Transfer Mechanism in Porous Liquids for Low-energy Gas Separation
<b>18:00 Dinner</b>			



## Session 4

### Ionic Liquid-Based Photochemical / Electrochemical Transformation Processes

Chairs: Jie Fu, Zhimin Liu, Xiaowei Yang  
Convenors: Guiyuan Jiang, Guidong Yang, Mingfei Shao

Location: 3F, Yiya Hall

#### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Guiyuan Jiang Jie Fu</b>			
13:30-13:50	KL	<b>Zhimin Liu</b> <i>Institute of Chemistry, CAS</i>	Ionic Liquid Catalysis: Principal and Applications
13:50-14:10	KL	<b>Pengju Pan</b> <i>Zhejiang University</i>	Polymeric Ionogels Controlled by Chain Crystallization and Microphase Separation Towards Sensing Application
14:10-14:25	IL	<b>Xiaofeng Cui</b> <i>Anhui Normal University</i>	Enhancement of the Reaction Process Based on the Development of Photoelectrocatalytic Devices
14:25-14:40	IL	<b>Hefeng Cheng</b> <i>Shandong University</i>	Plasmon-Driven Highly Selective CO <sub>2</sub> Photoreduction to C <sub>2</sub> H <sub>4</sub> on Ionic Liquid-Mediated Copper Nanowires
14:40-14:55	IL	<b>Baoyou liu</b> <i>Hebei University of Science and Technology</i>	Ionic Liquid Prepared Carbon Quantum Dots and Their Applications in Emerging Contaminant Detection and Organic Dye Degradation
14:55-15:10	IL	<b>Tao Xie</b> <i>Xi'an Jiaotong University</i>	Construction of LDH-Derived Catalyst and the Photothermal Catalytic Characteristics in CO <sub>2</sub> Methanation Reaction
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Zhimin Liu Pengju Pan</b>			
15:30-15:50	KL	<b>Jie Fu</b> <i>Zhejiang University</i>	Electro-Catalytic CO <sub>2</sub> Reduction to Syngas
15:50-16:05	IL	<b>Ningqiang Zhang</b> <i>Northeastern University</i>	Catalyst Design for Photothermal Reverse Water-Gas Shift Reaction
16:05-16:20	IL	<b>Kaihong Chen</b> <i>Nanjing University</i>	Ionic Liquid-Promoted Photocatalytic CO <sub>2</sub> Reduction
16:20-16:35	IL	<b>Bin Wang</b> <i>Jiangsu University</i>	Bismuth-Based Artificial Photosynthesis Materials: Design and Reaction Mechanism
16:35-16:50	IL	<b>Neng Chen</b> <i>Hefei University</i>	Multifunctional Carbon-Based Materials for Hydrogen Electrocatalysis with Ionic Liquid Regulation
16:50-17:05	IL	<b>Yuhan Wu</b> <i>Henan Normal University</i>	Interfacial Electrocatalytic Conversion for Waste Resource Utilization
17:05-17:20	IL	<b>Yong Zheng</b> <i>Anyang Institute of Technology</i>	Electrolysis of Aluminum from Ionic Liquids with Inert Anodes
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Pengju Pan Baowang Lu</b>			
08:30-08:50	KL	<b>Guidong Yang</b> <i>Xi'an Jiaotong University</i>	Air-Water Green Ammonia Synthesis Engineering
08:50-09:10	KL	<b>Rufan Zhang</b> <i>Tsinghua University</i>	High-Performance Photothermal Regulation Materials
09:10-09:25	IL	<b>Chengcheng Liu</b> <i>Shandong University</i>	Interface-Engineered Porous Frameworks for Photocatalytic CO <sub>2</sub> Conversion
09:25-09:40	IL	<b>Jiaqi Feng</b> <i>China University of Petroleum, Beijing</i>	Design and Mechanism Research of Electrocatalytic CO <sub>2</sub> Reduction Catalysts
09:40-09:55	IL	<b>Peng Chen</b> <i>Guizhou University</i>	Development of a Multi-Scale Polarity Framework and Mechanistic Investigation of Nitrogen-Containing Molecular Transformations
<b>09:55-10:15 Coffee Break</b>			
<b>Chair: Rufan Zhang</b>			
10:15-10:35	KL	<b>Baowang Lu</b> <i>National Institute of Clean-and-Low-Carbon Energy</i>	Breaking the Temperature Barrier: Low-Temperature CO <sub>2</sub> Methanation for Efficient Synthetic Natural Gas Production
10:35-11:50	IL	<b>Weiqiang Zhang</b> <i>Liaocheng University</i>	Cluster Structure Engineering and Interfacial Synergistic Catalysis: Research on Photo/Electrocatalytic Energy Conversion
10:50-11:05	IL	<b>Aoxuan Wang</b> <i>Tianjin University</i>	Key Materials Research for Dynamics of Magnesium Metal Secondary Batteries
11:05-11:15	OL	<b>Zhuohang Zhang</b> <i>Sun Yat-Sen University</i>	Balancing CO <sub>2</sub> Absorption Capacity and Kinetics in Ionic Liquid of Deep Eutectic Solvent: Insights from COSMO-RS and Molecular Dynamics
<b>11:15-13:30 Lunch</b>			



## Session 5

# Ionic Liquid-Based Biochemical Engineering and Intelligent Drug Delivery

**Chairs: Haijia Su, Long Liu, Wei Wei**

**Convenors: Jian Yin, Yao Chen, Yuanhui Ji, Jian Sun, Shan Wu**

**Location: 2F, Lemei Hall**

### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Long Liu Kosuke Kuroda</b>			
13:30-13:50	KL	<b>Long Liu</b> <i>Jiangnan University</i>	Bioproduction of Functional Food Fngredients by Microbial Cell Factories
13:50-14:10	KL	<b>Kosuke Kuroda</b> <i>Kanazawa University</i>	Drinkable Ionic Liquids
14:10-14:25	IL	<b>Yao Chen</b> <i>Institute of Process Engineering, CAS</i>	Crystalline Immobilization Biocatalysis
14:25-14:40	IL	<b>Feng Cheng</b> <i>Zhejiang University of Technology</i>	Intelligent Construction of Bio-Inorganic Amination Systems
14:40-14:55	IL	<b>Zhansheng Wu</b> <i>Xi'an Polytechnic University</i>	Construction of Ginsenoside Sustained-release System and Its Anticancer Activity
14:55-15:10	IL	<b>Aitao Li</b> <i>Hubei University</i>	Development of Efficient Biosynthetic Systems for Nylon 66 Monomers
15:10-15:25	IL	<b>Shuwen Liu</b> <i>Institute of Microbiology, CAS</i>	Biosynthesis and Industrial Production of Chemicals
<b>15:25-15:35 Coffee Break</b>			
<b>Chairs: Feng Xu Zhiguo Zhang Gang Xiao</b>			
15:35-15:55	KL	<b>Feng Xu</b> <i>Beijing Forestry University</i>	Preparation and Utilization of Cellulose Based Materials
15:55-16:15	KL	<b>Zhiguo Zhang</b> <i>Zhejiang University</i>	Light Driven Organic Synthesis (LDOS): Oxidation with Molecular Oxygen
16:15-16:35	KL	<b>Haijia Su (Gang Xiao)</b> <i>Beijing University of Chemical Technology</i>	Chem-Bio Synergistic Catalysis for the Utilization of Waste Carbon Resources
16:35-16:50	IL	<b>Chin-Yu Chen</b> <i>Hubei University</i>	Cryo-EM Visualization of Enzyme Dynamics Across Ionic and Reaction Environments
16:50-17:05	IL	<b>Jiaoqi Gao</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Repurposing <i>Ogataea polymorpha</i> into a Superior Microbial Platform for Bio-Productions
17:05-17:20	IL	<b>Yunting Liu</b> <i>Hebei University of Technology</i>	Unconventional Media-Enabled Intensification of Enzymatic Processes
17:20-17:35	IL	<b>Lidan Ye</b> <i>Zhejiang University</i>	Improving Biocatalysis and Biosynthesis by Protein Engineering
17:35-17:50	IL	<b>Qi Han</b> <i>RMIT University</i>	Ionic Liquids for Protein Crystallization and Oral Peptide Delivery
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Jiali Zhai Yuhong Huang</b>			
08:30-08:50	KL	<b>Jiali Zhai</b> <i>RMIT University</i>	Ionizable Lipid Nanoparticles with Structural Insights for Targeted mRNA Delivery
08:50-09:05	IL	<b>Yuhong Huang</b> <i>Institute of Process Engineering, CAS</i>	Artificial Cascade Ionozyme for the Direct Conversion of CO <sub>2</sub> to Valuable Products
09:05-09:20	IL	<b>Xinyu Liu</b> <i>Peking University</i>	Green Assembly and Delivery Enhancement of Protein Therapeutics
09:20-09:35	IL	<b>Yingzi Cui</b> <i>Institute of Process Engineering, CAS</i>	Dissecting CoxsackieVirus-Host Interactions for Oncolytic Virus Engineering
09:35-09:50	IL	<b>Catarina Almeida</b> <i>University of Aveiro</i>	A Three-Phase Partitioning Systems-Based Platform for the Selective Recovery of Immunoglobulin Y (IgY)
09:50-10:05	IL	<b>Hongguang Zhang</b> <i>Institute of Process Engineering, CAS</i>	Solar-Driven Sustainable Synthesis of Value-Added Chemicals and Biofuels
<b>10:05-10:20 Coffee Break</b>			
<b>Chairs: Jingwen Zhou Yajun Wang</b>			
10:20-10:40	KL	<b>Jingwen Zhou</b> <i>Jiangnan University</i>	Production of Steroids by Synthetic Biology
10:40-11:00	KL	<b>Yajun Wang</b> <i>Zhejiang University of Technology</i>	Engineering of Imine Reductase for Asymmetric Synthesis of Chiral Naphthyl Alkylamines
11:00-11:15	IL	<b>Jiafu Shi</b> <i>Tianjin University</i>	Enzyme-Photo-Coupled Biomanufacturing Processes
11:15-11:30	IL	<b>Zhengyao Zhang</b> <i>Dalian University of Technology</i>	A Novel ZnO <sub>2</sub> Thermosensitive Hydrogel For Multifunctional Bone Regeneration Microenvironment Construction
11:30-11:45	IL	<b>Maria Mendes</b> <i>University of Aveiro</i>	Ionic Liquid-Based Aqueous Biphasic Systems for Improved Cancer Biomarker Detection in Microfluidic Devices
<b>12:00-13:30 Lunch</b>			



## Session 6

# Ionic Liquids for Advanced Energy Storage and Hydrogen Energy-A

**Chairs: Meicheng Li, Zhenxing Liang, Yan Yu**  
**Convenors: Shimou Chen, Weihua Chen, Shibin Yin,**  
**Chaofeng Zhang, Haitao Zhang**

Location: 3F, VIP A Hall

Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Junfeng Rong    Zhibo Ren</b>			
13:30-14:00	KL	<b>Jingke Mo</b> <i>Huairou Laboratory</i>	In Situ Visualization of Electrochemical Reactions in PEM Water Electrolyzers
14:00-14:30	KL	<b>Xiaotao Ding</b> <i>Scyn.X</i>	Key Technologies and Engineering Applications of PEM Water Electrolysis for Hydrogen Production
14:30-15:00	KL	<b>Jun'e Zhu</b> <i>Beijing Nowogen Technology Co., Ltd.</i>	Research Progress and Practical Application of High-Power Fuel Cells
<b>15:00-15:30    Coffee Break</b>			
<b>Chairs: Jingke Mo    Xiaotao Ding</b>			
15:30-16:00	KL	<b>Junfeng Rong</b> <i>Sinopec Research Institute of Petroleum Processing Co., Ltd.</i>	Development of Anodic and Cathodic Catalysts with High-Efficiency for AEM Water Electrolysis
16:00-16:30	KL	<b>Kun Han</b> <i>SPIC Science and Technology Research Institute Co., Ltd.</i>	Research and Practical Application of Reformed Methanol Fuel Cell
16:30-17:00	KL	<b>Zhibo Ren</b> <i>Huaneng Clean Energy Research Institute</i>	Renewable Energy-Powered Dynamic Electrolytic Hydrogen Production Technology Development & Demonstration
<b>19:00    Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Yang Hou Jianguo Liu</b>			
08:30-08:50	KL	<b>Lilong Jiang</b> <i>Fuzhou University</i>	Low-Temperature Efficient Ammonia Cracking for Hydrogen and Electricity Generation
08:50-09:10	KL	<b>Zhonghua Xiang</b> <i>Beijing University of Chemical Technology</i>	Process Intensification of Polymer Oxygen Electrode
09:10-09:25	IL	<b>Jieqiong Shan</b> <i>City University of Hong Kong</i>	Engineering Inter-Site Synergy in Atomic-Scale Catalysts for Sustainable Electrocatalysis
09:25-09:40	IL	<b>Linda Zhang</b> <i>Tohoku University</i>	Lattice Responses and Adsorption Dynamics of Hydrogen Isotopologues in a Flexible Triazolate MOF
09:40-09:55	IL	<b>Yawei Li</b> <i>Shanxi University</i>	Application of Ionic Liquids to Enhance the PEM Fuel Cell Performance
<b>09:55-10:20 Coffee Break</b>			
<b>Chairs: Lilong Jiang Zhonghua Xiang</b>			
10:20-10:40	KL	<b>Yang Hou</b> <i>Zhejiang University</i>	Interfacial Engineering and Regulatory Mechanisms for Electrolytic Water Splitting to Hydrogen Based on the Synergy of Hydrogen Bond Network Reconstruction and Proton Transport
10:40-11:00	KL	<b>Jianguo Liu</b> <i>North China Electric Power University</i>	Engineering the Triple-Phase Boundary for High-Performance PEM Fuel Cells
11:00-11:15	IL	<b>Min Wang</b> <i>China University of Petroleum (East China)</i>	Towards Addressing Fundamental Manufacturing Questions for Polymer Electrolyte Membrane Fuel Cells
11:15-11:30	IL	<b>Meigui Xu</b> <i>Nanjing Tech University</i>	Materials Design and Scalable Fabrication of Intermediate-Low Temperature Solid Oxide Fuel Cells (SOFCs)
11:30-11:45	IL	<b>Peijian Yan</b> <i>Liaocheng University</i>	Research and Development of Methanol Reforming Hydrogen Fuel Cell Systems
<b>11:45-13:30 Lunch</b>			



## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Jianguan Shui Nicholas Musyoka</b>			
13:30-13:50	KL	<b>Jianguo Wang</b> <i>Zhejiang University of Technology</i>	Ionic Liquid-Modified Catalyst Promotes Electrosynthesis of Hydrogen Peroxide
13:50-14:10	KL	<b>Fengxiang Zhang</b> <i>Dalian University of Technology</i>	Preparation and Fuel Cell Performance of Poly(arylene) Anion Exchange Membranes Regulated by Free Volume and Amphiphilic Dual Side Chains
14:10-14:25	IL	<b>Zhenye Kang</b> <i>Hainan University</i>	Synergistic Optimization of Intrinsic Charge and Heat at Interfaces in Proton Exchange Membrane Water Electrolyzers
14:25-14:40	IL	<b>Bingxing Zhang</b> <i>Zhejiang University</i>	Sub-Nanometer Catalytic Interface Coupling for Hydrogen-Based Energy Molecule Conversion
14:40-14:55	IL	<b>Jianchuan Wang</b> <i>Chongqing University</i>	Supramolecular Polymer Framework Ion Exchange Membrane
14:55-15:10	IL	<b>Konggang Qu</b> <i>Liaocheng University</i>	Research on Energy-Saving Hydrogen Production Assisted by Electrocatalytic Hydrazine Oxidation
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Jianguo Wang Fengxiang Zhang</b>			
15:30-15:50	KL	<b>Jianguan Shui</b> <i>Beihang University</i>	Performance Enhancement of Traditional Hydrogen Storage Materials
15:50-16:10	KL	<b>Nicholas Musyoka</b> <i>University of Nottingham Ningbo China</i>	Power-to-X: Unlocking Hydrogen Storage and Distribution Solutions
16:10-16:25	IL	<b>Guanxiong Wang</b> <i>Shenzhen Academy of Aerospace Technology</i>	Key Technology Research on AEM Electrolysis Materials and Membrane Electrode Assembly
16:25-16:40	IL	<b>Baoguang Mao</b> <i>Beijing University of Chemical Technology</i>	Multiscale Surface and Interface Engineering, Device Integration, and Cross-Sector Applications of Green Hydrogen Electrodes
16:40-16:55	IL	<b>Heng Zhao</b> <i>Eastern Institute of Technology, Ningbo</i>	Rational Design on Catalysts for Solar-Driven Hydrogen Production
16:55-17:10	IL	<b>Hao Wang</b> <i>Institute of Process Engineering, CAS</i>	Ionic Liquid-Assisted New Process of Electricity-Hydrogen Conversion
<b>18:00 Dinner</b>			

## Session 6

# Ionic Liquids for Advanced Energy Storage and Hydrogen Energy-B

**Chairs: Meicheng Li, Zhenxing Liang, Yan Yu**  
**Convenors: Shimou Chen, Weihua Chen, Shibin Yin,**  
**Chaofeng Zhang, Haitao Zhang**

Location: 3F, VIP B Hall

Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Feng Yan Siqi Shi</b>			
13:30-13:50	KL	<b>Guanglei Cui</b> <i>QIBEBT, CAS</i>	Fast-Charging Sulfide All-Solid-State Battery
13:50-14:10	KL	<b>Yan Yu</b> <i>University of Science and Technology of China</i>	Design of Materials for Low-Temperature Sodium-Ion Batteries
14:10-14:30	KL	<b>Guang Feng</b> <i>Huazhong University of Science and Technology</i>	Supercapacitors with Ionic Liquid Electrolytes
14:30-14:45	IL	<b>Zhizhang Yuan</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Recent Advances in Zinc-Based Flow Batteries
14:45-15:00	IL	<b>Linghong Lü</b> <i>Nanjing Tech University</i>	The Controlled Design of MXene/Ionic Liquid Interfacial
15:00-15:15	IL	<b>Fanglin Wu</b> <i>Wuhan University of Technology</i>	Ionic Liquid Electrolytes for High-Energy Lithium Metal Batteries
<b>15:15-15:30 Coffee Break</b>			
<b>Chairs: Yan Yu Haitao Zhang</b>			
15:30-15:50	KL	<b>Feng Yan</b> <i>Donghua University</i>	AI Assisted Design and Synthesis of Anion Exchange Membranes
15:50-16:10	KL	<b>Junmei Zhao</b> <i>Institute of Process Engineering, CAS</i>	Aqueous Sodium-Ion Batteries Based on Interface Design
16:10-16:25	IL	<b>Xinpei Gao</b> <i>Hainan University</i>	Heterogeneous Colloid Electrolytes: Ionic Liquids, Plastic Crystals, and Liquid Crystals
16:25-16:40	IL	<b>Xin Su</b> <i>Harbin Institute of Technology</i>	Exploration of High-Energy-Density Lithium Battery Materials: Lithium Manganese Iron Phosphate, Prelithiation Additive, High-Voltage Electrolyte and Their Closed-Loop Recycling
16:40-16:55	IL	<b>Yangyang Liu</b> <i>Xi'an Jiaotong University</i>	Interface Mass-Charge Balance Study of Metal Anodes
16:55-17:10	IL	<b>Wanyu Zhao</b> <i>Shanghai Jiao Tong University</i>	Ionic Liquids: Accelerating Conversion Kinetics in Magnesium-Sulfur Batteries
17:10-17:25	IL	<b>Shaoze Zhang</b> <i>Kunming University of Science and Technology</i>	Mechanism of Dual Suppression of Lithium Dendrites and Shuttle Effect by Ionic Liquids
17:25-17:40	IL	<b>Yingyue Cui</b> <i>Henan University</i>	Construction of Key Materials and Investigation on Electrocatalytic Kinetics of Lithium-Sulfur Battery
<b>19:00 Dinner</b>			



## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Meicheng Li Yufeng Zhao</b>			
08:30-08:50	KL	<b>Weishen Yang</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Catalysis and Membrane Separation toward Carbon Emission Reduction
08:50-09:10	KL	<b>Xiaodong Guo</b> <i>Sichuan University</i>	Advanced Cathodes for Rechargeable Batteries
09:10-09:30	KL	<b>Weihua Chen</b> <i>Zhengzhou University</i>	Design of Electrolytes for Sodium-Ion Batteries and Interfacial Engineering
09:30-09:45	IL	<b>Zhengfei Chen</b> <i>NingboTech University</i>	Ionic Liquid Strategies for Advanced Lithium Batteries: Electrode Material Engineering and Gel Electrolyte Regulation
09:45-10:00	IL	<b>Shizhao Xiong</b> <i>Kunming University of Science and Technology</i>	Ionic Liquid Interlayer Enables Stable Interface in Solid-State Batteries
10:00-10:15	IL	<b>Caihong Wang</b> <i>Sichuan University</i>	Structural Design of Thermoresponsive Ionic Liquid Electrolytes and Overheating Protection
<b>10:15-10:30 Coffee Break</b>			
<b>Chairs: Weishen Yang Weihua Chen</b>			
10:30-10:50	KL	<b>Meicheng Li</b> <i>North China Electric Power University</i>	Innovations in Lithium Battery Anodes, Optimization of Cathodes, and Exploration of Solid-State Batteries
10:50-11:10	KL	<b>Yufeng Zhao</b> <i>Shanghai University</i>	Materials and Energy Storage Mechanisms for Sodium-Ion Batteries at Low Temperatures
11:10-11:25	IL	<b>Hongwei Fan</b> <i>Beijing University of Chemical Technology</i>	Efficient and Green Synthesis of Graphdiyne-Based Materials for Electrochemical Energy Applications
11:25-11:40	IL	<b>Shengan Wu</b> <i>Nanjing Normal University</i>	Ionic Liquid Electrolytes for Anode-Free Metal Batteries: Coordination Structure and Interfacial Chemistry
11:40-11:55	IL	<b>Shanshan Pan</b> <i>Henan University</i>	Construction of High-Performance Lithium Slurry Fluid Batteries and Optimization of Reactor Configuration
<b>12:00-13:30 Lunch</b>			

## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Xiaowei Yang Haitao Zhang</b>			
13:30-13:50	KL	<b>Hao Jiang</b> <i>East China University of Science and Technology</i>	Materials for Rechargeable Batteries: Strain Regulation and Stabilization Mechanisms
13:50-14:10	KL	<b>Kelei Zhuo</b> <i>Henan Normal University</i>	Solvation Thermodynamics and Ionic Liquid-Based Electrolytes
14:10-14:25	IL	<b>Ying Wang</b> <i>Fudan University</i>	AI Assisted Accelerated Development of Ion Polymer Electrolytes and Their Applications
14:25-14:40	IL	<b>Jianhang Huang</b> <i>Zhejiang Normal University</i>	Metallic Tin Anode with Highly Reversibility
14:40-14:55	IL	<b>ISHIOMA LAURENE EGUN</b> <i>Zhejiang University/NingboTech University</i>	Upcycling Waste Tires into Heteroatom-Doped Porous Carbon via Ionic Liquid Engineering for Advanced Sodium-Ion Battery Anodes
14:55-15:10	IL	<b>Jishi Wei</b> <i>Henan University</i>	Ionic Liquid Induced Smart Fabrication of Carbon Dots for High Performance Aqueous Batteries
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Hao Jiang Kelei Zhuo</b>			
15:30-15:50	KL	<b>Xiaowei Yang</b> <i>Shanghai Jiao Tong University</i>	Ionic Liquid-Enabled New Electrochemical Energy Storage Systems
15:50-16:10	KL	<b>Haitao Zhang</b> <i>Institute of Process Engineering, CAS</i>	Structure-Performance Relationship of Multiscale Ionogel Electrolytes
16:10-16:25	IL	<b>Jingjing Xu</b> <i>Hohai University</i>	Research on Ionic Liquid-Based Liquid/Solid Electrolytes
16:25-16:40	IL	<b>Maocheng Liu</b> <i>Lanzhou University of Technology</i>	Structural Design of Materials for High-Specific-Energy Na-K Metal Batteries and Their Performance
16:40-16:55	IL	<b>Qingpeng Guo</b> <i>National University of Defense Technology</i>	Research on High-Temperature Solid-State Lithium Batteries Based on Integrated Ionogel and Applications
16:55-17:10	IL	<b>Pengfei Zhai</b> <i>Henan University</i>	A Study on the Construction of Gradient Inorganic-Rich SEI and Its Stabilization of the Solid Polymer Electrolyte/Lithium Anode Interface
17:10-17:20	OL	<b>Zhuang Wang</b> <i>China University of Petroleum (Beijing)</i>	Mechanism of Laser Transmission Welding Optimization for Flow Batteries
<b>18:00 Dinner</b>			



## Session 7

# Ionic Liquids for Functional Materials and Innovative Applications

**Chairs:** Hongyan He, Yapei Wang, Feng Yan  
**Convenors:** Xiaoli Sun, Fei Xu, Yu Zhang, Shiguo Zhang

**Location:** 3F, Linjiang Hall

### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs:</b> Xiaoli Sun    Zepeng Lei			
13:30-13:50	KL	<b>Feng Yan</b> <i>Soochow University</i>	High-Strength and Tough Ionogels
13:50-14:10	KL	<b>Tianlong Deng</b> <i>Tianjin University of Science and Technology</i>	Fabrication of Polyimidazole-Functionalized Copper Prussian Blue Analogues with Defect Engineering for Enhanced Adsorption
14:10-14:30	KL	<b>Takeshi Ueki</b> <i>National Institute for Materials Science</i>	Ionic Liquid Interface as a Cell Scaffold
14:30-14:45	IL	<b>Yanhui Chen</b> <i>Northwestern Polytechnical University</i>	Thermal Management Materials and Modules
14:45-15:00	IL	<b>Yu Zhang</b> <i>Institute of Process Engineering, CAS</i>	Multi-Field Driven Shape Memory Polyurethane Functional Material
15:00-15:15	IL	<b>Jia Chen</b> <i>Lanzhou Institute of Chemical Physics, CAS</i>	Application of Ionic Organic Single-Crystals in High-Efficiency Separation
<b>15:15-15:30    Coffee Break</b>			
<b>Chairs:</b> Feng Yan    Tianlong Deng			
15:30-15:50	KL	<b>Yimin Yao</b> <i>Shenzhen Institutes of Advanced Technology, CAS</i>	Research and Application of Polymer-Based Advanced Packaging Materials
15:50-16:10	KL	<b>Zepeng Lei</b> <i>South China University of Technology</i>	Amphiphilic Ionic Liquids Enable Protective Dissolution and Controllable Regeneration of Cellulose
16:10-16:25	IL	<b>Xiaoli Sun</b> <i>Beijing University of Chemical Technology</i>	The Structure Control and Engineering of Dielectric Polymer Materials
16:25-16:40	IL	<b>Pengxiang Jia</b> <i>Northwest University</i>	Extreme Environment-Tolerant Gel Based on Green Solvents
16:40-16:55	IL	<b>Yunsong Yu</b> <i>Xi'an Jiaotong University</i>	Fundamental Research and Scale-Up Technology for Simultaneous Carbon Dioxide Capture and Conversion
16:55-17:10	IL	<b>Weizhong Zheng</b> <i>East China University of Science and Technology</i>	Low-Temperature Alcoholysis of Waste Polyester Catalyzed by Deep Eutectic Solvents
17:10-17:25	IL	<b>Jingyu Pang</b> <i>Henan University</i>	Polyoxometalate-Based Ionic Liquid Catalysts for Oxidative Desulfurization of Fuels
<b>19:00    Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Haibo Xie Hong Wang</b>			
08:30-08:50	KL	<b>Kazuhide Ueno</b> <i>Yokohama National University</i>	Molecular Design of Lithium Ionic Liquids for Efficient Li-ion Transport
08:50-09:10	KL	<b>Shiguo Zhang</b> <i>Hunan University</i>	From Ionic Liquids to High-Performance Adhesive Materials
09:10-09:25	IL	<b>Lixia Ren</b> <i>Tianjin University</i>	Self-Assembly of Magnetic Ionic Liquid Based on Triphenyl Linker and the Ice Recrystallization Inhibition
09:25-09:40	IL	<b>Dawei Zhang</b> <i>East China Normal University</i>	Swelling Poly(Ionic Liquid)s Integrated with Coordination Cages for Adaptive Guest Encapsulation and Separation
09:40-09:55	IL	<b>Bolin Wang</b> <i>Northeast Electric Power University</i>	Application Research of Ionic Liquids in Transformer Fault Diagnosis
09:55-10:10	IL	<b>Siyu Zheng</b> <i>Zhejiang University of Technology</i>	Construction of High-Performance Underwater Adhesives Based on Ionic Liquids
<b>10:10-10:20 Coffee Break</b>			
<b>Chairs: Kazuhide Ueno Shiguo Zhang</b>			
10:20-10:40	KL	<b>Haibo Xie</b> <i>Guizhou University</i>	Dissolution Technology Boosts Biopolymer-Based Poly(Ionic Liquids) for Zinc-Ion Batteries
10:40-11:00	KL	<b>Hong Wang</b> <i>Nankai University</i>	Poly(Ionic Liquid)-Based Functional Materials
11:00-11:15	IL	<b>Tao Zhu</b> <i>Hebei University</i>	Improving the Adsorption and Electrochemical Performances of Oxidized Hydrogen-Substituted Graphyne and Graphene Oxide via Ionic Liquid Regulation
11:15-11:30	IL	<b>Yanlan Wang</b> <i>Liaocheng University</i>	Construction and Selective Catalysis of Multi Nuclear Palladium Clusters
11:30-11:45	IL	<b>Zhenbo Ning</b> <i>Beijing University of Chemical Technology</i>	Photothermal Shape Memory Dressing Containing Lignin-Iron Ion Complex
11:45-12:00	IL	<b>Zhiwu Chen</b> <i>Renmin University of China</i>	Bioinspired Self-Powered Thermoreceptors Independent of Temperature Gradients
<b>12:00-13:30 Lunch</b>			



## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Hongyan He Yu Zhang</b>			
13:30-13:50	KL	<b>Peiyi Wu</b> <i>Donghua University</i>	Low-Hysteresis and Tough Ionogels via Low-Energy-Dissipating Cross-Linking
13:50-14:05	IL	<b>Guiyin Xu</b> <i>Donghua University</i>	High-Safety Separators for Lithium, Sodium and Zinc Batteries
14:05-14:20	IL	<b>Xiaoyan Luo</b> <i>Huaqiao University</i>	Flexible Material from Ionic Liquid via Synergic Coordination-Hydrogen Bond for Energy-Efficient and Reversible Ammonia Capture
14:20-14:35	IL	<b>Qi Zhang</b> <i>The Chinese University of Hong Kong, Shenzhen</i>	Engineering Non-Covalent Interactions for Ionogel Adhesives
14:35-14:50	IL	<b>Shuai Tan</b> <i>Sichuan University</i>	Regulating Molecular Interactions in Ionic Liquids towards Diverse Applications
14:50-15:05	IL	<b>Qian Wang</b> <i>Institute of Process Engineering, CAS</i>	Electrodeposition of Aluminum in Ionic Liquids and Its Industrial Applications
15:05-15:20	IL	<b>Yuanbin Zhang</b> <i>Zhejiang Normal University</i>	Anion Hybrid Porous Materials for Enhanced Gas Separation
15:20-15:30 <b>Coffee Break</b>			
<b>Chairs: Peiyi Wu Fei Xu</b>			
15:30-15:45	IL	<b>Yingjie Zhou</b> <i>Donghua University</i>	CO <sub>2</sub> -Sourced Ionic Polymers
15:45-16:00	IL	<b>Li Cui</b> <i>Shanxi University</i>	Ion Pair-Driven Selective Lithium Extraction and Lithium Isotope Separation in Multicomponent Complex Systems
16:00-16:15	IL	<b>Shiyuan Bian</b> <i>University of Science and Technology of China</i>	Research on Key Technologies of Humanoid Robots
16:15-16:30	IL	<b>Lilong Zhou</b> <i>Hebei University of Science and Technology</i>	Metal free Catalysts from Ionic Liquids for Oxidation of Organics at Low Temperature
16:30-16:45	IL	<b>Jun Zhang</b> <i>Hunan University</i>	In Situ Room-Temperature Spontaneous Gelation Electrolytes for High-Performance Electrochromic Devices
16:45-17:00	IL	<b>Yongkang Bai</b> <i>Xi'an Polytechnic University</i>	Designable Ionic Gel Platforms for Multimodal Sensing, Actuation and Self-Powered Intelligent Healthcare Systems
17:00-17:15	IL	<b>Nan Sun</b> <i>Shandong University</i>	Supramolecular Mismatch Elevates the Flow Transition Temperature of Ionogels
17:15-17:30	IL	<b>Siyang Che</b> <i>Zhejiang University of Technology</i>	Design and Detection Application of Electrostatic-Driven Fluorescent Ion Probes
18:00 <b>Dinner</b>			

## Session 8

# Ionic Liquid-Enabled Technology for Efficient Capture and Conversion of CO<sub>2</sub>

**Chairs:** Jie Zeng, Xiangping Zhang, Wei Wei  
**Convenors:** Yongqin Lü, Jian Sun, Xue Wang, Zhoujun Wang

**Location:** 3F, Zhuli Hall

**Saturday Morning, May 30**

Time	Item	Speaker	Title
<b>Chair: Jie Zeng Ye Wang</b>			
08:30-08:50	KL	<b>Xinbin Ma</b> <i>Xinjiang University</i>	Design of High-performance Catalysts for the Conversion of CO <sub>2</sub> to Methanol
08:50-09:10	KL	<b>Jinlong Gong</b> <i>Tianjin Normal University</i>	Catalytic Conversion of Low-Carbon Hydrocarbon Energy
09:10-09:30	KL	<b>Wei Wei</b> <i>Shanghai Advanced Research Institute, CAS</i>	Advances in CO <sub>2</sub> Conversion and Utilization Technologies
09:30-09:45	IL	<b>Chuan Xia</b> <i>University of Electronic Science and Technology</i>	General Construction of Single-Atom Alloys for CO <sub>2</sub> Conversion via Molten Salt Synthesis
09:45-10:00	IL	<b>Sheng Zhang</b> <i>Tianjin University</i>	Electrochemical Conversion of CO <sub>2</sub> to Value-Added Oxygenates
<b>10:00-10:10 Coffee Break</b>			
<b>Chair: Xinbin Ma Xiangping Zhang</b>			
10:10-10:30	KL	<b>Ye Wang</b> <i>Xiamen University</i>	Electrocatalytic Reduction of CO <sub>2</sub> : Key Fundamental Challenges and Our Strategic Approaches
10:30-10:50	KL	<b>Dong Xu &amp; Yang Yang</b> <i>CHN Energy New Energy Technology Research Institute</i>	Opportunity, Practice and Challenge of CCUS in China
10:50-11:05	IL	<b>Yongqin Lü</b> <i>Beijing University of Chemical Technology</i>	Biomimetic Capture and Electro-Bio Synergistic Catalysis: A New Path for High-Value CO <sub>2</sub> Utilization
11:05-11:20	IL	<b>Nannan Sun</b> <i>Shanghai Advanced Research Institute, CAS</i>	Material and Process for Integration of CO <sub>2</sub> Capture and Methanation
11:20-11:35	IL	<b>Yi Liu</b> <i>National Institute of Clean-and-Low-Carbon Energy</i>	Design of Industrial-Grade Catalysts for CO <sub>2</sub> Hydrogenation to Chemicals and Fuels
11:35-11:50	IL	<b>Xingchen Jiao</b> <i>Jiangnan University</i>	Pair Catalysis-Based CO <sub>2</sub> Photoreduction
11:50-12:00	OL	<b>Yifeng Chen</b> <i>Institute of Chemical Industry of Forest Products</i>	A Generalized Model for Cost Prediction of Physical Ionic Liquids in CO <sub>2</sub> Separation
<b>12:00-13:00 Lunch</b>			



## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chair: Jinlong Gong Min Wei</b>			
13:00-13:20	KL	<b>Lidong Wang</b> <i>North China Electric Power University</i>	Research Progress in CO <sub>2</sub> Capture
13:20-13:40	KL	<b>Jianling Zhang</b> <i>Institute of Chemistry, CAS</i>	Ionic Liquid-Modified Catalysts for Electrocatalytic CO <sub>2</sub> Reduction
13:40-13:55	IL	<b>Guangping Hao</b> <i>Dalian University of Technology</i>	Removal of Low Concentration and Moist CO <sub>2</sub> Using Polar Carbon Pores
13:55-14:10	IL	<b>Qun Yi</b> <i>Wuhan Institute of Technology</i>	Tailored Construction of Ionic Liquid-Functionalized Materials toward CO <sub>2</sub> Separation and Catalytic Conversion
14:10-14:25	IL	<b>ChunRan Chang</b> <i>Xi'an Jiaotong University</i>	Immobilized Ionic Liquids for CO <sub>2</sub> Cycloaddition Reaction
14:25-14:40	IL	<b>Zhiguang Zhu</b> <i>Tianjin Institute of Industrial Biotechnology, CAS</i>	Electric Energy-Powered CO <sub>2</sub> Bioconversion
14:40-14:55	IL	<b>Zhoujun Wang</b> <i>Beijing University of Chemical Technology/Ningxia University</i>	Catalytic Conversion of Greenhouse Gases: From Catalyst Design to Process Intensification
14:55-15:05	OL	<b>Ruru Chen</b> <i>Liaocheng University</i>	The Dynamic Reconstruction of Single-Cu-Atom-Modified SnS <sub>2</sub> in Electrocatalytic CO <sub>2</sub> RR
15:05-15:15	OL	<b>Lei Yuan</b> <i>Henan Normal University</i>	Ionic Liquid-Mediated CO <sub>2</sub> Electrocatalysis and Preliminary Scale-Up
<b>15:15-15:30 Coffee Break</b>			
<b>Chair: Wei Wei Lidong Wang</b>			
15:30-15:50	KL	<b>Min Wei</b> <i>Beijing University of Chemical Technology</i>	Catalytic Conversion of CO <sub>2</sub>
15:50-16:05	IL	<b>Shaowu Wang</b> <i>Anhui Polytechnic University</i>	Rare-Earth Metal Complexes and Ionic Liquids Binary Catalysis for the Efficient Transformation of CO <sub>2</sub>
16:05-16:20	IL	<b>Pengfei Xie</b> <i>Zhejiang University</i>	Rational Design of Inverse Catalysts for Efficient CO <sub>2</sub> Upgrading Utilization
16:20-16:35	IL	<b>Guoqing Cui</b> <i>China University of Petroleum (Beijing)</i>	Joule Heating Catalysis Methylcyclohexane Dehydrogenation on Pt Based Catalysts
16:35-16:50	IL	<b>Hao Tian</b> <i>Shandong University</i>	Microenvironment Engineering in CO <sub>2</sub> Cycloaddition with Epoxides over Ionic Liquids towards Green Polyurethane Synthesis
16:50-17:05	IL	<b>Jing Ding</b> <i>Nanjing University of Technology</i>	From CO <sub>2</sub> Capture to Conversion: Ionic Liquid Functionalized COFs for a Sustainable Carbon Cycle
17:05-17:20	IL	<b>Ying Huang</b> <i>China Huan Qiu Contracting &amp; Engineering Co., Ltd.</i>	Enabling Intelligent Carbon Capture Operation through Mechanism-Guided Hybrid AI

17:20-17:35	IL	<b>Lei Chen</b> <i>Zhejiang University</i>	Multi-Level Interface Engineering for Efficient CO Electrolysis in MEA Systems
17:35-17:50	IL	<b>Lu Bai</b> <i>Institute of Process Engineering, CAS</i>	Functionalized Ionic Liquid-Based Membranes for Efficient Gas Separation
17:50-18:05	IL	<b>Qian Su</b> <i>Institute of Process Engineering, CAS</i>	Multi-level Structural Regulation of Poly(ionic liquid)s for Catalytic Conversion of CO <sub>2</sub> into Cyclic Carbonates
18:05-18:15	OL	<b>Xin Guo</b> <i>Liaoning Petrochemical University</i>	Inductive Effect of Amino-Functionalized Ionic Liquid Hybrid Zeolites for Efficient CO <sub>2</sub> Capture and Photocatalytic Reduction
18:15-18:25	OL	<b>Fangfang Li</b> <i>Henan University</i>	Ethylene Glycol-Enabled Enhancement of CO <sub>2</sub> Electrochemical Reduction to CO in Ionic Liquids
18:25-18:35	OL	<b>Kuilin Peng</b> <i>Jiangxi Normal University</i>	Calculation-Guided Design and Experimental Validation of Ionic Liquid Electrolytes for Boosting High CO Generation Rate in CO <sub>2</sub> Electroreduction
<b>18:35 Dinner</b>			



## Session 9

### Ionic Liquids Big Data and Ecosystem Safety

**Chairs: Xuebo Chen, Chao Lü, Xingmei Lü, Juncheng Jiang, Zhixiong Zhang**  
**Convenors: Bona Lu, Zhen Song, Xiaonan Wang, Yufei Wang**

Location: 3F, 999 Hall

#### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Xingmei Lü Yawei Liu</b>			
13:30-13:50	KL	<b>Xuebo Chen</b> <i>Henan University</i>	AI-Driven Intelligent Design and Manufacturing Platform for Electronic Materials Based on Electron and Energy Transfer Theory
13:50-14:10	KL	<b>Jun Jiang</b> <i>University of Science and Technology of China</i>	Building a Global Infrastructure for AI-Driven Innovation
14:10-14:25	IL	<b>Zhonghua Xiang</b> <i>Beijing University of Chemical Technology</i>	AI-Driven Research and Development of Energy Materials
14:25-14:40	IL	<b>Lijun Liang</b> <i>Hangzhou Dianzi University</i>	Research on Artificial Intelligence Designed Membrane Materials and Mass Transfer Mechanisms
14:40-14:55	IL	<b>Xiang Zhang</b> <i>East China University of Science and Technology</i>	Systematic Product Design: Functionalization of IL@MOF Composites for Environmental Applications
14:55-15:10	IL	<b>Li Zhang</b> <i>Zhejiang Sci-Tech University</i>	Exploring the Transport Mechanisms of Mixed Ions in Two-Dimensional Nanomembranes via Molecular Simulation and Machine Learning
<b>15:10-15:30 Coffee Break</b>			
<b>Chairs: Xuebo Chen Yufei Wang</b>			
15:30-15:50	KL	<b>Xingmei Lü</b> <i>Institute of Process Engineering, CAS</i>	Upgrading and Recycling of Waste PET To Prepare Gel Material with ILs /DES
15:50-16:05	IL	<b>Yang Lei</b> <i>Wuhan University of Science and Technology</i>	Molecular Design and Process Innovation for CO <sub>2</sub> Capture Based on Ionic Liquid Mixed Organic Solvents
16:05-16:20	IL	<b>Xiaofei Xu</b> <i>East China University of Science and Technology</i>	Balancing Dissolution and Diffusion for Enhanced CO <sub>2</sub> /CH <sub>4</sub> Separation in Polyimide Membranes via Ion Solvation
16:20-16:35	IL	<b>Yonglin He</b> <i>Renmin University of China</i>	Organogel-Based Intelligent Flexible Sensing
16:35-16:50	IL	<b>Xiaochun Zhang</b> <i>Institute of Process Engineering, CAS</i>	Machine learning for CO <sub>2</sub> Separation by Ionic Liquids/COFs
16:50-17:05	IL	<b>Yasir Khan</b> <i>Institute of Process Engineering, CAS</i>	Machine Learning Driven Multi-Property Screening of Ionic Liquids for CO <sub>2</sub> Capture
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Bona Lu Tianhang Zhou</b>			
08:30-08:50	KL	<b>Zhixiong Zhang</b> <i>National Science Library, CAS</i>	Towards an AI4S Knowledge Engine for Ionic Liquids: New Insights and Advances
08:50-09:10	KL	<b>Daojian Cheng</b> <i>Beijing University of Chemical Technology</i>	Application of AI-Integrated Structure Descriptor for Rational Design of Metal Catalysts
09:10-09:25	IL	<b>Xiaonan Wang</b> <i>Tsinghua University</i>	Foundation Models and AI Agents for Closed-Loop Discovery in Molecules, Materials, and Catalysis
09:25-09:40	IL	<b>Zhen Song</b> <i>East China University of Science and Technology</i>	Big Data-Driven Rational Design of Ionic Liquids and Deep Eutectic Solvents
09:40-09:55	IL	<b>Zhaoxi Sun</b> <i>Shenzhen University of Advanced Technology</i>	AI for Greener Solvents: Empowering Intelligent Development of Ionic Liquids with Multimodal Large Models
<b>09:55-10:15 Coffee Break</b>			
<b>Chairs: Zhixiong Zhang Zhen Song</b>			
10:15-10:35	KL	<b>Bona Lu</b> <i>University of Chinese Academy of Sciences</i>	Mesoscale CFD Modeling and Simulation: Toward Optimization of Gas–Solid Fluidized Catalytic Reactors For Process Upgrading
10:35-10:50	IL	<b>Tianhang Zhou</b> <i>China University of Petroleum, Beijing</i>	Multi-Scale Simulation and Intelligent Design of Chemical Engineering
10:50-11:05	IL	<b>Chang He</b> <i>Sun Yat-sen University</i>	Physics-Informed Machine Learning for Chemical Processes: Discovery, Integration, and Transfer of Mechanisms
11:05-11:20	IL	<b>Bidan Zhao</b> <i>China University of Petroleum, Beijing</i>	Physics-Informed Neural Network for Solving the Inverse Problems of Simple Granular Flow Systems
11:20-11:35	IL	<b>Feiya Lv</b> <i>Henan University</i>	Early Fault Warning Methods for Chemical Processes
<b>12:00-13:30 Lunch</b>			



## Session 10

### Green and Low-Carbon Chemistry and Biomass Chemical Engineering-A

Chairs: Xuehui Li, Haichao Liu, Xueqing Qiu, Feng Xu  
Convenors: Haohong Duan, Tianfu Wang, Yanlin Qin, Xuliang Lin

Location: 2F, Houshan Hall

#### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Xuehui Li Longlong Ma</b>			
14:00-14:20	KL	<b>Qingbiao Li</b> <i>Xiamen University</i>	Biomass Utilization for Low-Carbon Resource Recovery
14:20-14:40	KL	<b>Xingxiang Ji</b> <i>Qilu University of Technology</i>	Report on Research Progress in Efficient Separation Methods and Utilization of Agricultural and Forestry Biomass
14:40-14:55	IL	<b>Chengjian Jiang</b> <i>Guangxi University of Science and Technology</i>	Construction and Mechanism of A High Bio-efficient Transformation System for Low-Value Components
14:55-15:10	IL	<b>Lichun Dai</b> <i>Biogas Institute of Ministry of Agriculture and Rural Affairs</i>	Deep Eutectic Solvents-Mediated Solvothermal Routes for the Functionalization of Biomass-based Materials
15:10-15:25	IL	<b>Madadi Meysam</b> <i>Jiangnan University</i>	Biphasic Pretreatment for Sustainable and Holistic Lignocellulose Biorefining
15:25-15:40	IL	<b>Lihua Zhang</b> <i>Guizhou University</i>	Ionic Liquids for Homogeneous Dissolution of Polysaccharides and Preparation of Functional Materials
<b>15:40-16:00 Coffee Break</b>			
<b>Chairs: Qingbiao Li Xingxiang Ji</b>			
16:00-16:20	KL	<b>Kai Guo</b> <i>Nanjing Tech University</i>	Development and Transformation of Key Technologies for Bio-based Spandex
16:20-16:40	KL	<b>Yuhe Liao</b> <i>Guangzhou Institute of Energy Conversion, CAS</i>	Mechanistic Insight into Selective Depolymerization of Lignin
16:40-16:55	IL	<b>Wencan Huang</b> <i>Ocean University of China</i>	Rational Design and Functional Regulation of Novel Deep Eutectic Solvents for Green Extraction of Chitin
16:55-17:10	IL	<b>Yishuang Wang</b> <i>Anhui University of Science and Technology</i>	Catalytic Depolymerization of Lignin over B-Ti-Modified Diatomite Supported Nickel Phosphide Catalysts Using Formic Acid-Assisted Aqueous-Phase Glycerol
17:10-17:25	IL	<b>Guandong Su</b> <i>Dalian University of Technology</i>	Co-Fermentation of Food Waste and Anaerobic Digester Supernatant for Sustainable Butanol Bioproduction
17:25-17:40	IL	<b>Jinwen Hu</b> <i>Dalian Polytechnic University</i>	Lignin-Based Hydrogels for Pollutant Adsorption and Flexible Sensing
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Changzhi Li Yong Qian</b>			
08:30-08:50	KL	<b>Changzhi Li</b> <i>Dalian Institute of Chemical Physics, CAS State Key Laboratory of Non-Food Biomass Energy Technology, Guangxi State Farm Mingyang Biochemical Co., Ltd</i>	Refining Lignin into Value-Added N-Containing Aromatic Compounds
08:50-09:10	KL	<b>Yong Qian</b> <i>South China University of Technology</i>	Biomass Lignin Based Electronic and Energy Materials
09:10-09:25	IL	<b>Zuoyi Xiao</b> <i>Dalian Polytechnic University</i>	Construction and Application of Biomass-Derived Energy Storage Materials
09:25-09:40	IL	<b>Dongyu Zhu</b> <i>Guangdong University of Technology</i>	Halometallate Ionic Liquid-Enabled Self-Healing Ionogels: Recyclable Transparent to Lignin-Powered Multimodal Sensing
09:40-09:55	IL	<b>Sijie Liu</b> <i>Hunan Normal University</i>	Ionic Liquids Catalyze Lignin Conversion within Emulsion Systems
<b>09:55-10:15 Coffee Break</b>			
<b>Chairs: Zhijun Chen Xinghua Zhang</b>			
10:15-10:35	KL	<b>Zhijun Chen</b> <i>Northeast Forestry University</i>	Research and Utilization of Photophysical-Chemical Properties of Forest Resources
10:35-10:55	KL	<b>Xinghua Zhang</b> <i>Southeast University</i>	Synthesis of High-Density Aviation Fuel from Biomass over Ionic Liquid
10:55-11:10	IL	<b>Xianlei Shi</b> <i>Henan Polytechnic University</i>	Some Novel Catalysts for the Upgrading of Biomass Furaldehydes
11:10-11:25	IL	<b>Zhongguo Wang</b> <i>Liaocheng University</i>	Construction and Properties of Inorganic Salt-mediated Lignocellulosic Ionic Gels
11:25-11:40	IL	<b>Shuang Xiang</b> <i>Shaoxing University</i>	CoO-Ov Interface: H <sub>3</sub> O <sup>+</sup> -mediated Efficient Activation of Biomass C-O Bonds
11:40-11:55	IL	<b>Jia Wei</b> <i>Xi'an University of Technology</i>	Cellulose-Ionic Liquid Multi-Scale Interaction Regulation: From Efficient Spinning to Flexible Conductive Gels
<b>12:00-13:30 Lunch</b>			



## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Xianhai Zeng Zhimin Xue</b>			
14:00-14:20	KL	<b>Xianhai Zeng</b> <i>Xiamen University</i>	The Real Biomass Pretreatment and Downstream Biorefinery for Green Chemicals
14:20-14:40	KL	<b>Zhimin Xue</b> <i>Beijing Forestry University</i>	Deep Eutectic Solvent-Mediated Lignin Fractionation and Deep Depolymerization
14:40-14:55	IL	<b>Anguo Ying</b> <i>Shaoxing University</i>	Regulating the Hydrogenation Extent for Valorization of Lignite and Lignin
14:55-15:10	IL	<b>Hongliang Qian</b> <i>China Pharmaceutical University</i>	Prediction Model for Biomass Thermodynamic Data and Its Application
15:10-15:25	IL	<b>Xing Wang</b> <i>Dalian Polytechnic University</i>	Dimension Modulation and Utilization of Lignin-derived Nanomaterials
15:25-15:40	IL	<b>Yumiao Lü</b> <i>Institute of Process Engineering, CAS</i>	Lignin Degradation in an Ionic Liquid-Based Electrocatalytic System
<b>15:40-16:00 Coffee Break</b>			
<b>Chairs: Yaxuan Jing Liangfang Zhu</b>			
16:00-16:15	IL	<b>Yaxuan Jing</b> <i>Nanjing University</i>	Precise Bond Cleavage and Synergistic Catalysis for Waste Plastics Upcycling
16:15-16:30	IL	<b>Liangfang Zhu</b> <i>Sichuan University</i>	Breaking the Concentration Barrier: From High-loading Cellulose to Typical Platform Chemicals
16:30-16:45	IL	<b>Tengfei Niu</b> <i>Jiangnan University</i>	Research on the Preparation of Fine Chemicals through Catalytic Oxidation of Biomass
16:45-17:00	IL	<b>Can Meng</b> <i>Guangxi University of Science and Technology</i>	Synergistic Strategies of Additives in Microbial Enzymatic Hydrolysis of Bagasse
17:00-17:15	IL	<b>Shuai Xu</b> <i>Chang'an University</i>	Identifying Key Intermediates in Photocatalytic Lignin Conversion via Ab Initio Molecular Dynamics: Insights from Oxygen Evolution Reaction Studies
17:15-17:30	IL	<b>Juping Liu</b> <i>Huazhong University of Science and Technology</i>	Preparation of Sustainable Liquid Aviation Fuel Components via Catalytic Hydrogenolysis Liquefaction of Lignin
<b>18:00 Dinner</b>			

## Session 10

Green and Low-Carbon Chemistry and Biomass  
Chemical Engineering-B

Chairs: Xuehui Li, Haichao Liu, Xueqing Qiu, Feng Xu  
 Convenors: Haohong Duan, Tianfu Wang, Yanlin Qin, Xuliang Lin

Location: 2F, Rufeng Hall

## Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Aiqin Wang Tianfu Wang</b>			
14:00-14:20	KL	<b>Aiqin Wang</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Single-Atom Alloy Catalysts for Hydrodeoxygenation and Amination of Biomass-Derived Chemicals
14:20-14:40	KL	<b>Zhenglong Li</b> <i>Zhejiang University</i>	Sustainable Aviation Fuels from CO <sub>2</sub> and Ethanol
14:40-14:55	IL	<b>Fengxiang Zhang</b> <i>Dalian University of Technology</i>	Preparation and Fuel Cell Performance of Poly(arylene) Anion Exchange Membranes Regulated by Free Volume and Amphiphilic Dual Side Chains
14:55-15:10	IL	<b>Zilong Wang</b> <i>Jinan University</i>	Theory-Guided Design of Ru-NiFe Cathode Catalysts for Anion Exchange Membrane Water Electrolysis at Large Electrode Scale
15:10-15:25	IL	<b>Liangliang Lin</b> <i>Jiangnan University</i>	Microplasma-Based Green Processes for Functional Materials Synthesis
15:25-15:40	IL	<b>Yingluo He</b> <i>University of Toyama</i>	CO <sub>2</sub> -to-Value: A Path to Carbon-Neutral Chemistry
<b>15:40-16:00 Coffee Break</b>			
<b>Chairs: Jiahua Zhu Dangge Gao</b>			
16:00-16:20	KL	<b>Jiahua Zhu</b> <i>Nanjing Tech University</i>	Microwave-Coupled Interfacial Chemical Engineering
16:20-16:40	KL	<b>Dangge Gao</b> <i>Shaanxi University of Science &amp; Technology</i>	Construction and Performance of Functional Leather Based on Ionic Liquid-Assisted Modification
16:40-16:55	IL	<b>Renzhong Li</b> <i>Xi'an Polytechnic University</i>	Molecular Mechanism Underlying the Synergistic Interaction Between Amino Acid Ionic Liquid [C <sub>2</sub> mim][Gly] and Cosolvents in Cellulose Dissolution
16:55-17:10	IL	<b>Liyong Guo</b> <i>Shenyang University of Technology</i>	Synthesis and Modification of Bio-based Polyesters from CO <sub>2</sub> Catalyzed by Ionic Liquids
17:10-17:25	IL	<b>Jikuan Qiu</b> <i>Henan Normal University</i>	Overcoming Photochemical Limitations in Porous Organic Frameworks: Mechanistic Insights into Full-spectrum Driven Oxygen Activation
17:25-17:40	IL	<b>Hang Jiang</b> <i>Jiangnan University</i>	Droplet Microreactor Enhances Biosynthesis
17:40-17:55	IL	<b>Binghao Wang</b> <i>Hunan University of Science and Technology</i>	Photocatalytic Nitrogen Fixation Process Based on Single Atom Modified Plasmonic Nanostructures
<b>19:00 Dinner</b>			



## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Yixin Huo Zehui Zhang</b>			
08:30-08:50	KL	<b>Yixin Huo</b> <i>Beijing Institute of Technology</i>	Bio Element Design and Bulk Chemical Production Based on Generative Large Scale Model
08:50-09:10	KL	<b>Zehui Zhang</b> <i>South-central University For Nationalities</i>	Directional Preparation of Bio-Based Nitrogen-Containing Chemicals
09:10-09:25	IL	<b>Jinsheng Zhao</b> <i>Liaocheng University</i>	Linkage Unit Engineering of Conjugated Porous Polymer for Photocatalytic Organic Conversion Applications
09:25-09:40	IL	<b>Yuxiang Hong</b> <i>Guangxi University of Science and Technology</i>	Research on Latent Heat Energy Storage and Thermal Management Technology Based on Organic Phase Change Materials
09:40-09:55	IL	<b>Enlai Hu</b> <i>Zhejiang Normal University</i>	Effect of Hydroxyl Evolution on the Stability of Alkaline Electrocatalytic Hydrogen Evolution
09:55-10:15 <b>Coffee Break</b>			
<b>Chairs: Guowu Zhan Huaigang Cheng</b>			
10:15-10:35	KL	<b>Guowu Zhan</b> <i>Huaqiao University</i>	Design of Bifunctional Catalysts for Product Selectivity Modulation in Catalytic Pyrolysis of Fatty Acids
10:35-10:50	IL	<b>Huaigang Cheng</b> <i>Shanxi University</i>	CO <sub>2</sub> -mineralized Carbide Slag: Engineering Experimentation and Carbon Sequestration Potential Analysis
10:50-11:05	IL	<b>Junfeng Wang</b> <i>Institute of Process Engineering, CAS</i>	Resource Recovery Technology and Application of High-Salt Organic Wastewater
11:05-11:20	IL	<b>Xinglei He</b> <i>Jinggangshan University</i>	Cobalt Single-Atom Catalyst at PPM Level Reduces Sulfonyl Chlorides to Sulfinate Esters
11:20-11:35	IL	<b>Jingjing Yan</b> <i>Anhui University of Science and Technology</i>	Fabrication of Enriched-Microporous Carbon Electrodes for High-Performance Supercapacitor
11:35-11:50	IL	<b>Zhaolei Liu</b> <i>Liaocheng University</i>	Non-lead Halide Perovskite Artificial Photosynthesis Catalyst
12:00-13:30 <b>Lunch</b>			

## Saturday Afternoon, May 30

Time	Item	Speaker	Title
<b>Chairs: Tiejun Wang Xianyuan Wu</b>			
14:00-14:20	KL	<b>Tiejun Wang</b> <i>Guangdong University of Technology</i>	Aqueous Coupling of Green Alcohols to Sustainable Aviation Fuel
14:20-14:40	KL	<b>Xianyuan Wu</b> <i>South China University of Technology</i>	Strategies for the Deconstruction and Molecular Redesign of Nylon 6 toward A Circular Economy
14:40-14:55	IL	<b>Hong Zhong</b> <i>Jinggangshan University</i>	The Research on Functional Porous Organic Polymer Materials for CO <sub>2</sub> Conversion
14:55-15:10	IL	<b>Yafei Guo</b> <i>Henan University of Science and Technology</i>	Ionic Liquid-Derived Metal-nitrogen Co-Doped Carbon for Catalytic Aerobic Oxidative Coupling Reactions
15:10-15:25	IL	<b>Yezheng Cai</b> <i>Guangxi University of Science and Technology</i>	Regulation of the Interface Microstructure of Cobalt-Based Oxygen Electrodes Enhances Catalytic Reactions
15:25-15:40	IL	<b>Wenhong Wang</b> <i>Liaocheng University</i>	Imidazolium Ionic Liquids Promote CO <sub>2</sub> Hydrogenation to Multi-carbon Products
<b>15:40-16:00 Coffee Break</b>			
<b>Chairs: Wanhui Wang Daili Peng</b>			
16:00-16:15	IL	<b>Wanhui Wang</b> <i>Dalian University of Technology</i>	POP-Supported Catalysts for CO <sub>2</sub> Hydrogenation to Formic Acid
16:15-16:30	IL	<b>Daili Peng</b> <i>Central China Normal University</i>	Sustainable Recovery of Aromatics from Pyrolysis Gasoline Using Deep Eutectic Solvents: UNIFAC Prediction and Process Evaluation
16:30-16:45	IL	<b>Rong Fu</b> <i>Liaocheng University</i>	Study on Visible-Near Infrared Light-Driven Ammonia Synthesis from Surface Metallization to Dual-Site Synergistic Mechanism
16:45-17:00	IL	<b>Xianshuo Zhang</b> <i>Anyang Normal University</i>	Upcycling and Recycling of Polyurethane Using Stepwise Depolymerization in Carboxylic Acid-Water Reactive Solvents
17:00-17:15	IL	<b>Xiaoling Meng</b> <i>Guangxi University of Science and Technology</i>	Synergistic Regulation of Thermal Conduction-Insulation for Flexible Phase-Change Energy Storage Materials
<b>18:00 Dinner</b>			



## Session 11

### AI & Ionic Liquids Emerging Young Scholars Forum

Chairs: Daojian Cheng, Weifeng Shen, Yanqiang Zhang  
Convenors: Teng Zhou, Qing Zhu

Location: 1F, Administration Hall

#### Friday Afternoon, May 29

Time	Item	Speaker	Title
<b>Chairs: Zhigang Geng Haoxiang Xu</b>			
13:30-13:50	KL	<b>Jianping Guo</b> <i>Dalian Institute of Chemical Physics, CAS</i>	Hydrides for N <sub>2</sub> Conversion
13:50-14:10	KL	<b>Xuliang Lin</b> <i>Guangdong University of Technology</i>	Lignin-Derived Carbon Catalytic Materials
14:10-14:30	KL	<b>Xilong Wang</b> <i>China University of Petroleum (Beijing)</i>	Petrochemical Engineering: Fundamental Research on Efficient Hydrogenation of Non-Hydrocarbon Compounds
14:30-14:45	IL	<b>Guoxiong Zhan</b> <i>Institute of Process Engineering, CAS</i>	Modeling and Optimization of Ionic Liquid-Based CO <sub>2</sub> Capture from Flue Gas of a Coal-Fired Power Plant
14:45-15:00	IL	<b>Jian Wang</b> <i>City University of Hong Kong</i>	Research on Dynamic Process Engineering of Electrolytic Cell
15:00-15:15	IL	<b>Liqiang Wang</b> <i>Zhengzhou University</i>	Construction of Carbon-Based Non-Noble-Metal Catalysts Derived from Protein-Metal Ion Networks for Nitroarene Hydrogenation
<b>15:15-15:30 Coffee Break</b>			
<b>Chairs: Jianping Guo Xuliang Lin Xilong Wang</b>			
15:30-15:50	KL	<b>Zhigang Geng</b> <i>University of Science and Technology of China</i>	Efficient Activation and Electrocatalytic Conversion of Nitrogen Species
15:50-16:10	KL	<b>Haoxiang Xu</b> <i>Beijing University of Chemical Technology</i>	Construction and Application of Domain-Specific Large Language Models for Chemical Materials
16:10-16:25	IL	<b>Zipeng Zhao</b> <i>Beijing Institute of Technology</i>	Development and Optimization of High-Performance Catalysts for Energy Catalysis Reactions Driven by Operating Condition Demands
16:25-16:40	IL	<b>Xiaopeng Wang</b> <i>Sichuan University</i>	Highly Efficient Nickel Hydroxide Oxygen Evolution Reaction Electrocatalysts
16:40-16:55	IL	<b>Meng Yao</b> <i>Sichuan University</i>	Design of Solid Electrolytes Based on Built-in Electric Field
16:55-17:10	IL	<b>Min Wang</b> <i>Institute of Process Engineering, CAS</i>	Cobalt Phthalocyanine-Based Tandem Catalytic Systems for Electroreduction of CO <sub>2</sub> to C <sub>2+</sub> Products
<b>19:00 Dinner</b>			

## Saturday Morning, May 30

Time	Item	Speaker	Title
<b>Chairs: Xin Peng Duanjian Tao</b>			
08:30-08:50	KL	<b>Yongming Han</b> <i>Beijing University of Chemical Technology</i>	Energy Efficiency Intelligent Optimal Control for Complex Chemical Industrial Processes
08:50-09:10	KL	<b>Xiaoyong Gao</b> <i>China University of Petroleum (Beijing)</i>	Novel Methods for Operating Condition Diagnosis Based on Multimodal Large Models
09:10-09:25	IL	<b>Zihao Wang</b> <i>Chongqing University</i>	Closed-Loop Intelligent Design of Energy-Efficient Separation Systems Using Bayesian Optimization
09:25-09:40	IL	<b>Lanyu Li</b> <i>Beijing University of Chemical Technology</i>	The AI-Catalyst Pipeline: Accelerating Catalyst Innovation from Laboratory to Industry
09:40-09:55	IL	<b>Xinyan Liu</b> <i>Wuhan University of Science and Technology</i>	Thermodynamic Modelling with Process Evaluation for IL Design and Gas Separation
09:55-10:05	OL	<b>Kaikai Li</b> <i>Institute of Coal Chemistry, CAS</i>	Prediction of Ionic Liquid Properties and Inverse Design Based on Machine Learning
<b>10:05-10:15 Coffee Break</b>			
<b>Chairs: Yongming Han Xiaoyong Gao</b>			
10:15-10:35	KL	<b>Xin Peng</b> <i>East China University of Science and Technology</i>	AI-assisted Design of Novel Catalytic Materials
10:35-10:55	KL	<b>Duanjian Tao</b> <i>Jiangxi Normal University</i>	AI Screening of Ionic Solvents for Intensified Gas Absorption
10:55-11:10	IL	<b>Yu Long</b> <i>Lanzhou University</i>	Development and Application of Zirconium Hydroxide Catalysts
11:10-11:25	IL	<b>Shuyue Wen</b> <i>Tianjin University of Technology</i>	Functional Regulation of Ionic Liquid Absorbents for Enhanced CO <sub>2</sub> Capture
11:25-11:40	IL	<b>Xiaoqing Yan</b> <i>Xi'an Jiaotong University</i>	Multiscale Catalyst Design and Photo/Electrocatalytic Redox-Coupled Process Intensification
11:40-11:50	OL	<b>Wanxiang Zhang</b> <i>Qingdao University of Science and Technology</i>	Rational Design of Low Neutral Oil Entrainment Ionic Liquids and Intelligent Optimization of Oil-Phenol Separation Process
11:50-12:00	OL	<b>Zhaoyang Ju</b> <i>Quzhou University</i>	Molecular Simulation Studies on Biomass Conversion and Interfacial Mechanisms in Ionic Liquids
<b>12:00-13:30 Lunch</b>			