

[Forum L] ICAFPM 2025 Graduate Forum on Sustainable Development and Material Innovation
L. “可持续发展与材料创新” 研究生论坛

Topic: Graduate Forum on Sustainable Development and Material Innovation

Chairman:

1. Prof. Jun Chen, President, University of Wollongong; 2. Prof. Shaobin Wang, President, The University of Adelaide;
3. Prof. Hao Yu, President, Donghua University; 4. Prof. Jianping Yang, President, Donghua University/Fujian Normal University.

Session Secretaries: 1.Min Kuang, Donghua University; 2.Xiaoshuang Chen, Donghua University; 3.Chao Ren, Donghua University.

Nov. 1, 2025 Afternoon (下午) Venue: Room No. 悦贵 3

Session A Moderator: Shaobin Wang 王少彬

Time	Type	Speaker	Title	Affiliation
13:05-13:17	Oral	Zixuan Wu 伍子轩	Nanocelluloses Fine-tuned Polyvinylidene Fluoride Membranes: Performance and Mechanisms	Tongji University 同济大学
13:17-13:29	Oral	Fei Guo	A trigger for enhancing PEMFCs performance and stability: coupling the in situ-derived single metal site-enriched carbon support and the Pt@PtNi core-shell	UCL, Department of Chemistry
13:29-13:41	Oral	Zhenyu Xing 邢振宇	Computational Empowerment of Biocatalysis: DFT-Centric Mechanistic Elucidation	Sichuan University 四川大学
13:41-13:53	Oral	Yan Wang 汪艳	Synergistic B/Ir Catalyzed Asymmetric Allylic Substitution of α - or β -Hydroxyl Ketones	Shanghai University 上海大学
13:53-14:05	Oral	Ting Wang 王婷	Bioadaptive Artificial Enzymes for Anti-Inflammation and Regenerative Promotion Applications	Sichuan University 四川大学
14:05-14:17	Oral	Ming Chen 陈铭	Structural Design of Biomass-Based Adsorbents for Phosphorus Reclamation from Wastewater	Tongji University 同济大学
14:17-14:29	Oral	Miao Wang 王淼	A Physico-Chemically Synergistic Crosslinking Thickener for Textile Printing	Xi' an Polytechnic University 西安工程大学
14:29-14:41	Oral	Yingwei Xie 谢英伟	Machine Learning Force Fields for Predicting Thermodynamic Properties of PA6T/6I Copolymers	Donghua University 东华大学
14:41-14:53	Oral	Xiaofeng Jiang 蒋晓丰	Adaptive Smart Textiles and Applications	Nanjing University of Aeronautics and Astronautics 南京航空航天大学
14:53-15:05	Oral	Chengyao Xue 薛承尧	Controlled Assembly of Porous Hollow Fibrous Polymers and Their Antibacterial and Anti-fouling Applications	University of Shanghai for Science and Technology 上海理工大学
15:05-15:17	Oral	Zhiming Li 李志明	Cooperative catalysis by B/Cu system for the synthesis of optically active propargylic compounds	Shanghai University 上海大学
15:17-15:25	Coffee Break (茶歇)			
Session A				
15:25-15:37	Oral	Yifan Yan 冯一帆	Molybdenum-based catalysts for the thermal catalytic conversion of non-fossil carbon sources	Sichuan University 四川大学
15:37-15:49	Oral	Jingyue Zhao 赵景月	Regulating Homogeneous Reactions for Stable Lithium Metal Batteries	Fujian Normal University 福建师范大学
15:49-16:01	Oral	Aqiang Chu 楚阿强	Superhydrophilic Solar Evaporator Combined with Ion-Selective Membrane for High-Efficiency Lithium Extraction	Soochow University 苏州大学

16:01-16:13	Oral	Yongheng Cui 崔永恒	Spontaneous Polymerization and Multifunctional Applications of CO ₂ -Based Ionic Polycarbonates	Donghua University 东华大学
16:13-16:25	Oral	Jiacheng Wang 王家成	Metal Cyanamide Compounds: Boosting Nitrate Reduction for Ammonia Synthesis	Shanghai Institute of Ceramics 中国科学院上海硅酸盐所
16:25-16:37	Oral	Xuan Li 李轩	Engineering contact curved interface with high-electronic-state active sites for high-performance potassium-ion batteries	Fujian Normal University 福建师范大学
16:37-16:49	Oral	Yuzhu Wang 王玉珠	Photothermal-Driven Integrated System for Water Purification and Energy Conversion Based on Porphyrin Conjugated Microporous Polymers	Donghua University 东华大学
16:49-17:01	Oral	Xu Chi 迟旭	Vinylene-Linking of Polycyclic Aromatic Hydrocarbons to π Extended Two-Dimensional Covalent Organic Framework Photocatalyst for H ₂ O ₂ Synthesis	Shanghai Jiao Tong University 上海交通大学
17:01-17:13	Oral	Lin Gu 古霖	Regulation of Active Hydrogen and Nitrate Concentration: Pulsed Potential Strategies in Nitrate Electroreduction Microenvironments	Donghua University 东华大学
17:13-17:25	Oral	Chuanping Li 李川平	Nitrogen doping induced by intrinsic defects of recycled polyethylene terephthalate-derived carbon nanotubes	Fujian Normal University 福建师范大学
17:25-17:37	Oral	Qifa Chen 陈启发	Ni-Catalyzed Regioselective Cross-coupling of Enamides with Unactivated Alkenes	Shanghai University 上海大学
17:37-17:49	Oral	Yao Yao 姚尧	Thermo-spun reaction encapsulation fabrication of knittable fibrous ionic conductors with large elasticity	Anhui Agricultural University 安徽农业大学
17:49-18:01	Oral	Xiong Li 李雄	A graphene/C-PDA/carbon fiber ternary heterostructure network enables lightweight polyimide composites with enhanced electromagnetic shielding and thermal	Shanghai University 上海大学
18:01-18:13	Oral	Qi Zhang 张旗	Bioinspired Janus Evaporator for Efficient Desalination of Saline-Alkali and Seawater Through Photothermal-Capillary Effects	Xi' an Polytechnic University 西安工程大学
18:13-18:25	Oral	Sisi Hu 胡思思	Current density modulation for stabilizing the interface of silicon anodes	Shanghai University 上海大学
18:25-18:37	Oral	Hong Wu 吴红	Hierarchical Porous Lignin-Based Polypyrrole Composite Fiber Electrodes via Non-Carbonized Fabrication for Flexible Supercapacitors	Xi' an Polytechnic University 西安工程大学
18:37-18:50	Invited	Yuyang Wu 吴宇扬	Data-Driven Materials Science Research in the Era of Artificial Intelligence	Elsevier

Nov. 2, 2025 Morning (上午)

Venue: Room No. 悦贵 3

Session A Moderator: Min Kuang 况敏

Time	Type	Speaker	Title	Affiliation
8:30-8:42	Oral	Zeqi Zhang 张泽祺	Graphene Fiber-based Bio-microelectrode for Precise Neural Signal Recording	Donghua University 东华大学
8:42-8:54	Oral	Wenjie Pan 潘文杰	Photocatalytic Dual-Defluorination Thiolation of Trifluorome-thyl Hydrazones	Shanghai University 上海大学
8:54-9:06	Oral	Keyang Zhang 张科阳	Preparation of Chiral α -Acyl Ketones and Aldehydes via Ni-Catalyzed Asymmetric Reductive Cross-Coupling	Shanghai University 上海大学

9:06-9:18	Oral	Jie Chen	Analyzing the fiber structure in aqueous zinc-ion batteries using X-ray Computed Tomography (CT)	University College London
9:18-9:30	Oral	Pengfei Qi 齐鹏飞	Synthesis of phosphorus-sulfur reactive flame-retardant for flame-retardant PA 66 with improved mechanical strength	Beijing Institute of Fashion Technology 北京服装学院
9:30-9:42	Oral	Zirong Li 李自蓉	Engineered Janus Silk Fibroin Smart Textiles via Green Enzymatic Catalysis and In Situ Biomineralization for Asymmetric Thermal-Moisture Regulation.	Jiangnan University 江南大学
9:42-9:54	Oral	Angshi Shi 史士昂	Hygroscopic MOFs based open-cell sponges for a highly efficient interfacial heat-driven atmospheric water harvesting	Anhui Agricultural University 安徽农业大学
9:54-10:06	Oral	Wenjing Cao 曹文静	Knowledge-Driven Simulation-First Intelligent Design Strategy for EMI Shielding Composites	Shanghai University 上海大学
10:06-10:18	Oral	Tingting Chen 陈婷婷	Defect Engineering of MOFs: Tuning Electrochemical Activity and Reconstruction	Donghua University 东华大学
10:18-10:25	Coffee Break (茶歇)			
Session A				
10:25-10:37	Oral	Zhiye Zheng 郑芷烨	Facile and gram-scale synthesis of single-crystal hydrogen-bonded organic frameworks as iodine adsorbents for synthesis of β -iodoethers	Shanghai University 上海大学
10:37-10:49	Oral	Zhenlin Wang 王震林	Construction and Mechanism of Copper-based Electrocatalysts for Efficient Nitric Oxide Reduction to Ammonia	Shanghai University 上海大学
10:49-11:01	Oral	Leting Wang 王乐婷	Highly adhesive asynchronous drug-releasing membrane for facial care: Combined anti-acne and anti-inflammatory properties	University of Shanghai for Science and Technology 上海理工大学
11:01-11:13	Oral	Yi Hao 郝义	Non-noble-metal-Catalyzed Mild and Efficient Oxidative Upcycling of Waste Polyolefins into Carboxylic Acids	Shanghai University 上海大学
11:13-11:25	Oral	Jiacheng Zhang 张嘉诚	Synthesis and Performance Study of Fully Bio-Based Fluorinated Aryl-vinyl Ether (FAVE) Polymers	Donghua University 东华大学
11:25-11:37	Oral	Yuan Yao 姚远	Phase Behavior of Complex Coacervates between Iminodiacetate-Functionalized Polymers and Poly(diallyldimethylammonium chloride)	Donghua University 东华大学
11:37-11:49	Oral	Yifan Yan 闫一帆	A wearable smart fire warning e-textile based on ANFs/MXene composite aerogel fibers	Beijing Institute of Fashion Technology 北京服装学院
11:49-12:01	Oral	Zhenhui Chen 陈珍慧	A Zwitterionic Polyelectrolyte Hydrogel Composite Loaded on Metal Foam for Efficient Atmospheric Water Harvesting	Shanghai Maritime University 上海海事大学
12:01-12:13	Oral	Haoran Wang 汪浩然	Enhancing plateau capacity of binder-free and self-supported napkin-based hard carbon anodes for sodium-ion batteries via a pre-oxidation modulation strategy	Shanghai University 上海大学
12:13-12:25	Oral	Xuesong Wu 吴雪松	Research on the Preparation and Application of Melt Electrospun Degradable Polymer Nanofibers	Beijing University of Chemical Technology 北京化工大学
12:25-12:37	Oral	Qinqing Du 杜钦青	Self-compliant ionic nanomesh for gas-permeable and stress-free on-skin electronics	Donghua University 东华大学