



Handbook



Oct. 30th - Nov. 2nd, 2023 Hangzhou China



北京世纪森朗实验仪器有限公司

Beijing Century SenLong experimental apparatus Co., Ltd



催化反应装置



微型反应系统



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地 址:北京昌平科技园超前路 35 号北京 化工大学国家科技园综合楼 201-203 室 电 话:010-82833118 400-058-2728 传 真:010-82176488 E-mail:slreactor@163.com 网 址:www.slreactor.com www.senlangyiqi.com

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Greetings

The Asia-Pacific Congress on Catalysis (APCAT) has been organized every three years by the Asian-Pacific Association of Catalysis Societies. The 9th congress (APCAT-9) will be held from October 30th to November 2nd, 2023 in Hangzhou, China. The conference is jointly organized by the Catalysis Society of China, Zhejiang University, and Westlake University under the auspices of the Asia-Pacific Association of Catalysis Societies (APACS).

The theme for this congress is "Catalysis for Sustainable Development", which aims to address pressing environmental, energy, mobility, and circular economy challenges through advanced catalysis techniques. The main topics include materials for catalysis, fundamentals and characterization, computation in catalysis, catalysis in energy conversion, environmental catalysis, photocatalysis, electrocatalysis, homogeneous catalysis/bio-catalysis, and industrial catalysis. The congress will feature plenary, keynote, invited, oral, and poster presentations. A total of over 600 abstracts were submitted, and 567 papers were accepted for presentation, including 8 plenary lectures, 40 keynote speeches, 55 invited reports, 180 oral presentations, and 284 posters.

Building on the success of previous editions in Gyeongju, Sydney, Dalian, Singapore, Sapporo, Taipei, Mumbai, and Bangkok, we are confident that APCAT-9 will once again bring together scientists from academia and industry to share the latest ideas for the mutual benefit of both basic research and industrial applications of catalysis. We look forward to showcasing the beauty of Hangzhou and offering our warmest Chinese hospitality!

Sincerely The organizing committee of APCAT-9





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Venue

APCAT-9 will be held in InterContinental Hangzhou. With its 6,000 square meters of meeting and conference areas, InterContinental Hangzhou is the perfect venue for an inspiring meeting or event. The 1,780 square meters pillar-less Hangzhou Ballroom that had hosted the Business 20 Summit 2016, a 943 square meters international hall, a unique conference hall with annular shape and another 20 function rooms of different sizes makes InterContinental Hangzhou the preferred meeting venue in the city. Contemporary design with open kitchens offering FRESH ingredients and living cooking in front of guests together with FRESH and UP BEAT Service Philosophy. The hotel has 384 guest rooms and suites, ranging from 50-420 square meters including 28 Suites, a CEO Suite, and a Presidential Suite. With floor-to-ceiling windows in all rooms and suites, guests can enjoy the panoramic views of Qiantang River and the scenic city, even light shows and a musical fountain at night.







Venue plan & details

Intercontinental Hotel Hangzhou, 1st floor



- **Room A:** Hangzhou 5&6 Hall
- **Room B:** Hangzhou-7 Hall
- **Room C:** Hangzhou-1 Hall
- **Room D:** Hangzhou-2 Hall
- **Room E:** Hangzhou-3 Hall
- **Room F:** Hangzhou-4 Hall
- **Room G:** Shanghai Hall





Enlarged view of Conference Venue







Conference schedule

Date	Time	Arrangement
	08:30-22:30	Registration
Oct 20 Monday	14:30-15:00	Opening ceremony
Oci. 30, Moriday	15:00-17:30	Plenary lecture
	18:30-20:30	Welcome reception
	8:30-10:10	Plenary lecture
Oct. 31, Tuesday	10:40-12:00	Session lecture
	13:30-17:40	Session lecture
	8:30-12:00	Session lecture
	13:30-15:30	Session lecture
Nov. 1, Wednesday	13:30-15:30	Poster preparation
	15:30-18:00	Poster session
	18:30-20:30	Banquet/Student party
	8:30-12:00	Session lecture
Nov. 2, Thursday	13:30-16:00	Plenary lecture
	16:00-16:40	Closing ceremony





Plenary lectures

Venue: Hangzhou Hall			
Date	Time	Topic/Speaker/Affiliation	
Oct. 30, Monday	14:30-15:00	Opening ceremony	
Oct. 30, Monday	15:00-15:50	PL-1: Single-Atom Catalysis: Progress, Opportunity, and Challenge Tao Zhang (Dalian Institute of Chemical Physics, Chinese Academy of Sciences)	
	15:50-16:40	PL-2: Creation of High-Performance Zeolite-Based Catalytic Materials Jihong Yu (Jilin University)	
	16:40-17:30	PL-3: Harnessing Atom Trapping: Enabling Single-Atom Catalysts for Catalytic Applications Yong Wang (Washington State University)	
Oct. 31,	8:30-9:20	PL-4: Mechanochemistry in Catalysis: Synthesis of Advanced Catalysts and Catalytic Reactions in Ball Mills Ferdi Schüth (Max-Planck-Institut für Kohlenforschung)	
Tuesday	9:20-10:10	PL-5: Pore Science and Engineering for Catalysis Bao-Lian Su (University of Namur; Wuhan University of Technology)	
	13:30-14:20	PL-6: Design and Application of Nanostructured Catalysts for Renewable Energy and Environmental Uses Hiromi Yamashita (Osaka University)	
Nov. 2, Thursday	14:20-15:10	PL-7: New Zeolite Structures and Compositions for CO ₂ Separations and NO _x SCR Suk Bong Hong (Pohang University of Science and Technology, POSTECH)	
	15:10-16:00	PL-8: The Net Zero Goal & Sustainability: Green Hydrogen Technologies, CO ₂ Refineries, Biomass Valorization & Waste Plastic Recycling Ganapati D. Yadav (Institute of Chemical Technology, Mumbai)	
Nov. 2, Thursday	16:00-16:40	Closing ceremony	





Session overview

Keynote (K): 25 + 5 min; Invited (I): 17 + 3 min; Oral (O): 12 + 3 min

Oct. 31, Tuesday								
Room A	Room B	Room C	Room D	Room E	Room F	Room G		
KA-1-1040	OB-1-1040 Yong Guo	IC-1-1040 Dehui Deng	OD-1-1040 Ying Li	OE-1-1040 Viktor Golubkov	OF-1-1040 Ang Cao	KG-1-1040		
Stockenhuber	IB-1-1055 Yong Qin	IC-2-1100 Keiichi Tomishige	ID-1-1055 Zhengping Hao	OE-2-1055 Yan Zhou	OF-2-1055 Dong Wang	-1055 Wang		
OA-1-1110 Mingwu Tan	KB-1-1115	IC-3-1120	KD-1-1115	OE-3-1110 Yucai Qin	OF-3-1110 Jian Zheng	OG-1-1110 Marc Pera-Titus		
OA-2-1125 Lili Zhang	Weiping Ding	Xinwen Guo	Junhua Li	OE-4-1125 Wentao Yuan	OF-4-1125 Xiao-Ming Cao	OG-2-1125 Shouying Huang		
	Lunch							
KA-2-1330	OB-2-1330 Aleksei V. Tarataiko	IC-4-1330 Kuo-Wei Huang	OD-2-1330 Weiping Deng	IE-1-1330 Xuezhi Duan	OF-5-1330 Xin-Ping Wu	KG-2-1330		
Weiguo Song	OB-3-1345 Esteban Mejia	OC-1-1350 Cuiling Li	OD-3-1345 Xiaofei Lu	OE-5-1350 Yu Tang	OF-6-1345 Sulei Hu	Tao Wang		
IA-1-1400 Lele Duan	OB-4-1400 Zitao Ni	IC-5-1405 Xingang Li	OD-4-1400 Guang-Ping Hao	KE-1-1405	OF-7-1400 Jianping Xiao	IG-1-1400 Jiawei Teng		
IA-2-1420 Minkee Choi	OB-5-1415 Kosei Arata	OC-2-1425 Yuefeng Liu	OD-5-1415 Ming Gong	Gadi Rothenberg	OF-8-1415 Jiaqi Ding	OG-3-1420 Jincan Kang		
OA-3-1440 Zhengxing Qin	OB-6-1430 Grigory Mamontov	IC-6-1440 Yun Hin	ID-2-1430 Da-Gang Yu	IE-2-1435	KF-1-1430	OG-4-1435 Peng Gao		
KA-3-1455	Changsheng Zhang	Taufiq-Yap	KD-2-1450		Juii Li	OG-5-1450 Lili Lin		
Zhipan Liu	IB-2-1500 IC-7-1500 Junling Lu Zelong Li		IE-3-1455 Bunjerd Jongsomjit	IF-1-1500 Gang Fu	OG-6-1505 Xian Zhou			
			Coffee break					
OA-4-1545 Peng Bai	KB-2-1545	KC-1-1545	ID-3-1545 Do Heui Kim	KE-2-1540	IF-2-1540 Xue-Qing Gong	OG-7-1545 Chunzheng Wang		
OA-5-1600 Anders Riisager	An-Hui Lu	Noritatsu Tsubaki	ID-4-1605 Dengsong Zhang	Fengtao Fan	IF-3-1600 Donghai Mei	OG-8-1600 Chenguang Wang		
OA-6-1615 Marc Pera-Titus	IB-3-1615 Wei Li	OC-3-1615 Peipei Xiao	ID-5-1625	IE-4-1610 Jun Xu	KF-2-1620	KG-3-1615		
OA-7-1630 Xinhua Gao	IB-4-1635 Minh Thang Le	OC-4-1630 Young-Woong Suh	Junwang lang	OE-6-1630 Xuning Li	Wei-Xue Li	Yong-Ki Park		
OA-8-1645 Can Yang	OB-8-1655 Ji Qi	OC-5-1645 Pavel V. Snytnikov	OD-6-1645 Hangjuan Ren	OE-7-1645 Guanghui Zhang	OF-9-1650 Ilaria Cianchetta	OG-9-1645 Bo Peng		
OA-9-1700 Luwei Chen	OB-9-1710	OC-6-1700 Yuriy N. Malyar	OD-7-1700 Mian Guo	OE-8-1700 Zhenchao Zhao	OF-10-1705 James P. Lewis	OG-10-1700 Seok-Ho Lee		
OA-10-1715 Chengyang Yin	Zhe An	OC-7-1715 Yong Wang	OD-8-1715 Guochuan Yin	OE-9-1715 Shaoqing Jin	OF-11-1720 Supareak Praserthdam	OG-11-1715 Yang Lou		





Nov. 1, Wednesday						
Room A	Room B	Room C	Room D	Room E	Room F	Room G
KA-4-0830	OB-10-0830 Akihiro Nakayama	KC-2-0830	ID-6-0830 Lingzhi Wang	OE-10-0830 Evgeny Vovk	IF-4-0830 Xiaodong Wen	OG-12-0830 Mingze Yang
Wenjie Shen	OB-11-0845 Tamao Ishida	Ye Wang	OD-9-0850 Yifeng Chen	OE-11-0845 Peng Guo	OF-12-0850 Sergey Kozlov	OG-13-0845 Yulong Shan
IA-3-0900 Toshiyuki Yokoi	KB-3-0900 Marc	OC-8-0900 Qiang Guo	OD-10-0905 Jie Li	KE-3-0900	OF-13-0905 Chuanming Wang	OG-14-0900 Qingde Zhang
OA-11-0920 Rui-Ping Zhang	Pera-Titus	OC-9-0915 Hyun-Seog Roh	OD-11-0920 Chang Guo	Weixin Huang	OF-14-0920 Zhi-Qiang Wang	OG-15-0915 Angelina V. Miroshnikova
OA-12-0935 Zhifeng Dai	OB-12-0930 Etty Nurlia Kusumawati	OC-10-0930 Xiaohao Liu	KD-3-0935	IE-5-0930 Alexey A. Philippov	OF-15-0935 Yuehui Li	OG-16-0930 Toshiya Tsunakawa
OA-13-0950 Amol Hengne	IB-5-0945 Yingxu Wei	OC-11-0945 Lin He	Xinchen Wang	OE-12-0950 Luming Peng	OF-16-0950 Mengwen Huang	IG-2-0945 Yunjie Ding
			Coffee Break	-	-	
KA-5-1025	1025	IC-8-1025	OD-12-1025 Bin Wang	KE-4-1025	KF-3-1025	OG-17-1025 Feng Jiao
Chi-Sheng Wu	Jian Zhu	Aiqin Wang	ID-7-1040 Jian Liu	Yu Han	Peijun Hu	OG-18-1040 Xinyu Wei
OA-14-1055 Pengru Chen	IB-7-1045 Hengquan YangIC-9-1045 Xin TuOD-13-1100 Haiyang LiOE-13-1055 Tae Wan Kim		OF-17-1055 Lingcong Li	OG-19-1055 Shuran Liu		
OA-15-110 Ming-Hui Sun	IB-8-1105 Ying Wan	KC-3-1105	OD-14-1115 Wee-Jun Ong	IE-6-1110 Xi Liu	OF-18-1110 Xiaoju Cui	IG-3-1110 Kwan-Young Lee
OA-16-1125 Shiying Li	OB-13-1125 Younghwan Park	Dirk De Vos	OD-15-1130 Shunji Xie	OE-14-1130 Yong Yang (Shanghaitech)	OF-19-1125 Chang He	KG-4-1130
OA-17-1140 Fujian Liu	OB-14-1140 Ming-Rou Wu	IC-10-1135 Xinjiang Cui	OD-16-1145 Xiaobo Li	OE-15-1145 Shuai Wang	OF-20-1140 Huimin Luan	Lilong Jiang
			Lunch	1	1	
KA-6-1330	OB-15-1330 Yong Yang (QIBEBT)	IC-11-1330 Feng Wang		1330-1430 Face to the editors	OF-21-1330 Xuejiao Wu	
Peng Wu	OB-16-1345 Hiroya Ishikawa	IC-12-1350 Yanqin Wang			OF-22-1345 Ju Young Kim	
IA-4-1400 Hexiang Deng	KB-4-1400	IC-13-1410 Youzhu Yuan		IE-7-1430 Guangjin Hou	OF-23-1400 Ayaka Shigemoto	
	Fei Wei		1330-1530		OF-24-1415	1330-1530
OA-18-1420 Siyu Yao		KC-4-1430	Poster Preparation		Qiang Wang	Poster Preparation
OA-19-1435 Pingwei Liu	IB-9-1430 Xiao Wang	Haichao Liu		OF-16-1450	OF-25-1430 Pengfei Du	
OA-20-1450 Limin Ren	OB-17-1450 Yan Liu	IC-14-1500		Toru Wada	OF-26-1445 Grabchenko Maria V.	
OA-21-1505 Ye Ma	OB-18-1505 Qingyue Wang	Zhen Zhao			OF-27-1500 Shihui Zou	





Nov. 2, Thursday							
Room A	Room B	Room C	Room D	Room E	Room F	Room G	
IA-5-0830 Weibin Fan	KB-5-0830	IC-15-0830 Liangshu Zhong	KD-4-0830	OE-18-0830 Shilong Chen	OF-28-0830 Shogen Mihara		
	Hao Ming Chen	Zhong	Masaaki Kitano	OE-19-0845 Zongfang Wu	OF-29-0845 Mingyue Lin	KG-5-0830 Le Zhang	
OA-22-0850 Yongquan Qu		OC-12-0850 OE-20-09 Valery Ningqiar Tarabanko Zhang		OE-20-0905 Ningqiang Zhang	OF-30-0900 Tamara S. Kharlamova		
OA-23-0905 Li Tan	OB-19-0900 Dan Zhou	KC-5-0905	KD-5-0900	IE-8-0915	OF-31-0915	OG-20-0900 Mikhail A. Salaev	
OA-24-0920 Jian Zhang	OB-20-0915 Ben Liu	Ning Yan	Zhang	Bingjun Xu	Yanfei Liu	OG-21-0915 Toru Murayama	
OA-25-0935 Haifeng Xiong	OB-21-0930 Changyan Cao	KC-6-0935	OD-17-0930 Shiyang Liu	OE-21-0935 Qun-Xing Luo	OF-32-0930 Pengfei Xie	KG-6-0930 Weishen	
OA-26-0950 Kun Zhang	OB-22-0945 Yingluo He	Liang Wang	OD-18-0945 Yulia A. Belik	OE-22-0950 Zhe Dong	OF-33-0945 Tuan Doan	Yang	
			Coffee break		1		
KA-7-1025	OB-23-1020 Swathi Mukundan	OC-13-1025 Rui Zhang	KD-6-1020 Lin Zhuang	OE-23-1025 Fang Lu	OF-34-1025 Zhiqiang Liu	OG-22-1025 Xuerui Zheng	
Xiulian Pan	IB-10-1035 Yan Zhu	IC-16-1040 Wen Liu	OD-19-1050 Hajime Suzuki	OE-24-1040 Jifeng Pang	OF-35-1040 Tinghai Wang	OG-23-1040 Yifeng Liu	
KA-8-1055 Piyasan Praserthdam	IB-11-1055 Qihua Yang	KC-7-1100 Bo-Qing Xu	OD-20-1105 Nengchao Luo	IE-9-1055 Jun Huang	OF-36-1055 Yunfei Gao	OG-24-1055 Haijun Chen	
OA-27-1125 Hao Xu	IB-12-1115 Weili Dai	OC-14-1130 Xiongjie Jin	OD-21-1120 Yohei Cho	IE-10-1115 Lijuan Song	OF-37-1110 Pei Yuan	OG-25-1110 Amol Amrute	
OA-28-1140 Zhenyu Sun	OB-24-1135 Keke Kang	OC-15-1145 Abdul Hanif Mahadi	OD-22-1135 Malathi Arumugam	IE-11-1135 Yong Wang (ZJU)	OF-38-1125 Chao Gai	OG-26-1125 Wei Fang	





Session schedule

	Venue: Room A (Hangzhou 5&6 Hall)					
Time	NO.	Торіс	Speaker	Affiliation		
		Chair: Weiguo Song				
10:40- 11:10	KA-1	Advances in Catalytic Process Development Using Transition Metal Exchanged Zeolites	Michael Stockenhuber	University of Newcastle		
11:10- 11:25	OA-1	Hydrogen Spillover Assisted by Oxygenate Molecules over Nonreducible Oxides	Mingwu Tan	A*STAR-Singapore		
11:25- 11:40	OA-2	Tailoring Materials for Sustainable Catalysis	Lili Zhang	A*STAR-Singapore		
11:40- 13:30		Lunch				
		Chair: Keiichi Tomishige & Michael Sto	ockenhuber			
13:30- 14:00	KA-2	A Green Technology for Chiral Amino Alcohol Production	Weiguo Song	Institute of Chemistry, Chinese Academy of Sciences		
14:00- 14:20	IA-1	Surface Coordination Chemistry on Graphdiyne Materials for Green Fuels Production	Lele Duan	Westlake University		
14:20- 14:40	IA-2	Separate Storage of Hydrogen Atoms into Proton-Electron Pairs at BaO-Ru Interfaces for Promoting Ammonia Synthesis under Mild Conditions	Minkee Choi	Korea Advanced Institute of Science and Technology		
14:40- 14:55	OA-3	Methane Dehydroaromatization on Mo-ZSM-5 "Donut"-Like Catalysts	Zhengxing Qin	China University of Petroleum (East China)		
14:55- 15:25	KA-3	Square-Pyramidal Subsurface Oxygen [Ag₄OAg] Spurring Selective Ethene Epoxidation on Silver	Zhipan Liu	Fudan University		
15:25- 15:45		Coffee break				
		Chair: Minkee Choi & Zhengxin	Qin			
15:45- 16:00	OA-4	Highly Porous Alumina Materials: Synthesis and Applications	Peng Bai	China University of Petroleum (East China)		
16:00- 16:15	OA-5	Design of Aluminum Phosphate Catalysts for Selective Valorization of Biomass-Derived Furfural	Anders Riisager	Technical University of Denmark		
16:15- 16:30	OA-6	Liquid-Phase Permethylation of Diethylenetriamine Using Methanol over Robust Composite Copper Catalysts	Marc Pera-Titus	Cardiff University		
16:30- 16:45	OA-7	Desorption Agent Assistant Fe-Based Catalyst for C1 Chemistry	Xinhua Gao	Ningxia University		
16:45- 17:00	OA-8	Carbon Based Catalysts with High Nitrogen Content and its Application in H ₂ S Selective Oxidation	Can Yang	Fuzhou University		
17:00- 17:15	OA-9	Core-Shell Structure Catalysts for CO ₂ Conversion and Hydrogen Production	Luwei Chen	A*STAR-Singapore		
17:15- 17:30	OA-10	Efficient Preparation of Copper Based Molecular Sieve Catalysts for NH ₃ -SCR	Chengyang Yin	Shenyang Normal University		





		Venue: Room B (Hangzhou-	7 Hall)	
Time	NO.	Торіс	Speaker	Affiliation
		Chair: An-Hui Lu		
10:40-10:55	OB-1	Lignin Upgrading via Coupling Hydrogen Production and Hydrodeoxygenation	Yong Guo	East China University of Science & Technology
10:55-11:15	IB-1	Nucleation, Growth, and Location Regulation of Heterogeneous Catalysts Synthesized by Atomic Layer Deposition	Yong Qin	Institute of coal Chemistry, Chinese Academy of Sciences
11:15-11:45	KB-1	Meso Catalysis Research: Exploration, Progress, and Application	Weiping Ding	Nanjing University
11:45-13:30		Lunch	•	
		Chair: Weiping Ding & Wei	Li	
13:30-13:45	OB-2	Ag/Graphene Oxide Modified with Transition Metal Oxides as a Catalyst for Catalytic and Light-Induced Reduction of Nitroarenes	Aleksei V. Tarataiko	Tomsk State University
13:45-14:00	OB-3	Development and Applications of Heterogeneous Catalysts Made from Agricultural (Rice) Bio-Waste	Esteban Mejia	Leibniz Institute for Catalysis (LIKAT)
14:00-14:15	OB-4	Comparative Evaluation of Microwave Heating Performance Across Structurally Diverse Tungsten Oxides	Zitao Ni	Kyushu University
14:15-14:30	OB-5	Oxidative C-H Coupling Reaction of Dimethyl Phthalate over Au/ZrO ₂ Catalysts	Kosei Arata	Tokyo Metropolitan University
14:30-14:45	OB-6	Hierarchical Composites Based on Mil-100(Fe) and Diatomite for Phenol Degradation under Visible Light	Grigory Mamontov	Tomsk State University
14:45-15:00	OB-7	Efficient Synthesis of Nanosized and Hierarchical MFI Zeolites	Changsheng Zhang	SINOPEC Research Institute of Safety Engineering Co., Ltd.
15:00-15:20	IB-2	New Opportunities in Atom-by-Atom Synthesis of Supported Catalysts Using Atomic Layer Deposition	Junling Lu	University of Science and Technology of China
15:20-15:45		Coffee Brea	ık	
		Chair: Junling Lu & Changsheng	g Zhang	
15:45-16:15	KB-2	Boron Catalysis for Oxidative Dehydrogenation of Alkanes to Alkenes	An-Hui Lu	Dalian University of Technology
16:15-16:35	IB-3	Mesoporous Catalytic Materials	Wei Li	Fudan University
16:35-16:55	IB-4	Oxidative Coupling of Methane on Metal Oxides and Perovskite Catalysts	Minh Thang Le	Hanoi University of Science and Technology
16:55-17:10	OB-8	Atomically Dispersed Metal Catalysts for Halide-Free Selective Methanol Carbonylation to Acetic Acid	Ji Qi	Tianjin University
17:10-17:25	OB-9	Targeted Activation of Alcoholic sp ³ C _α -H by H-Bonding Protection of O-H for the Hydroxyalkylation of N-Heterocycles	Zhe An	Beijing University of Chemical Technology





	Venue: Room C (Hangzhou-1 Hall)				
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Hongga	ng Fu	1	
10:40-11:00	IC-1	Chainmail Catalysis: From Fundamentals to Applications	Dehui Deng	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
11:00-11:20	IC-2	Synthesis of 2-Imidazolidinone from CO ₂ -absorbed Ethylenediamine using CeO ₂ -based Catalysts	Keiichi Tomishige	Tohoku University	
11:20-11:40	IC-3	Design Synthesis of TS-1 with High Catalytic Performance	Xinwen Guo	Dalian University of Technology	
11:40-13:30		L	unch		
		Chair: Noritatsu Tsubaki a	& Baoning Zong		
13:30-13:50	IC-4	Fueling the Future	Kuo-Wei Huang	King Abdullah University of Science and Technology	
13:50-14:05	OC-1	Porous Materials for Confined Electrocatalysis	Cuiling Li	Technical Institute of Physics and Chemistry, Chinese Academy of Sciences	
14:05-14:25	IC-5	Rational Design of Metal Catalysts to Control Product Selectivity of Fischer-Tropsch Synthesis	Xingang Li	Tianjin University	
14:25-14:40	OC-2	Generation Oxide Surface Patches Promoting the H-spillover in Ru/(TiO _x)MnO Catalysts Enable CO ₂ Selective Reduction	Yuefeng Liu	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
14:40-15:00	IC-6	Deoxygenation of Triglyceride to Green Diesel and Aviation Fuels over Ag ₂ O ₃ -La ₂ O ₃ /Ac Nano-Catalysts	Yun Hin Taufiq-Yap	University Putra Malaysia	
15:00-15:20	IC-7	Conversion of Key Intermediates in Carbon Dioxide Hydrogenation	Zelong Li	Lanzhou University	
15:20-15:45		Coffe	ee Break		
		Chair: Yun Hin Taufiq-Ya	p & Yuefeng Liu		
15:45-16:15	KC-1	New C1 Chemistry Technology for Carbon Neutral Society	Noritatsu Tsubaki	University of Toyama	
16:15-16:30	OC-3	Direct Oxidative Methane to Value-Added Chemicals	Peipei Xiao	Tokyo Institute of Technology	
16:30-16:45	OC-4	Supported Nickel Catalysts on Silica-Grafted Alumina for Improved Hydrogen Storage Performance	Young-Woong Suh	Hanyang University	
16:45-17:00	OC-5	Platform Approaches for the Preparation of Structured Catalysts and Respective Fuel Processors	Pavel V. Snytnikov	Boreskov Initute of Catalysis, Russia	
17:00-17:15	OC-6	Biomass Valorization via Hemicelluloses Catalytic Depolymerization over Zr-SBA-15	Yuriy N. Malyar	Institute of Chemistry and Chemical Technology of the SB RAS	
17:15-17:30	OC-7	Catalytic Reforming of Methane with H ₂ S via Dynamically Stabilized Sulfur on Transition Metal Oxides and Sulfides	Yong Wang	Tianjin University	





Venue: Room D (Hangzhou-2 Hall)					
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Jinlong Zhang			
10:40-10:55	OD-1	Carbon-Based Metal Free Catalysts for Acetylene Hydrochlorination	Ying Li	Zhejiang University of Technology	
10:55-11:15	ID-1	Catalytic Conversion of Acid Gas to CO ₂ -Free Hydrogen and Valuable Chemicals	Zhengping Hao	University of Chinese Academy of Sciences	
11:15-11:45	KD-1	The Abatement of NO & VOC by Environmental Catalysis	Junhua Li	Tsinghua University	
11:45-13:30		Lunch			
		Chair: Dengsong Zhang & Ying	Li		
13:30-13:45	OD-2	Efficient Electrooxidation of Bioplatform Molecules to Dicarboxylic Acids with a Combination Catalyst of Nickel Oxide and Nitroxyl Radical	Weiping Deng	Xiamen University	
13:45-14:00	OD-3	Product Distribution Control Guided by Microkinetic Analysis for CO(2) Reduction at High-Flux Electrocatalysis Using Gas-Diffusion Electrodes	Xiaofei Lu	The University of Tokyo	
14:00-14:15	OD-4	Enhancing Coupled Electrocatalysis by Carbon-Based Catalysts	Guang-Ping Hao	Dalian University of Technology	
14:15-14:30	OD-5	Interfacial Weak Interactions for Enhanced Electrocatalysis	Ming Gong	Fudan University	
14:30-14:50	ID-2	Catalytic Organic Transformations with CO ₂	Da-Gang Yu	Sichuan University	
14:50-15:20	KD-2	Titanate Photocatalysts for Reduction of Carbon Dioxide with Water	Hisao Yoshida	Kyoto University	
15:20-15:45		Coffee break	,		
		Chair: Hisao Yoshida & Ming Go	ng		
15:45-16:05	ID-3	Novel but Simple Method to Prepare Vanadia Catalyst with Superior Sulphur Resistance and NO _x Removal Activity	Do Heui Kim	Seoul National University	
16:05-16:25	ID-4	Selective Catalytic Reduction of Nitrogen Oxide in Non-Electricity Industry	Dengsong Zhang	Shanghai University	
16:25-16:45	ID-5	Selective Oxidation of CH₄ to High Value Chemicals by Oxide Photocatalysts	Junwang Tang	Tsinghua University	
16:45-17:00	OD-6	Operando Proton-Transfer-Reaction Time-of-Flight Mass Spectrometry of Carbon Dioxide Reduction Electrocatalysis	Hangjuan Ren	University of Oxford	
17:00-17:15	OD-7	Mechanistic Studies of Intramolecular Hydrogen-Bonding Effect on the Fe (IV)-oxo Porphyrin Species	Mian Guo	Wuhan University	
17:15-17:30	OD-8	Lewis Acid Promoted Catalytic Oxidation by Redox Metal Ions	Guochuan Yin	Huazhong University of Science and Technology	





	Venue: Room E (Hangzhou-3 Hall)				
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Qiang Fu			
10:40-10:55	OE-1	Synergistic Effect of General and Specific Acid Catalysis in the Cellobiose Hydrolysis	Viktor A. Golubkov	Institute of Chemistry and Chemical Technology SB RAS	
10:55-11:10	OE-2	Atomic Structure and Catalytic Performance of the Metal-Oxide Interfaces	Yan Zhou	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
11:10-11:25	OE-3	Characterization of Multi-Scale Mass Transfer Performance of Zeolite Catalytic Materials	Yucai Qin	Liaoning Petrochemical University	
11:25-11:40	OE-4	In Situ Study of Surface Dynamics of Nanocatalysts via Environmental Transmission Electron Microscopy	Wentao Yuan	Zhejiang University	
11:40-13:30		Lunch	1		
		Chair: Fengtao Fan & Ju	ın Xu		
13:30-13:50	IE-1	Mesokinetics as a Tool Bridging the Microscopic-to-Macroscopic Transition to Rationalize Catalyst Design	Xuezhi Duan	East China University of Science and Technology	
13:50-14:05	OE-5	Methane Conversion on Single Atom Catalysts	Yu Tang	Fuzhou University	
14:05-14:35	KE-1	Understanding Confinement at Catalyst Surfaces	Gadi Rothenberg	University of Amsterdam	
14:35-14:55	IE-2	Catalyst-Support Interaction: From SMSI to SOSI	Qiang Fu	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
14:55-15:15	IE-3	Effect of Water Content in Ethanol on Catalytic Dehydration of Ethanol Using WO ₃ /SBA-15 Catalyst	Bunjerd Jongsomjit	Chulalongkorn University	
15:15-15:40		Coffee br	eak		
		Chair: Xuezhi Duan & Yar	n Zhou		
15:40-16:10	KE-2	Spatiotemporal Imaging of Charge Transfer in Photocatalyst Particles	Fengtao Fan	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
16:10-16:30	IE-4	Insight into Active Sites and Catalytic Reactions over Metal-Zeolites from Solid-state NMR Spectroscopy	Jun Xu	Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences	
16:30-16:45	OE-6	Applications of in Situ/Operando Mössbauer Spectroscopy in Single Atom Catalysis	Xuning Li	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
16:45-17:00	OE-7	Structural Evolution of Iron and Cobalt Catalysts in Carbon Dioxide Hydrogenation	Guanghui Zhang	Dalian University of Technology	
17:00-17:15	OE-8	Development of High-Pressure in-situ MAS NMR in Catalysis	Zhenchao Zhao	Zhejiang Normal University	
17:15-17:30	OE-9	Insight into the Evolution of Titanium Species in Ti-MWW Zeolite during Acid Treatment by UV Resonance Raman Spectroscopy	Shaoqing Jin	SINOPEC Shanghai Research Institute of Petrochemical Technology	





	Venue: Room F (Hangzhou-4 Hall)					
Time	NO.	Торіс	Speaker	Affiliation		
		Chair: Xueqing Gong				
10:40-10:55	OF-1	Spin Effect-Driven Efficient Catalyst Design for Ammonia Synthesis	Ang Cao	Technical University of Denmark		
10:55-11:10	OF-2	Theoretical Insights on Interface Defect Engineering for Boosting Photocatalytic Hydrogen Evolution	Dong Wang	East China University of Science and Technology		
11:10-11:25	OF-3	Precise Regulation of Hydrocarbons Adsorption Conformation over Zeolites and Hydrocarbons Conversion Mechanism of Specific Adsorption Conformation	Jian Zheng	SINOPEC Research Institute of Petroleum Processing Co., Ltd.		
11:25-11:40	OF-4	Methane Activation and Bottlenecks for Photocatalytic Direct Methane to Methanol in the Aqueous Solution	Xiao-Ming Cao	East China University of Science and Technology		
11:40-13:30		Lunch				
		Chair: Donghai Mei & Wei-Xu	ie Li			
13:30-13:45	OF-5	Theoretical Design of Porous Photocatalytic Materials	Xin-Ping Wu	East China University of Science and Technology		
13:45-14:00	OF-6	Physics-Informed Learning and Classifying Nanocatalysts' Deactivation Curves for Deconstructing Environment-Dominated Nanoenergetics	Sulei Hu	University of Science and Technology of China		
14:00-14:15	OF-7	Steering from Electrochemical Denitrification to Ammonia synthesis	Jianping Xiao	Dalian Institute of Chemical Physics, Chinese Academy of Sciences		
14:15-14:30	OF-8	Exploring Ceria-Supported Dual-atom Catalysts for Methane Total Oxidation	Jiaqi Ding	Zhejiang University		
14:30-15:00	KF-1	Single-Cluster Catalysts with Graphdiyne Support	Jun Li	Tsinghua University		
15:00-15:20	IF-1	Mechanisms for "Non-Contact" Catalytic Hydrogenation	Gang Fu	Xiamen University		
15:20-15:40		Coffee break	ζ.			
		Chair: Jun Li & Chuanming W	/ang			
15:40-16:00	IF-2	Theoretical Insights into the Unique Catalytic Performance of CeO ₂ Catalysts	Xue-Qing Gong	East China University of Science and Technology		
16:00-16:20	IF-3	Low-Temperature Ammonia Assisted Selective Catalytic Reduction of Nitric Oxides over Copper-Exchanged Zeolites	Donghai Mei	Soochow University		
16:20-16:50	KF-2	When Metal-Support Interaction is Strong?	Wei-Xue Li	University of Science and Technology of China		
16:50-17:05	OF-9	Publishing in Chem Catalysis-Cell Press	Ilaria Cianchetta	Editor-in-chief of Chem Catalysis		
17:05-17:20	OF-10	Machine Learning Meets Quantum Chemistry in Catalyst Design	James P. Lewis	SynCat@Beijing, Synfuels China Ltd., Hong Kong Quantum Al Laboratory, Ltd.		
17:20-17:35	OF-11	Catalyst Screening and On-line Catalytic Process Optimization via Techniques in Quantum Chemistry and Machine Learning	Supareak Praserthdam	Chulalongkorn University		





	Venue: Room G (Shanghai Hall)					
Time	NO.	Торіс	Speaker	Affiliation		
	,	Chair: Xiaojun Bao				
10:40- 11:10	KG-1	Synergy of Heterogeneous Catalysis and Non-Thermal Plasma	Chunshan Song	The Chinese University of Hong Kong		
11:10- 11:25	OG-1	Unraveling the Role of H_2 and NH_3 in the Amination of Isohexides over Ru/C Catalyst	Marc Pera-Titus	Cardiff University		
11:25- 11:40	OG-2	Study on the Mass Transfer Performance of Zeolite Catalysts for Dimethyl Ether Carbonylation	Shouying Huang	Tianjin University		
11:40- 13:30		Lunch				
		Chair: Chunshan Song & Deh	nui Deng			
13:30- 14:00	KG-2	Magneto-catalytic Effect in Ammonia Synthesis	Tao Wang	Westlake University		
14:00- 14:20	IG-1	Full-crystalline Zeolite Catalyst and its Industrial Application	Jiawei Teng	Shanghai Research Institute of Petrochemical Technology		
14:20- 14:35	OG-3	Synthesis of C ₂₊ Oxygenates from Syngas by Relay Catalysis via Methanol Intermediate	Jincan Kang	Xiamen University		
14:35- 14:50	OG-4	Direct Carbon Dioxide Hydrogenation to Produce Bulk Chemicals and Liquid Fuels via Heterogeneous Catalysis	Peng Gao	Shanghai Advanced Research Institute, Chinese Academy of Sciences		
14:50- 15:05	OG-5	The Development of Anti-Poisoning Hydrogenation Catalysts	Lili Lin	Zhejiang University of Technology		
15:05- 15:20	OG-6	Concurrent Hydrogen Production and Small Organic Coupling Reactions	Xian Zhou	Zhejiang University		
15:20- 15:45		Coffee Break	ζ	•		
		Chair: Peng Gao & Tao W	/ang			
15:45- 16:00	OG-7	Pd Active Sites and Catalytic Reaction Mechanism for Indirect Oxidative Carbonylation of Methanol to Dimethyl Carbonate	Chunzheng Wang	China University of Petroleum (East China)		
16:00- 16:15	OG-8	Catalytic Conversion of Sugars to Alkyl Lactates by Metal-Heteroatomic Molecular Sieves	Chengguang Wang	Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences		
16:15- 16:45	KG-3	Design of Fluidized Cracking Catalyst for Selective Light Olefin Production	Yong-Ki Park	Korea Research Institute of Chemical Technology		
16:45- 17:00	OG-9	Strategies of Ethylene Yield Enhancement from the Catalytic Cracking of Alkanes or Alkenes	Bo Peng	SINOPEC Research Institute of Petroleum Processing Co., Ltd.		
17:00- 17:15	OG-10	Enhancing Dehydrogenation Activity of Bimetallic Catalysts for Liquid Organic Hydrogen Carrier Systems: Experimental Insights and Performance Evaluation	Seok-Ho Lee	Korea University		
17:15- 17:30	OG-11	Regulation on the Microenvironment of Single Atom Catalysts and Their Applications	Yang Lou	Jiangnan University		





	Venue: Room A (Hangzhou 5&6 Hall)					
Time	NO.	Торіс	Speaker	Affiliation		
		Chair: Peng Wu & Jeffrey Chi-Sheng Wu	l			
8:30-9:00	KA-4	Mordenite-Catalyzed Carbonylation of Dimethyl Ether	Wenjie Shen	Dalian Institute of Chemical Physics, Chinese Academy of Sciences		
9:00-9:20	IA-3	Zeolite Catalysis for Carbon Neutrality	Toshiyuki Yokoi	Tokyo Institute of Technology		
9:20-9:35	OA-11	Cool Environment and Hot Nanoreactor Design for Selective Hydrogenations	Rui-Ping Zhang	Dalian University of Technology		
9:35-9:50	OA-12	Functionalized Porous Organic Polymers Used for Fixation of Low Concentration CO ₂	Zhifeng Dai	Zhejiang Sci-tech University		
9:50-10:05	OA-13	Single Atom Catalysis for Glycerol Conversion to Lactic Acid	Amol M. Hengne	A*STAR-Singapore		
10:05-10:25		Coffee break				
	·	Chair: Wenjie Shen & Hexiang Deng				
10:25-10:55	KA-5	Photocatalytic Water Splitting by Strontium Titanate Synthesized using Flux Method: The Role of Different Molten Salts	Jeffrey Chi-Sheng Wu	National Taiwan University		
10:55-11:10	OA-14	Hydrogenolysis of Isosorbide to Diols and Triols over a Rh/SiO ₂ Catalyst	Pengru Chen	Osaka Metropolitan University		
11:10-11:25	OA-15	Hierarchically Porous Zeolites for High Catalytic Efficiency	Ming-Hui Sun	Wuhan University of Technology		
11:25-11:40	OA-16	The Hollow-Structured Silicalite-1 Zeolite Confined with PtIn Clusters for Highly Catalytic Performance in Propane Dehydrogenation	Shiying Li	Institute of Coal Chemistry, Chinese Academy of Sciences		
11:40-11:55	OA-17	Ordered Mesoporous Materials for Selective Catalytic Elimination of Gaseous Sulfides from Industrial Gases	Fujian Liu	Fuzhou University		
11:55-13:30		Lunch				
		Chair: Zhijian Da & Toshiyuki Yokoi				
13:30-14:00	KA-6	Novel Metallosilicates for Selective Oxidation	Peng Wu	East China Normal University		
14:00-14:20	IA-4	'Molecular Compartments' Created in Metal-Organic Frameworks for Photocatalytic CO ₂ Overall Conversion	Hexiang Deng	Wuhan University		
14:20-14:35	OA-18	Subsurface Metallic Promoters Boost the Low-Temperature Performance of Boron-Based Catalysts for Propane Oxidative Dehydrogenation Reaction	Siyu Yao	Zhejiang University		
14:35-14:50	OA-19	Covalent Organic Framework-Supported Catalysts for Ethylene Polymerization	Pingwei Liu	Zhejiang University		
14:50-15:05	OA-20	Interzeolite Conversion, a Versatile Strategy for Synthesis of Small-Pore Zeolites with Tunable Active Sites	Limin Ren	Dalian University of Technology		
15:05-15:20	OA-21	Design of an Organic Template for Synthesizing ITR Zeolites under Ge-Free Conditions	Ye Ma	ShanghaiTech University		





Venue: Room B (Hangzhou-7 Hall)				
Time	NO.	Торіс	Speaker	Affiliation
		Chair: Oxana P. Taran & Hengquan Yan	g	
8:30-8:45	OB-10	Catalytic Properties of Supported Gold Catalysts Utilizing Layered Double Hydroxide (LDH) Nanoparticles	Akihiro Nakayama	Tokyo Metropolitan University
8:45-9:00	OB-11	Thin Metal Oxide Layer-Coated Au/SiO ₂ Using Layered Double Hydroxide Nanosheets	Tamao Ishida	Tokyo Metropolitan University
9:00-9:30	KB-3	Single Reactor Tandem Synthesis of Furan and Tetrahydrofuran Derivatives from Furfural	Marc Pera-Titus	Cardiff University
9:30-9:45	OB-12	Bimetallic PtCo on Ionic Liquid-Functionalized SBA-15 for Solvent-Free Selective Hydrogenation of Cinnamaldehyde to Cinnamyl Alcohol	Etty Nurlia Kusumawati	Iwate University
9:45-10:05	IB-5	Zeolite-Catalyzed Methanol-to-Olefins Conversion	Yingxu Wei	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:05-10:25		Coffee Break	·	
	1	Chair: Yingxu Wei & Marc Pera-Titus		
10:25-10:40	١	In Situ Spectroscopic, Photoelectric Characterization Technology and its Application in Catalysis and Photocatalysis	Jian Zhu	Zhongke kaili Instrument (SuZhou) Co.Ltd.
10:40-11:00	IB-7	Biomimetic Catalysis within Pickering Emulsions	Hengquan Yang	Shanxi University
11:00-11:20	IB-8	Breaking Scaling Relationships in Alkynol Semi-hydrogenation by Manipulating Interstitial Atoms in Pd with D-Electron Gain	Ying Wan	Shanghai Normal University
11:20-11:35	OB-13	Dynamic Metal-Polymer Interactions for Designing Selective and Long-Lived Partial Hydrogenation Catalysts	Younghwan Park	Korea Advanced Institute of Science and Technology
11:35-11:50	OB-14	Palladium Single-Site Metal-Organic Framework Catalyzed the Hydroformylation of Styrene with Formic Acid	Ming-Rou Wu	National Taiwan University
11:55-13:30		Lunch		
		Chair: Xiaonian Li & Yong-Ki Park		
13:30-13:45	OB-15	Structural Regulation of Non-Precious Metal Nanocatalysts for Selective Catalysis	Yong Yang	Qingdao Institute of Bioenergy and Bioprocess Technology
13:45-14:00	OB-16	Highly Active and Sulfur-Tolerant Ruthenium Phosphide Catalyst for Hydrogenation of Nitroarenes	Hiroya Ishikawa	Osaka University
14:00-14:30	KB-4	CO _x Hydrogenation to Sustainable Aviation Fuel and Green Diesel	Fei Wei	Tsinghua University
14:30-14:50	IB-9	Multi-Site Rare Earth Catalysts	Xiao Wang	Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
14:50-15:05	OB-17	Development and Applications of Carbon-Based Materials in Decarbonization	Yan Liu	A*STAR-Singapore
15:05-15:20	OB-18	Mechanistic Understanding of Efficient Polyethylene Hydrocracking over Low-Dimensional Catalysts	Qingyue Wang	Zhejiang University





Venue: Room C (Hangzhou-1 Hall)					
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Dirk De Vos & Xin Tu	L		
8:30-9:00	KC-2	Relay Catalysis for Highly Selective Conversion of Syngas into C ₂ Oxygenates	Ye Wang	Xiamen University	
9:00-9:15	OC-8	Interfacial Tandem Catalysis for Ethylene Carbonylation and C-C Coupling to 3-Pentanone on Rh/Ceria	Qiang Guo	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
9:15-9:30	OC-9	Boosting the Active Sites of Cu/Ce _{0.8} Zr _{0.2} O ₂ Catalysts through Tailored Precipitation Method of Ce _{0.8} Zr _{0.2} O ₂ Support for a Single-Stage Water-Gas Shift Reaction	Hyun-Seog Roh	Yonsei University	
9:30-9:45	OC-10	Design and Structure-Activity Relationship Study of Cobalt Based Zeolite Catalysts for Dehydrogenation of Light Alkanes to Olefins/Aromatics without Oxygen	Xiaohao Liu	Jiangnan University	
9:45-10:00	OC-11	C1 Chemistry: Catalytic Carbonylation and Cyanidation	Lin He	Lanzhou Institute of Chemical Physics (LICP), Chinese Academy of Sciences	
10:00-10:25		Coffee Break	(
		Chair: Youzhu Yuan & Zhen Z	hao		
10:25-10:45	IC-8	On The Coordination Environment of Single Atoms	Aiqin Wang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
10:45-11:05	IC-9	Plasma Catalysis: A promising Solution for Decentralized Production of Fuels and Chemicals	Xin Tu	University of Liverpool	
11:05-11:35	KC-3	Novel Catalytic Methods for Introducing N-Containing Functions in Organic Molecules: Transfer Hydrocyanation with Zeolites, and Electrocatalytic Aziridinations	Dirk De Vos	KU Leuven	
11:35-11:55	IC-10	Formation of Carbonyl Molecules by Heterogeneous Catalysts	Xinjiang Cui	Lanzhou Institute of Chemical Physics	
11:55-13:30		Lunch			
		Chair: Shun'ai Che & Xinjiang	Cui		
13:30-13:50	IC-11	Lignin Separation and Selective Catalytic Conversion	Feng Wang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
13:50-14:10	IC-12	The Role of Niobium Based Materials in the Catalytic Conversion of Biomass and Plastics	Yanqin Wang	East China University of Science & Technology	
14:10-14:30	IC-13	Electronic Buffering Effects of Fullerenes on Cu-Catalyzed Reduction Reactions	Youzhu Yuan	Xiamen University	
14:30-15:00	KC-4	Selective Conversion of Cellulosic Biomass to Chemicals: Catalytic Functions and Reaction Mechanisms	Haichao Liu	Peking University	
15:00-15:20	IC-14	Study on the Highly Efficient Catalysts for the Combustion of Carbon Smoke Particulate Matter (PM) from Engine Exhausts	Zhen Zhao	China University of Petroleum	





Venue: Room D (Hangzhou-2 Hall)						
Time	NO.	Торіс	Speaker	Affiliation		
	Chair: Junwang Tang & Do Heui Kim					
08:30-08:50	ID-6	Understanding the C-H Activation Mechanism of Photocatalytic Non-Oxidative Methane Coupling	Lingzhi Wang	East China University of Science and Technology		
08:50-09:05	OD-9	Transition Metal-Catalyzed Stereoselective Cross-Coupling Reaction of Unsaturated Hydrocarbons	Yifeng Chen	East China University of Science and Technology		
09:05-09:20	OD-10	Counterion-Effects of Anion-Coordination in Organozinc Reagents: Development and Application	Jie Li	Soochow University		
09:20-09:35	OD-11	Lewis Acid-Catalyzed Asymmetric Electrochemical Synthesis	Chang Guo	University of Science and Technology of China		
09:35-10:05	KD-3	Carbon Nitride Photocatalysts for Overall Water Splitting	Xinchen Wang	Fuzhou University		
10:05-10:25		Coffee Break		- -		
		Chair: Xinchen Wang & Lingzhi Wan	g			
10:25-10:40	OD-12	Biologically Inspired Hydrocarbon Oxidation Catalysis	Bin Wang	University of Jinan		
10:40-11:00	ID-7	Sustainable Photocatalytic Production of H ₂ O ₂ over Phenolic Resins Catalysts	Jian Liu	Inner Mongolia University		
11:00-11:15	OD-13	Online Photoionization Mass Spectrometry for Operando Monitoring of Catalytic Reaction Process	Haiyang Li	Dalian Institute of Chemical Physics, Chinese Academy of Sciences		
11:15-11:30	OD-14	Heterojunction Engineering: Two-Dimensional Photocatalysts for Sustainable Chemical Production	Wee-Jun Ong	Xiamen University Malaysia		
11:30-11:45	OD-15	Photocatalytic C-H Bonds Activation and C-C Coupling of C1 Molecules	Shunji Xie	Xiamen University		
11:45-12:00	OD-16	Combining Machine Learning and High-Throughput Experimentation to Discover Organic Photocatalysts	Xiaobo Li	Zhejiang Normal University		





Venue: Room E (Hangzhou-3 Hall)					
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Yu Han & Xi Liu			
8:30-8:45	OE-10	Catalytic Centers on La ₂ O ₃ in Oxidative Coupling of Methane	Evgeny Vovk	ShanghaiTech University	
8:45-9:00	OE-11	Structural Characterizations of Zeolites by Three-Dimensional Electron Diffraction	Peng Guo	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
9:00-9:30	KE-3	Site-specific Photocatalysis on Anatase TiO₂ Surface	Weixin Huang	University of Science and Technology of China	
9:30-9:50	IE-5	Supercritical Lower Alcohols in Advanced Heterogeneous Green Processes	Alexey A. Philippov	Boreskov Institute of Catalysis SB RAS	
9:50-10:05	OE-12	Exploring the Surface Structure and Chemistry of Oxide Catalysts with ¹⁷ O Solid-State NMR Spectroscopy	Luming Peng	Nanjing University	
10:05-10:25		Coffee Break			
	Chair: Weixin Huang & Alexey A. Philippov				
10:25-10:55	KE-4	High-Resolution Imaging of Electron Beam-Sensitive Materials	Yu Han	King Abdullah University of Science and Technology	
10:55-11:10	OE-13	Heterolytic H ₂ Adsorption on Ru Catalysts for the Hydrogenation of Aromatic LOHC Molecules	Tae Wan Kim	Hanyang University	
11:10-11:30	IE-6	Surface Reconstruction of Metallic Fe Nanoparticle Visualized by Secondary Electron Imaging Technique	Xi Liu	Shanghai Jiao Tong University	
11:30-11:45	OE-14	On the Role of La ₂ O ₃ Surface Reconstruction in Oxidative Coupling of Methane	Yong Yang	ShanghaiTech University	
11:45-12:00	OE-15	Mechanistic Insights into Radical-Induced Selective Oxidation of Methane over Nonmetallic Boron Nitride Catalysts	Shuai Wang	Xiamen University	
11:55-13:30		Lunch			
13:30-14:30		Face to the editors	3		
		Chair: Jun Huang			
14:30-14:50	IE-7	Solid-State NMR Techniques and Applications in the Investigation of Catalytic Reaction Mechanism of Syngas Conversion	Guangjin Hou	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
14:50-15:05	OE-16	Insight into Structural Disorder of Ziegler-Natta Catalysts via X-ray Total Scattering	Toru Wada	Japan Advanced Institute of Science and Technology	





	Venue: Room F (Hangzhou-4 Hall)							
Time	NO.	Торіс	Speaker	Affiliation				
		Chair: Peijun Hu & Xiaoju	Cui					
8:30- 8:50	IF-4	Rational Design of Fe-Based Catalysts for Fischer-Tropsch Synthesis from Theoretical Prediction to Experimental Confirmation	Xiaodong Wen	Institute of Coal Chemistry, Chinese Academy of Sciences				
8:50- 9:05	OF-12	Metal-Support Interactions in Catalysis	Sergey Kozlov	National University of Singapore				
9:05- 9:20	OF-13	Computational insights into Methanol-to-Olefins Conversion in H-SAPO-34 Zeolite	Chuanming Wang	SINOPEC Shanghai Research Institute of Petrochemical Technology Co., Ltd.				
9:20- 9:35	OF-14	Theoretical Study on Generation Mechanism and Application of Hydride on Metal Oxide Surfaces	Zhi-Qiang Wang	East China University of Science and Technology				
9:35- 9:50	OF-15	Novel Cyanation Reactions from CO_2 and NH_3	Yuehui Li	Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences				
9:50- 10:05	OF-16	Selective Acetonitrile Production from Ethane and Ammonia over Ga-Zeolites in Anaerobic Conditions	Mengwen Huang	Hokkaido University				
10:05- 10:25		Coffee break						
		Chair: Xiaodong Wen & Guang	gjin Hou					
10:25- 10:55	KF-3	Recent Developments of First-principles Calculations in Heterogeneous Catalysis	Peijun Hu	ShanghaiTech University				
11:55- 11:10	OF-17	Na-Modified Pt Nanoparticles on Al ₂ O ₃ as Dual Functional Materials for CO ₂ Capture and Selective Hydrogenation to CO	Lingcong Li	Hokkaido University				
11:10- 11:25	OF-18	Direct Catalytic Conversion of Methane at Low Temperature	Xiaoju Cui	Dalian Institute of Chemical Physics, Chinese Academy of Sciences				
11:25- 11:40	OF-19	Novel Development of Highly Efficient Porous MIL-101 Based Catalyst Application for Green Diesel Production	Chang He	University Putra Malaysia				
11:40- 11:55	OF-20	Kente Catalysts - Organic Templates for Zeolites	Huimin Luan	Kente Catalysts Inc.				
11:55- 13:30		Lunch						
		Chair: Shuai Wang & Yueh	ui Li					
13:30- 13:45	OF-21	Photocatalytic Conversion of Lignin by Selective Cleavage of C-O or C-C Bonds	Xuejiao Wu	KU Leuven				
13:45- 14:00	OF-22	Catalytic Upgrading of PVC-Containing Plastic Mixture to Hydrocarbons	Ju Young Kim	Korea Institute of Science and Technology				
14:00- 14:15	OF-23	Lean NO _x Reduction in an Electric Field over Pt-Ba/CeO ₂ Catalyst	Ayaka Shigemoto	Waseda University				
14:15- 14:30	OF-24	Acidic Sites on Zeolitic Catalysts Investigated by Advanced Solid-state NMR Correlation Spectroscopy	Qiang Wang	Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences				
14:30- 14:45	OF-25	Catalytic CO ₂ Hydrogenation to Ethanol over K-Fe-Cu-Zn/ZrO ₂ Catalysts	Pengfei Du	Hokkaido University				
14:45- 15:00	OF-26	CO and Soot Oxidation over CeO ₂ -ZrO ₂ -MnO _x : Effect of Preparation Method on Structure and Catalytic Activity	Grabchenko Maria V.	Tomsk State University				
15:00-	OF-27	Selective Oxidative Coupling of Methane via	Shihui Zou	Zhejiang University				





15:15

Surface-Confined Methyl-Radical Transformation

Venue: Room G (Shanghai Hall)				
Time	NO.	Торіс	Speaker	Affiliation
		Chair: Lilong Jiang & Kwan-Youn	ig Lee	
8:30-8:45	OG-12	A Metal-Free Carbon Catalyst for Oxidative Dehydrogenation of Aryl Cyclohexenes to Produce Biaryl Compounds	Mingze Yang	Aalto University
8:45-9:00	OG-13	Exploration of Deactivation Mechanism of Cu-Based Zeolites Used in SCR Reaction	Yulong Shan	Chinese Academy of Sciences
9:00-9:15	OG-14	Low-Temperature Oxidation of Methanol/Dimethyl ether over Molybdenum-Tin Catalysts	Qingde Zhang	Institute of Coal Chemistry, Chinese Academy of Sciences
9:15-9:30	OG-15	Integrated Processing of Birch Wood Biomass by Reductive Catalytic Fractionation over Bifunctional Ru/C Catalyst	Angelina V. Miroshnikova	Institute of Chemistry and Chemical Technology SB RAS
9:30-9:45	OG-16	Addition Effect of Magnesium onto Multifunctional Catalyst in Hydrodeoxygenation and Isomerization of Vegetable Oil	Toshiya Tsunakawa	Tokyo University of Agriculture and Technology
9:45-10:05	IG-2	Engineering the Coordination Environment of Single-Rh-Site with N and S Atoms for Efficient Methanol Carbonylation	Yunjie Ding	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:05-10:25		Coffee Break		
		Chair: Yunjie Ding & Minh Than	ig Le	
10:25-10:40	OG-17	Disentanglement-Breaking the Activity-Selectivity "Tradeoff" Effect in Catalytic Conversion	Feng Jiao	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:40-10:55	OG-18	Modification of Unsaturated Fatty Acids Derived from Tall Oil Using Silica-Coating ZSM-22	Xinyu Wei	Tokyo University of Agriculture and Technology
10:55-11:10	OG-19	Simultaneous Removal of NO and N ₂ O by NH ₃ and CH ₄ on Fe-Zeolites	Shuran Liu	The University of Tokyo
11:10-11:30	IG-3	Effect of Promoter on Platinum Alumina Catalysts for the Dehydrogenation of HOMO-Cyclic Liquid Organic Hydrogen Carriers	Kwan-Young Lee	Korea University
11:30-12:00	KG-4	Highly Efficient Catalysts and New Process for Second-Generation Biofuels Production from Waste Lipids	Lilong Jiang	Fuzhou University





Venue: Room A (Hangzhou 5&6 Hall)					
Time	NO.	Торіс	Speaker	Affiliation	
		Chair: Xiulian Pan & Piyasan Praserthd	am		
8:30-8:50	IA-5	Selective Hydrogenation of Carbon Dioxide to Specific Hydrocarbon via Modulating the Alcohol Intermediate	Weibin Fan	Institute of Coal Chemistry, Chinese Academy of Sciences	
8:50-9:05	OA-22	Frustrated Lewis Pairs for Activation of Small Molecules	Yongquan Qu	Northwestern Polytechnical University	
9:05-9:20	OA-23	Cu ₁ -O ₃ Species in Single-Atom Cu/ZrO ₂ Catalyst for CO ₂ Hydrogenation	Li Tan	Fuzhou University	
9:20-9:35	OA-24	Efficient Conversion of Methyl Lactate to Methyl Acrylate over Cesium-modified Al-Rich Beta Zeolite	Jian Zhang	Beijing university of chemical technology	
9:35-9:50	OA-25	Generating Active Oxide-Metal Interfaces through Coordinated Migration of Metal and Oxide Single Atoms	Haifeng Xiong	Xiamen University	
9:50-10:05	OA-26	P-Band Intermediate States Mediate Electron Transfer at Confined Nanoscale	Kun Zhang	East China Normal University	
10:05-10:25		Coffee break			
		Chair: Weibin Fan & Keiichi Tomishig	e		
10:25-10:55	KA-7	Disentangling the Activity-Selectivity Trade-Off in Syngas Conversion	Xiulian Pan	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
10:55-11:25	KA-8	Comparative Study of CO ₂ Conversion Processes for Offshore Platform	Piyasan Praserthdam	Chulalongkorn University	
11:25-11:40	OA-27	Layered Zeolites as Precursors for Constructing Highly Efficient Catalysts	Hao Xu	East China Normal University	
11:40-11:55	OA-28	Tuning of CO ₂ and H ₂ Adsorption on the Surface of Catalysts for Enhanced Electrochemical CO ₂ Reduction	Zhenyu Sun	Beijing University of Chemical Technology	





Venue: Room B (Hangzhou-7 Hall)							
Time	NO.	Торіс	Speaker	Affiliation			
	Chair: Qihua Yang & Yan Zhu						
8:30-9:00	KB-5	Operando Understanding the Dynamic Structure of Electrocatalysts Using X-Ray Absorption Spectroscopy	Hao Ming Chen	National Taiwan University			
9:00-9:15	OB-19	Controlled Synthesis and Catalytic Application of Hollownest-Structured Zeolites	Dan Zhou	Hubei University			
9:15-9:30	OB-20	Boron Nitride-Supported Iridium-Iron Catalysts for Synthesizing Secondary Mono-Alcohols from Biomass-Derived Vicinal Diols	Ben Liu	Tohoku University			
9:30-9:45	OB-21	Densely Populated Single-Atom Catalysts for Enhanced Thermal Catalysis	Changyan Cao	Institute of Chemistry, Chinese Academy of Sciences			
9:45-10:00	OB-22	Realizing the Alcohol Solvent Assistant in Catalyst Preparation for Low-Temperature Methanol Synthesis	Yingluo He	University of Toyama			
10:00-10:20		Coffee Break					
		Chair: Yong Qin & Changyan Cao					
10:20-10:35	OB-23	Highly Active and Magnetically Recoverable Heterogeneous Catalyst for Hydrothermal Liquefaction of Biomass into High Quality Bio-Oil	Swathi Mukundan	Loughborough University			
10:35-10:55	IB-10	Catalysis Synergism by Atomically Precise Bimetal Nanoclusters	Yan Zhu	Nanjing University			
10:55-11:15	IB-11	Synergy of Homogeneous and Heterogeneous Catalysts for NADH Regeneration	Qihua Yang	Zhejiang Normal University			
11:15-11:35	IB-12	Mechanistic Investigations on Confined Catalytic Reactions over Zeolites	Weili Dai	Nankai University			
11:35-11:50	OB-24	Efficient CO ₂ Conversion to CO by Chemical Looping Over MGa ₂ O _x (M = Ni, Cu, Co)	Keke Kang	Waseda University			





Venue: Room C (Hangzhou-1 Hall)				
Time	NO.	Торіс	Speaker	Affiliation
		Chair: Paul Wen Liu & Weili Da	ai	
8:30-8:50	IC-15	Selectivity Control for Fischer-Tropsch Synthesis to Value-Added Chemicals	Liangshu Zhong	Shanghai Advanced Research Institute, Chinese Academy of Sciences
8:50-9:05	OC-12	Mass Transfer in the Process of Catalytic Oxidation of Flax Shives for the Vanillin Production and Energy Conversion	Valery Tarabanko	Institute of Chemistry and Chemical Technology SB RAS
9:05-9:35	KC-5	Catalysis for Renewable Nitrogen-containing Compounds	Ning Yan	National University of Singapore
9:35-10:05	KC-6	Heteroatom Zeolites for Catalytic Dehydrogenation of Light Alkanes	Liang Wang	Zhejiang University
10:05-10:25		Coffee Break		1
	1	Chair: Liangshu Zhong & Ning Y	ían 🛛	
10:25-10:40	OC-13	Efficient Core@Shell HeatPath SiC-Al ₂ O ₃ @Co/Re/Al ₂ O ₃ Catalyst for Fischer– Tropsch Synthesis	Rui Zhang	Shandong Chambroad Petrochemicals Co., Ltd.
10:40-11:00	IC-16	Halite-Structured High Entropy Oxide (HEO) for Chemical Looping–Dry Reforming of Methane	Wen Liu	Nanyang Technological University
11:00-11:30	KC-7	Selectivity Control of Aerobic Glycerol Oxidation in Water over Supported Au Catalyst	Bo-Qing Xu	Tsinghua University
11:30-11:45	OC-14	Multifunctional WO ₃ -ZrO ₂ -Supported Platinum Catalyst for Remarkably Efficient Hydrogenolysis of Esters to Alkanes	Xiongjie Jin	The University of Tokyo
11:45-12:00	OC-15	Effect of Difference Zn:Ti Ratio in ZnTiO ₃ as a Support for PdZn Catalyst for CO ₂ Hydrogenation to Methanol	Abdul Hanif Mahadi	University Brunei Darussalam





Venue: Room D (Hangzhou-2 Hall)						
Time	NO.	Торіс	Speaker	Affiliation		
Chair: Lin Zhuang						
08:30-09:00	KD-4	Development of Novel Solid Catalysts with Functional Anion Sites for Ammonia Synthesis	Masaaki Kitano	Tokyo Institute of Technology		
09:00-09:30	KD-5	Artificial Photosynthesis: from a Leaf to Solar Fuel Production Devices	Biaobiao Zhang	Westlake University		
09:30-09:45	OD-17	Photocatalytic C–C Bond Coupling of Dimethyl Ether to Glycol Dimethyl Ether and H ₂ Enhanced by Water-mediated Hole Transfer	Shiyang Liu	Dalian Institute of Chemical Physics, Chinese Academy of Sciences		
09:45-10:00	OD-18	The Role of Interphase Bondaries in Enhancement of Photocatalytic Performance of Bi-containing Composites	Yulia A. Belik	National Research Tomsk State University		
10:00-10:20		Coffee Break	*			
	•	Chair: Masaaki Kitano & Biaobiao Zh	ang			
10:20-10:50	KD-6	Alkaline Polymer Electrolyte-Based Technologies: Fuel Cells and Electrolysis	Lin Zhuang	Wuhan University		
10:50-11:05	OD-19	Layered Oxyhalides as Photocatalysts for Water Splitting under Visible Light	Hajime Suzuki	Kyoto University		
11:05-11:20	OD-20	Photocatalysts Steering Charge Transfer and Radical Reactions in Biorefineries	Nengchao Luo	Dalian Institute of Chemical Physics, Chinese Academy of Sciences		
11:20-11:35	OD-21	Temperature Dependence of Photocurrent at Various Applied Bias	Yohei Cho	Tokyo Institute of Technology		
11:35-11:50	OD-22	Effect of Nonmetals (B, O, P, and S) Doped with Porous $G-C_3N_4$ for Improved Electron Transfer towards Photocatalytic CO_2 Reduction with Water into CH_4	Malathi Arumugam	Chulalongkorn University		





Venue: Room E (Hangzhou-3 Hall)				
Time	NO.	Торіс	Speaker	Affiliation
		Chair: Yong Wang (ZJU) & Lijuan Song		
8:30-8:45	OE-18	Making Iron Active: Highly-loaded Bimetallic Iron-Cobalt Catalysts for Hydrogen Release from Ammonia	Shilong Chen	Kiel University
8:45-9:00	OE-19	Pinpointing the Catalytic Role of Water in Low-temperature CO Oxidation at NiO/Gold Interface	Zongfang Wu	University of Science and Technology of China
9:00-9:15	OE-20	Mechanism of Periodic Unsteady-State Water–Gas Shift Reaction on Highly Dispersed Cu-Loaded CeO ₂ Catalysts	Ningqiang Zhang	Hokkaido university
9:15-9:35	IE-8	Impact of Site Heterogeneity of Cu on the Electrochemical CO ₂ Reduction Reaction	Bingjun Xu	Peking University
9:35-9:50	OE-21	Integrating Ammonolysis of Methyl Salicylate with Dehydration: Catalytic Function and Kinetics Mechanism	Qun-Xing Luo	Northwest University
9:50-10:05	OE-22	Selective Hydrogenation of Cinnamaldehyde to Cinnamyl Alcohol over Low Iron Oxide Modified High Dispersion Iridium on Rutile form Titania	Zhe Dong	Tohoku University
10:05-10:25	10:05-10:25 Coffee break			
		Chair: Bingjun Xu & Jianguo Wang		
10:25-10:40	OE-23	Low-Carbon Footprint Gas Production from Raw Biomass via Catalytic Strategy	Fang Lu	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:40-10:55	OE-24	Tuning the Selectivity for Ethanol Transformation by Tailoring the Active Sites of Catalysts	Jifeng Pang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:55-11:15	IE-9	Development of Ultra-stable Nanocatalysts for CO ₂ Reforming of Methane	Jun Huang	The University of Sydney
11:15-11:35	IE-10	Molecular Engineering Enables the Directional Catalytic Conversion of Hydrocarbon Molecules	Lijuan Song	Liaoning Petrochemical University
11:35-11:55	IE-11	In-situ TEM Studies of Nanocatalysts under Reaction Environments	Yong Wang	Zhejiang University





Venue: Room F (Hangzhou-4 Hall)						
Time	NO.	Торіс	Speaker	Affiliation		
	Chair: Pei Yuan & Yunfei Gao					
8:30-8:45	OF-28	Direct Esterification of Alkylcarbamic Acid over Cerium Oxide Catalyst without Excess Carbon Dioxide	Shogen Mihara	Tohoku University		
8:45-9:00	OF-29	Selective Formation of Acetate Intermediate for Robust Ethylene Removal at 0 °C	Mingyue Lin	East China University of Science and Technology		
9:00-9:15	OF-30	Design Strategy for Effective Supported Au-Pd Catalysts for Selective Oxidation of 5-Hydroxymethylfurfural	Tamara S. Kharlamova	Tomsk State University		
9:15-9:30	OF-31	Unraveling Lattice O Assisted i-SCR Mechanism on High N_2 Selectivity of CuO _x /PtCu Catalysts in NH ₃ -SCO	Yanfei Liu	Huazhong University of Science and Technology		
9:30-9:45	OF-32	Rational Design of Atomic Dispersed Metal Catalysts for Environmental Applications	Pengfei Xie	Zhejiang University		
9:45-10:00	OF-33	The Synergistic Effects of Fe Presence in Cu/SAPO-34 on Selective Catalytic Reduction of NO _x with NH ₃ : A Deep Insight by In-situ Spectroscopy	Tuan Doan	Hanoi University of Science and Technology		
10:00-10:25		Coffee break	1	1		
		Chair: Pengfei Xie				
10:25-10:40	OF-34	Asymmetric Rotations Slow Down Diffusion Inside Zeolite Catalysts	Zhiqiang Liu	Wuhan University of Science and Technology		
10:40-10:55	OF-35	Synthesis of Hierarchical Zeolites from Natural Aluminosilicate Minerals	Tinghai Wang	Fuzhou University		
10:55-11:10	OF-36	Redox Materials for Catalysis	Yunfei Gao	East China University of Science and Technology		
11:10-11:25	OF-37	Tailored Design and Preparation of Highly Active and Stable Pd-Based Catalysts for Producing High Value-Added Hydrogenated Nitrile Butadiene Rubber	Pei Yuan	Fuzhou University		
11:25-11:40	OF-38	Engineering of Hydrochar-based Nanocatalysts towards Efficient Biomass Reforming under Mild Condition	Chao Gai	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences		





Venue: Room G (Shanghai Hall)					
Time	NO.	Торіс	Speaker	Affiliation	
	Chair: Bo-Qing Xu & Gadi Rothenberg				
8:30-9:00	KG-5	Research and Practice on Proton Exchange Membrane Water Electrolysis (PEMWE) Technology	Le Zhang	SINOPEC, Research Institute of Petroleum Processing (RIPP)	
9:00-9:15	OG-20	Designing CeO ₂ -ZrO ₂ -SnO ₂ Catalyst for CO Oxidation and Soot Combustion: Effect of Composition and Preparation Method	Mikhail A. Salaev	Tomsk State University	
9:15-9:30	OG-21	NO _x Removal (NH₃-SCR) at Less than 150 °C Using Vanadium Bronze	Toru Murayama	Tokyo Metropolitan University	
9:30-10:00	KG-6	Energy-Efficient Extraction of Linear Alkanes from Various Isomers Using Structured Metal-Organic Framework Membrane	Weishen Yang	Dalian Institute of Chemical Physics, Chinese Academy of Sciences	
10:00-10:25		Coffee Break			
		Chair: Weishen Yang			
10:25-10:40	OG-22	Manganese Oxide-Supported Catalysts for Benzene Oxidation by Ozone	Xuerui Zheng	Kyushu University	
10:40-10:55	OG-23	Efficient Catalytic Production of Hydrogen Peroxide Using Tin-containing Zeolite Fixed Palladium Nanoparticles with Oxidation Resistance	Yifeng Liu	Zhejiang University	
10:55-11:10	OG-24	A New deNO _X Process: Methanol-SCR on Zeolite Catalyst	Haijun Chen	Nankai University	
11:10-11:25	OG-25	Mechanochemically-Assisted Catalysis	Amol Amrute	A*STAR-Singapore	
11:25-11:40	OG-26	Fischer-Tropsch Synthesis Enhanced by Hydrophobic Promoters	Wei Fang	Zhejiang University	





Poster session

Preparing time: 13:30-15:30, Nov, 1.

Showing time: 15:30-18:00, Nov, 1.

No.	Title	Author
	Venue: Room D (Hangzhou-2 Hall)	
P-1	Effect of yttrium modification on the acidity of Y zeolite and its catalytic cracking coking performance	Zhiying Li
P-2	Effect of Sn source on propane dehydrogenation performance of PtSn/γ-Al ₂ O ₃ catalyst	Feifei Han
P-3	A general synthesis route of hydroxyl nests-anchoring subnano clusters catalysts in zeolites for propane dehydrogenation	Qiang Liu
P-4	Room-temperature CO oxidative coupling for oxamides production over interfacial Au/ZnO catalysts	Yanwei Cao
P-5	Nanorod manganese oxide as an efficient heterogeneous catalyst for hydration of nitriles into amides	Yeqing Wang
P-6	Stories about single atom catalysis	Huabin Zhang
P-7	Unraveling the role of H ₂ and NH ₃ in the amination of isohexides over Ru/C catalyst	Marc Pera-Titus
P-8	Hydrogenation of halo nitrobenzene over N, S-Co-doped mesoporous carbon supported Cobalt based catalyst	Jiaqi Bai
P-9	Modified USY- supported platinum for acenaphthene hydrogenated cycloisomerization to alkyladamantane	Jiasong Zhao
P-10	An enzyme-catalyzed reaction system - Ru/ZnO nanocatalysts for synergistic catalytic hydrogen production from formaldehyde solution	Ruixin Jin
P-11	Theoretical study on the process of H_2PtCl_6 landing on the surface of γ -Al ₂ O ₃	Kai He
P-12	Propane dehydrogenation by isolated Co ²⁺ in BEA zeolite: dealumination-determined key steps of propane C–H activation and propylene desorntion	Wei Sheng
P-13	Carbonate-modified metal-support interfaces for catalytic conversion of carbonyl contained C1 molecules	Yihu Dai
P-14	Silica modulation of raney nickel catalysts for selective hydrogenation	Yating Lv
P-15	Alloyed PdCu nanoparticles within siliceous zeolite crystals for catalytic semi-hydrogenation	Qingsong Luo
P-16	Zeolites containing heteroatoms for catalytic conversion of light alkanes	Hang Zhou
P-17	Defects engineering of metal-organic framework immobilized Ni-La(OH) ₃ nanoparticles for enhanced hydrogen production	Jianjun Long
P-18	Urea-assisted morphological engineering of MFI nanosheets with tunable b-thickness	Jiaqi Zhao
P-19	Online MS kinetics study with real temperature dependence of oxidative coupling of methane (OCM) on La ₂ O ₃	Zhehao Qiu
P-20	Ball-milling-induced phase transition of ZrO ₂ promotes selective oxidation of glycerol over PtBi bimetal catalyst	Wenjuan Rui
P-21	Synthesis of hierarchical single crystal Co-SAPO-34 molecular sieve by hard template	Chunmu Guo
P-22	Preparation of carbon-based materials for H ₂ S high value reaction	Yunjian Ma
P-23	Efficient catalytic production of hydrogen peroxide using Tin-containing zeolite fixed palladium nanoparticles with oxidation resistance	Yifeng Liu
P-24	Preparation of Pd supported hierarchically porous ZSM-5 single crystals and catalytic properties for nitrobenzene hydrogenation	Jia-Min Lyu
P-25	Aqueous-phase partial oxidation of methane with hydrogen peroxide over carbon-coated Fe-ZSM-5 catalysts	Seokyoung Hwang
P-26	Aqueous-phase partial oxidation of methane over Pd-Fe/ZSM-5 with O_2 in the presence of H_2	Gun Sik Yang
P-27	Coking-resistant polyethylene upcycling modulated by zeolite micropore diffusion	Jindi Duan
P-28	Rivet of cobalt in siliceous zeolite for catalytic ethane dehydrogenation	Lu Liu
P-29	The effect of solvent and catalyst choice on sulfated technical lignin synthesis	Valentina Borovkova





No.	Title	Author
P-30	Tailoring microenvironments over hydroxyapatite catalyst by mechanochemistry	Jia Wang
P-31	Structure–coking deactivation relationships over Mo–V–O/montmorillonite in the	Chunhui Zhou
P-32	Highly active cerium phosphate catalysts for the production of 5-bydroxymethylfurfural from ducose: Insights into structure, acidity and mechanism	Yanjuan Yang
P-33	Active sites behavior on Ru@MIL-101(Cr) catalysts to direct alcohol to acetal	Liang Zhu
P-34	New routes for construction of strong metal-support interactions and catalysts stabilization	Hai Wang
P-35	Physical regulation of copper catalyst with a hydrophobic promoter for enhancing CO ₂ hydrogenation to methanol	Hangjie Li
P-36	Synergistic catalysis of zeolite and Ru single-atoms boosts high-efficiency hydrogen storage	Wanting Li
P-37	Self-assembled nano-filamentous zeolite catalyst to realize efficient one-step ethanol synthesis	Jiaqi Fan
P-38	Accurate regulation and profound impact of surface tension on crystal growth in hierarchical zsm-5 zeolite single-crystal system	Zhan Liu
P-39	Selective oxidation of glycerol to lactic acid over heteroatom zeolite supported Pt catalyst	Haodong Xie
P-40	High-efficiency hydrocracking of 1-methylnaphthalene into BTX using NiW supported on nanosized Beta zeolite	Zunlong Hu
P-41	Synthesis and consequence of atomic dispersed Ni metal within BEA zeolite	Meng Liu
P-42	Salt-assisted surface charge driven synthesis of large pores alumina as carbon tolerance support for propane dehydrogenation	Yu Zhang
P-43	Precise construction and mass production of single atom catalysts	Xiaohui He
P-44	Synthesis and metal-acid balance of Pt/ZSM-48 catalyst for hydroisomerization of n-heptane	Sida Ge
P-45	Surface-clean Au ₂₅ nanoclusters in modulated microenvironment enabled by metal-organic frameworks for enhanced catalysis	He Wang
P-46	Niobium modification of ceria tuning electron density of nickel-ceria interfacial sites for enhanced CO ₂ methanation	Xuhui Zou
P-47	Aqueous-phase partial oxidation of methane over Fe/ZSM-5 with H_2O_2 generated in situ over palladium on carbon	Jongkyu Kang
P-48	Catalysts for hydrodeoxygenation coupled with isomerization of oils and fats	Jingxu Liu
P-49	The impact of initial gel properties on zeolites	Yanfeng Shen
P-50	Tuning Cu/ZnOx interfaces by atomic layer deposition for CO_2 hydrogenation to methanol	Kun Jiang
P-51	Restructured zeolites anchoring singly dispersed bimetallic platinum and zinc catalysts for propane dehydrogenation	Huafei Liao
P-52	Minute-scale synthesis of nano silicalite-1 zeolites	Changsheng Zhang
P-53	Tuning Fe active sites in zeolites	Max Bols
P-54	Modulation of Rh species in Rh/Al ₂ O ₃ /FeCrAl structured catalysts for steam reforming of toluene	Shangxin Guo
P-55	Low-cost and green route for synthesizing nano-rod MAZ zeolite	Fen Zhang
P-56	Microprocesses and microenvironment in electrocatalytic conversions	Peng Zhang
P-57	A noble-metal free Ni ²⁺ -doped MgO/Al ₂ O ₃ catalyst for highly selective photothermal coupling of methane to ethane	Tianyang Shen
P-58	Size sensitivity of supported palladium species on layered double hydroxides for the electro-oxidation dehydrogenation of hydrazine: from nanoparticles to nanoclusters and single atoms	Guihao Liu
P-59	Boosting CO ₂ hydrogenation of Fe-based monolithic catalysts via 3d printing technology-induced heat/mass-transfer enhancements	Yang Wang
P-60	Oscillatory behavior of Ni/TiO ₂ catalyst during partial oxidation of methane: understanding the role of strong metal-support interaction	Hua Yang
P-61	Complete hydrogen production from hydrazine borane over bimetallic CoPt alloy nanoparticles immobilized on CeO₂ nanorods	Haochong Wu





No.	Title	Author
P-62	Carbon-doped mesoporous TiO ₂ -immobilized Ni nanoparticles: oxygen defect engineering enhances hydrogen production	Xiaolei Zhang
P-63	Direct synthesis of tin-containing MWW-type zeolites and their physicochemical properties	Piyapatch Techasarintr
P-64	Design strategy and mechanism study of catalysts for methane reforming	Yuanjie Xu
P-65	Incorporating titanates into Pt/WO _x -ZrO ₂ catalysts for enhanced hydrogenolysis of glycerol	Yejun Guan
P-66	ECNU-13: a high-silica zeolite with three-dimensional and high-connectivity multi-pore structures for selective alkene cracking	Hao Xu
P-67	Ultra-dispersed PtZn alloy in beta zeolite for propane dehydrogenation	Longkang Zhang
P-68	Calcination-free synthesis of porous metal oxides/carbon from calcium carbide by ball milling	Xiaolan Duan
P-69	Assembly of layered zeolite-based two-dimensional separation membranes for hydrogen purification	Jilong Wang
P-70	Carbon monoxide promotes high selectivity of methane to oxygenate over iridium/ZSM-5	Bo Liu
P-71	PtCuCe supported on n-doped carbon nanotubes as electrocatalysts for oxygen reduction reaction	Bohong Chen
P-72	Metallosilicate-confined subnanometric Pt clusters for propane dehydrogenation	Yue Ma
P-73	A six-membered ring molecular sieve achieved by a reconstruction route	Jiaqi Shi
P-74	Synthesis of sp ² -sp ³ hybridized carbon allotropes from liquid organic oxygenates on negatively charged nascent silver nanoclusters	Rungkiat Nganglumpoon
P-75	Electrochemical Co-catalysis for hydrogen production	Lisong Chen
P-76	Post-synthesis of delaminated Ti-MWW zeolites for the efficient epoxidation of bulky cycloalkenes with tert-butyl hydroperoxide	Bowen Xu
P-77	Ti-MWW synthesis via acid-modulated isomorphous substitution of ERB-1 for efficient ethylene oxidative hydration to ethylene glycol	Yuexia Wang
P-78	Construction of one-dimensional Al-rich ZSM-48 zeolite with a hollow structure	Wen Liu
P-79	Synthesizing atomically dispersed catalysts by atomic layer deposition	Jiankang Zhang
P-80	Molecular imprinting catalyst for highly active and selective hydrogenation	Feng Shi
P-81	Enhanced reductive etherification of furfural over layered PLS-3 with high external surface area	Yejun Guan
P-82	CuNi/La ₂ O ₂ Co ₃ /RGO nanocomposites: an efficient noble-metal-free catalyst for hydrogen evolution from N ₂ H ₄ ·H ₂ O	Qilu Yao
P-83	MIL-68 (In)-derived In ₂ O ₃ @TiO ₂ S-scheme heterojunction with hierarchical hollow structure for selective photoconversion of CO ₂ to hydrocarbon fuels	Yingli Wang
P-84	Ionic liquid-based systems for CO ₂ capture and conversion	Guokai Cui
P-85	Controllable construction of porous catalytic materials for biomass utilization and their studies on reaction mechanism	Renfeng Nie
P-86	Synthesis of ERI-type aluminosilicate zeolite and its catalytic application	Yuqin Sun
P-87	Atomically dispersed SrO _x species on exposed {222} facets of pyrochlore La ₂ Zr ₂ O ₇ nanocrystals for boosting low-temperature oxidative coupling of methane	Tongtong Wu
P-88	Synthesis and catalytic application of MOFs-derived carbon-supported palladium nanocatalysts	Shijun Zhou
P-89	Complex ruthenium hydrides catalyze ammonia synthesis	Qianru Wang
P-90	Revealing the mystery of the synergy between Pt-O-Ti sites and exposed Pt sites for catalytic hydrogenation	Huibin Ge
P-91	Surface functionalization of metal-containing mesoporous silica SBA-15 materials	Fan Wu
P-92	Highly active sulfonic ionic liquid modified heteropoly acid composite catalysts for efficient production of ethyl palmitate	Shengchou Jiang
P-93	Synthesis of TUN zeolite via interzeolite conversion method and its catalytic performance	Yao Lu
P-94	A layered oxyhalide SrBi ₃ O ₄ Cl ₃ with single/double halogen layers as a promising photocatalyst for water splitting under visible light irradiation	Yusuke Ishii
P-95	Rational control of framework al distribution in ZSM-5 zeolite for high catalytic performance	Liang Zhao
P-96	Tin-modified Zr-UiO-66 metal-organic framework as a catalyst for cascade conversion of dihydroxyacetone to lactic acid	Viktoriia Torbina





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	Venue: Room G (Shanghai Hall)	
P-97	A novel synthesis route to SFH-type aluminosilicate zeolite having extra-large pore	Yibing Cai
P-98	Hydrogen-induced formation of surface acid sites on Pt/Al(PO₃)₃ enables remarkably efficient hydrogenolysis of C−O bonds in alcohols and ethers	Kento Oshida
P-99	CNF-based catalysts for hydrogen release via dehydrogenation of methylcyclohexane	Grigory Veselov
P-100	Selective activation of C-H bonds in methanol for ethylene glycol synthesis: insights from carbon-doped boron nitride photocatalysis	Leyuan Cui
P-101	Tuning the nature of graphene oxide frameworks used as support for palladium nanoparticle catalyst	Ce Gao
P-102	Au/CeO ₂ -catalyzed selective hydrogenation of aldehydes under syngas	Kotaro Shirayama
P-103	Enriching Pt ₃ ensemble with isolated 3-fold hollow site by crystal-phase engineering of Pt ₃ Fe single-nanoparticle for acetylene hydrogenation	Di Zhou
P-104	Mo ₂ N and MoC supported Au catalysts for the low-temperature water-gas shift	Peiyao Guo
P-105	Hierarchical BEA zeolite with trimodal micro-/meso-/macroporosity as a selective and stable catalyst for isobutane/2-butene alkylation	Jin Seok
P-106	Synthesis of high-Al nanosized beta zeolite by di-cationic quaternary ammonium salts	Jian Gong
P-107	Acetone hydrogenation over fcc and hcp cobalt, Co_3O_4 and mixed Co/Co_3O_4 phases	He Yang
P-108	Nitriding endows intermetallic Ni–In nanoparticles with superior catalytic activity toward CO ₂ hydrogenation	Dongdong Wang
P-109	Photo-assisted reverse water-gas shift chemical looping using Pt-loaded molybdenum sub-oxide	Taku Kishimura
P-110	CO ₂ activation effect of Co ₃ O ₄ Co-catalyst addition to Pd-catalyzed CO ₂ hydrogenation	Jun Shinogi
P-111	Selective hydrogenation of carbon dioxide to aromatics over GaZrO _x /ZSM-5 composite catalyst	Siyuan Huang
P-112	Alcohol transformations over supported metal catalysts with Co-deposited MgO	Yusuke Kita
P-113	Controllable synthesis of organic-inorganic hybrid zeolite catalysts	Dan Zhou
P-114	Highly selective synthesis of light aromatics from CO ₂ by chromium-doped ZrO ₂ aerogels in tandem with HZSM-5@SiO ₂ catalyst	Lijun Zhang
P-115	Fabricating catalytic centers directly by the intrinsic ammonia pools of zeolite	Guohui Yang
P-116	Engineering of hydrochar-based nanocatalysts towards efficient biomass reforming under mild condition	Chao Gai
P-117	Amino acid (histidine) modified Pd/SiO ₂ catalyst with high activity for selective hydrogenation of acetylene	Qinglei Wu
P-118	Synthesis of Mn-based catalysts and application in indoor air-purification	Yong Zhang
P-119	Photocatalysis-self-Fenton system for organic pollutant degradation with high flux and high mineralization ability	Yuming Dong
P-120	Photoelectrocatalytic degradation of fluorinated organic pollutants by construction of functional bilayer WO_3 photoelectrode with electron transport layer and heterophase junction	Qiuling Ma
P-121	Elimination of NH_3 by interfacial charge transfer over Ag/CeSnO _x tandem catalyst	Caixia Liu
P-122	Selective catalytic reduction of Nitric oxide with a novel Mn-Ti-Ce oxide core-shell catalyst having improved low-temperature activity and water tolerance	Huirong Li
P-123	Mercury nitrates as an intermediate in the oxidation of gaseous mercury over V_2O_5 /TiO ₂ -based catalysts in the presence of NO	Moon Hyeon Kim
P-124	Atomically dispersed electron traps in Cu doped BiOBr boosting CO ₂ reduction to methanol by pure H ₂ O	Ke Wang
P-125	The selective transformation of furan compounds to valuable C5 chemicals under mild conditions	Qixun Shi
P-126	Natural gas dehydroaromatization reaction by using Ce ion exchanged Mo/HZSM-5 catalysts	Sang Yun Kim
P-127	Reaction gas-induced partial exsolution of Pd from PdCeMnO for methane combustion	Han Zhao
P-128	Effective dehydrogenation of H12-BT at low temperature using Nb-doped Pt catalysts	Jun Hong Lee





No.	Title	Author
P-129	Hierarchical Ti-MOF single crystals featuring diverse architectures for oxidative desulfurization	Shen Yu
P-130	Enhancing catalytic stability by introducing Al into LaMnO ₃ perovskite catalyst for combined steam and dry reforming of methane	Hoin Kang
P-131	The proximity between hydroxyl and single atom determines the catalytic reactivity of Rh1CeO ₂ single-atom catalysts	Danfeng Wu
P-132	Unraveling the origin of SO ₂ and K Co-resistance over zeolite confined mixed metal oxides catalysts	Guobo Li
P-133	Enrich oxygen vacancy in ZnO_xCu by ball-milling for robust methanol synthesis from CO_2	Fanxing Zhang
P-134	Waste PVC upcycling: transferring unmanageable CI species into value-added CI-containing chemicals	Bo Feng
P-135	Hydroconversion of plastic wastes to alkanes	Sibao Liu
P-136	Acid hydrolysis of chitin in Calcium chloride solution	Xi Chen
P-137	Oxygen vacancies enriched Ir/WO _x catalyst for the relay catalysis of cellulose to ethanol in one-pot	Yujing Weng
P-138	Single cobalt site accelerates the direct catalytic oxidation of low concentration acetonitrile on CuO nanoparticles embedded in SAPO-34	Xiangwen Zhang
P-139	CO oxidation performance of the Pt/CeO ₂ of different Pt loadings dominated by Pt-O-Ce species	Weizheng Weng
P-140	Supported the mixed manganese copper oxides catalyst on activated carbon used for the adsorption–oxidation process	Thi Thu Hien Tran
P-141	Space-confined manganese-based catalyst for efficient and robust ozone decomposition	Jingling Yang
P-142	Accelerating catalyst exploration for N2O decomposition using machine learning	Chenxi He
P-143	Enabling catalysts discovery for low-temperature methanol synthesis from CO ₂ using machine learning	Shirun Zhao
P-144	Enhancing the thermal stability and activity of Pd–Rh/Al ₂ O ₃ catalyst for three–way catalytic reaction by introducing Pt and varying the synthesis method	Hyoseong Woo
P-145	Optimization of potassium-promoted Alumina-supported Nickel catalysts for ammonia decomposition reaction	Jaemin Park
P-146	Effect of Pd precursors on the catalytic properties of Pd/CeO $_2$ catalysts for CH $_4$ and CO oxidation	Gyuhyun Jang
P-147	Role of CeO ₂ in promoting the spillover in CO oxidation reaction over platinum nanoparticle-supported CeO ₂ catalyst	Eunwon Lee
P-148	Tuning the selectivity of CO ₂ hydrogenation using Ru phosphide catalysts	Mingjie Li
P-149	Chitin valorization to high-activity antifungal oligosaccharides	Jiong Cheng
P-150	High performance CoCu catalysts for direct synthesis of higher alcohols from syngas	Zhuoshi Li
P-151	Selective production of hydroxy-aromatics and aviation fuels from lignin: the role of zeolites	Yuhe Liao
P-152	Selective hydrogenation of CO/CO ₂	Chengtao Wang
P-153	Constructing a synergistic catalytic microenvironment for carbon dioxide conversion under ambient conditions	Guoqing Ren
P-154	Direct conversion of syngas to ethanol by RhMn/N-MCM-41	Tao Peng
P-155	3D graphene for electrochemical energy conversion	Xuebin Wang
P-156	Catalytic upcycling of waste plastics through precise activation of C-O/C-C bonds	Yaxuan Jing
P-157	Domino catalysis for selective dehydrogenation of ethane with shifted thermodynamic equilibrium	Xuedi Qin
P-158	Physical mixing of a catalyst and a hydrophobic polymer promotes CO hydrogenation through dehydration	Wei Fang
P-159	Acidity regulation for improved activity of Mo/HZSM-5 catalyst in methane dehydroaromatization	Yuyan Gan
P-160	Li-promoted C_3N_4 catalyst for efficient isomerization of glucose into fructose at 50 $^\circ\text{C}$ in water	Lingzhao Kong
P-161	Elementary steps and bifunctional scavenging pathways in methylcyclohexane dehydrogenation on dispersed Pt nanoparticles	Sai Chen
P-162	Ferrierite nanosheets with preferential AI locations for carbonvlation of dimethyl	Jie Tuo





No.	Title	Author
	ether	
P-163	Cu/CeO ₂ as an efficient catalyst with synergistic interaction for ketonization of carboxylic acid	Shan Zhang
P-164	Syngas induced zinc oxide active layers confined on ZnCr ₂ O ₄ spinel for enhanced syngas conversion	Xiaohui Feng
P-165	Integrated CO ₂ capture and utilization: a promising step contributing to carbon neutrality	Hongman Sun
P-166	Multiple treatments of zeolite Beta and its catalytic application to sorbitol conversion	Yin Liu
P-167	Synthesis of efficient photoanodes by hybrid microwave annealing for solar water splitting	Hemin Zhang
P-168	Development of nickel encapsulated in zeolite/ceria hybrid catalyst for selective production of hydrogen rich gas from biomass based resources	Nandkishor Urkude
P-169	Intercalated-hydrogen-driven dynamic carburization of Mo oxide catalyst with enhanced CO ₂ conversion	Xiangze Du
P-170	Surface hydroxyl-determined migration and anchoring of silver on alumina in oxidative redispersion	Yamei Fan
P-171	Reductive fractionation of flax shives over RuNi catalysts in ethanol medium	Aleksandr Kazachenko
P-172	Preparation of novel Bi-metal catalyst for direct cracking of methane to produce hydrogen and nanostructured carbon	Lu Liu
P-173	Low-dimensional piezo-/ferroelectric catalytic materials for mechanical/solar energy conversion	Shun Li
P-174	Ethane dehydrogenation under steam co-feeding atmosphere over YCrO ₃ perovskite	Yasushi Sekine
P-175	Electric field-assisted low-temperature ammonia synthesis using iron phosphide catalyst	Yasushi Sekine
P-176	Hollow ZSM-5 zeolite and its encapsulated with single Ga-atoms for catalytic fast pyrolysis of biomass waste	Liu Wu
P-177	Separate storage of proton–electron pairs at barium oxide–ruthenium interfaces for enhancing ammonia synthesis under mild conditions	Yaejun Baik
P-178	Single-atom catalysts for energy conversion and environment remediation	Junxing Han
P-179	Hydrogen production by steam reforming of liquefied natural gas (LNG) over mesoporous nickel-based catalysts promoted with nonmetal boron	Changjin Han
P-180	Anillin hydrodeoxygenation over bifunctional Ru/HZSM-5 catalysts implemented in a biphasic system	Jae Hyun Park
P-181	Application of iodide mediated transfer hydrogenation in biomass transformation	Weiran Yang
P-182	Development of highly stable ternary alloy catalyst for dry reforming of methane	Ke Liu
P-183	Direct electrochemical synthesis of acetamide from CO ₂ and N ₂ on single atom alloy catalyst	Jingnan Wang
P-184	Study on the mechanism of direct amination of isobutylene catalyzed by EU-1 zeolite	Bingcan Wang
P-185	Theoretical study on the effect of Si/Al ratio on the adsorption and diffusion behavior of N-butane / isobutane in ZSM-5 zeolites	Shengyu Se
P-186	The matching relationship between pore channels of zeolites and adsorbent structure during adsorption and diffusion	Qiang Li
P-187	Spin, coordination, and density play important role in single-atom catalysis	Xiaohu Yu
P-188	Mechanistic studies of CO ₂ conversion over heterocatalysts towards rational catalyst design	Shenggang Li
P-189	Theoretical investigation on the utilization of methane via catalysis using binuclear zeolite	Cheng Lu
P-190	2d SnO/MoO ₃ van der waals heterojunction with tunable electronic behavior for multifunctional applications: DFT calculations	Junyu Lang
P-191	Construction of the coordination environment of Pt-N in nanocarbons for propane dehydrogenation	Ziwei Zhai
P-192	Proximity effect on O ₂ activation and selective oxidation in model Mn ₃ O ₄ catalyst	Lin Le
P-193	Interplay of Cu and ZrO_x for boosting selective n-methylation of aniline using CO ₂ and H ₂	Xia Wang
P-194	Size control of ZnO in ZnZrOx: catalytic reduction of carbon dioxide to methanol	Wei Wu





No.	Title	Author
P-195	Top-down view for the activity distribution on surface	Pengju Ren
P-196	Theoretical study of nitrogen activation by confined double surfaces	Lili Liu
P-197	C ₂ N supported Fe ₃ clusters catalyst for N ₂ -to-NH ₃ thermal conversion	Qiantong Meng
P-198	CO hydrogenation on stepped Cu and CuZn alloy surfaces: Competition between methanol synthesis and methanation pathways	Xuanye Chen
P-199	Theoretical study of CO ₂ hydrogenation to methanol on ZnO(10-10) surface	Claire song
P-200	CO ₂ adsorption and desorption under applying an electric field	Yasushi Sekine
P-201	Investigating transition metal sulfides as cost-effective catalysts for hydrodesulfurization via machine learning-assisted analysis	Yu Ding
P-202	Kinetic approach to evaluate the effects of various promoters on the oxidative coupling of methane	Myung-June Park
P-203	Density functional theoretical study of the tungsten-doped In ₂ O ₃ catalyst for CO ₂ hydrogenation to methanol	Rui Zou
P-204	Breaking the volcano-shaped relationship for highly efficient electrocatalytic nitrogen reduction	Denglei Gao
P-205	On-chip electrochemical methodology for the analysis and development of efficient electrocatalysts	Mengning Ding
P-206	Applications of in situ/operando Mössbauer spectroscopy in single atom catalysis	Yaqiong Zeng
P-207	Evaluation of the hydrogenation reaction on the electrocatalytic nitrobenzene degradation over (FeCoNiCuZn) _x O _y high entropy oxides (HEOs).	Victor Marquez
P-208	The electrochemical synthesis of ammonia and organic amines using metal supported catalyst	Tao Wu
P-209	Hierarchical assembly of Prussian blue derivatives for efficient electrocatalytic oxidation of glycerol	Sheng Zhong
P-210	Isolated iron atoms anchored on appropriate triple-phase N-doped hollow carbon spherical structures for oxygen reduction reaction	Peilin Liu
P-211	Boosting oxygen reduction by surface fluorination engineering of NIF@asphalt-derived carbon by mechanochemistry	Jiahua Zhao
P-212	Synergistic effect between Ru nanoclusters and Ni single atoms in alkaline electrocatalytic HER	Jiaqing Luo
P-213	Metal nitrogen containing electrocatalysts for alkaline water electrolysis	Tzu Hsuan Chiang
P-214	Aminopolymer-functionalized hollow carbon spheres incorporating Ag nanoparticles for electrochemical syngas production from CO ₂	Kaining Li
P-215	Change in structure and oxygen reduction reaction activity of carbon supported 14-membered ring Fe complexes by heat treatment	Zhiqing Feng
P-216	Function-coordinated electrocatalysts for carbon dioxide reduction	Yuhang Li
P-217	Selective electrocatalytic hydrogenation of biomass organic molecules	Wei Zhao
P-218	Solid-state NMR study of acidic synergy on Beta zeolite in glucose conversion	Guodong Qi
P-219	Structure-activity relationship regulation of micro-nano pore and mass transfer performance of CO ₂	Xiaoxin Zhang
P-220	Formation and transformation of Pt species during the preparation of $PtSn/\gamma-Al_2O_3$ catalyst for propane dehydration	Xiangchen Tian
P-221	The nature and the transformation of the hydroxyl species in zeolite	Yu Hui
P-222	Interfacial catalysis of Rh-CeO ₂ nanocatalysts in CO ₂ hydrogenation	Zhenhua Zhang
P-223	The in-situ formation and characterization of 2d carbon layer armored La ₂ O ₃ catalyst for oxidative coupling of methane	Yang Liu
P-224	Solid-state NMR studies on the surface structures and reactions on the metal oxide catalysts	Gao Pan
P-225	Untangling challenging structures and confinement-based dynamics in zeolite catalysts via solid-state NMR	Kuizhi Chen
P-226	Structure sensitivity of Au-TiO ₂ strong metal–support interactions	Yunshang Zhang
P-227	Porous organic polymer-supported single-site manganese catalysts for efficient catalytic reaction	Bingyang Wang
P-228	Tuning reverse water gas shift and methanation reactions during CO $_2$ reduction on Ni catalysts via surface modification by MoO $_x$	Ruoyu Zhang
P-229	Improved C-H activation in propane dehydrogenation using zeolite-stabilized Co-O moieties	Junling Liu





No.	Title	Author
P-230	Study on structure–performance relationship of heterogeneous selective hydrogenation	Shanjun Mao
P-231	Synergistic activation of propane and CO ₂ on Pt-Sn/SiO ₂ to break the propane dehydrogenation equilibrium limit	Peng Zhai
P-232	Identifying the structure of Pt active sites on Al ₂ O ₃ for propane dehydrogenation	Ye Yang
P-233	Carbon-based materials enhance VPO catalytic selective oxidation of n-butane	Shengwen Zhu
P-234	Promoting effect of CN-doping on catalyst performance of MoS_2 for the reduction of nitroarenes to aniline by H_2S	Rui Huang
P-235	Development of ultra-low content noble metal catalysts for the production of vinyl chloride	Chuan Wang
P-236	Mxene-based H ₂ S value-maximizing catalysts: preparation, design, and properties	Dong Li
P-237	Oxygen vacancies engineering of Fe doped LaCoO $_3$ perovskite catalysts for efficient H ₂ S selective oxidation	Xiaohai Zheng
P-238	Preparation of MoS ₂ /C composite catalyst and reaction performance study of catalytic H ₂ S reduction of nitrobenzene	Bang Li
P-239	Highly stable dehydrogenation of methylcyclohexane by Pt-Ga ₂ O ₃ /Al ₂ O ₃ catalyst	Yufan Yue
P-240	Degradation of poly (ethylene terephthalate) catalyzed by mesoporous molecular sieves supported mental oxide catalyst	Taishun Yang
P-241	Application of highly dispersed nickel nanoparticles dispersed into SiO ₂ for ammonia decomposition	Shigang Li
P-242	Cu@SiO ₂ catalyst with high copper dispersion for chemoselective hydrogenation of p-chloronitrobenzene	Xinhui Li
P-243	Study on structure-activity relationship of CuIn catalyst for CO ₂ hydrogenation to methanol	Shangzhi Xie
P-244	Dynamic evolution of Cu-Pd active sites in ethanol oxidative carbonylation	Jian Zhang
P-245	Hydrophilic Ti-MWW for catalyzing epoxidation of allyl alcohol	Xianchen Gong
P-246	The synergistic effect of Zinc and Iron in the CO ₂ -assisted oxidative dehydrogenation of propane	Xinbao Zhang
P-247	Highly efficient epoxidation of propylene over TS-1 zeolite supported non-noble nickel catalyst	Wenqian Li
P-248	Surface modification of FER zeolites regulates the catalytic performance of isobutene to n-butene	Jiabao Yang
P-249	Effect of iron oxide crystal phase on aquathermolysis of heavy oil over NiO/Fe ₂ O ₃ catalyst	Van Duy Pham
P-250	Importance of pore size and lewis acidity of Pt/Al ₂ O ₃ for inhibiting mass transfer limitation and catalyst fouling in triglyceride deoxygenation	Yeongmin Kim
P-251	Nanoengineering of porous structures with tunable adsorption and diffusion behavior for acetylene hydrochlorination	Shuhao Wei
P-252	Hydrothermal synthesis of flower-like Ni-Mo/USY catalyst and its high activity in the hydrodesulfurization of dibenzothiophene	Xiaoqian Li
P-253	Promotional effect of Co cations on the activity of Co/ZSM-5 in 1,2-dichloroethane dehydrochlorination	Junho Suh
P-254	Study on the factors in varying benzene selectivity on Ga/HZSM-5 for butane aromatization	Jangeon Roh
P-255	Directly converting CO ₂ to light hydrocarbons on a fecoal prussian blue analog-based core-shell catalyst via fischer-tropsch synthesis	Yanbing Li
P-256	Study on the deactivation and regeneration mechanism of copper-based catalysts in carbon dioxide hydrogenation reaction	Wenlong Wu
P-257	Catalytic conversion of biomass-based polyols to dicarboxylic acids	Changpo Ma
P-258	Photochemical valorization of feedstock into high value chemicals	Shashikant Dighe
P-259	Maximizing photocatalytic activity of Zn _x In ₂ S _{x+3} nanosheets for simultaneous hydrogen evolution and benzyl alcohol oxidation using dual redox cocatalysts	Wee-Jun Ong
P-260	Highly efficient and selective photocatalytic conversion of CH ₄ with O ₂ by controlling overoxidation on TiO ₂	Ningdong Feng
P-261	Photocatalytic chemoselective transfer hydrogenation over metal -	Songlin Van
1-201	organic-framework-derived copper catalysts	Songin ran
P-262	Conjugated polymer photocatalysis	Xiong Chen
P-263	Synthesis of narrow-bandgap oxysulfide and oxynitride photocatalysts using a	Guijun Ma





No.	Title	Author
	capsular reactor	
P-264	Main bottlenecks for photocatalytic methane non-oxidative coupling reaction	Cong Liu
P-265	High-throughput experimentation for photocatalytic water purification in practical environments	Kyo Yanagiyama
P-266	Host-guest assembly to emulate enzyme-like catalysis for artificial photosynthesis	Jianying Shi
P-267	Green electron channels in CNTs-interspersed Cu ₂ O catalysts for enhancing visible light-driven CO ₂ reduction	Xiong Wang
P-268	Photocatalytic oxidation of methane to methanol over zinc titanate supported silver catalysts	Qian Lv
P-269	Photo-generated charge dynamics and interfacial chemistry of Rh doped rutile TiO ₂ photocatalysts: mechanistic insights of intra-gap Rh states	Jifang Zhang
P-270	Ternary heterojunction in RGO-coated Ag/Cu ₂ O catalysts for boosting selective photocatalytic CO ₂ reduction into CH ₄	Zhiling Tang
P-271	Low-dimensional semiconductor nanostructures for solar to fuel conversions	Yongjie Wang
P-272	Identification of active sites of CO-SCR catalyst and their synergistic enhancement of N ₂ selectivity	Xupeng Zong
P-273	Conductive nickel benzenehexathiol metal-organic framework functions as a hydrogen evolution cocatalyst for overall photocatalytic water splitting	Jingyan Guan
P-274	Oxygen as a molecular additive to enhance utilization efficiency of H ₂ O ₂ for photocatalytic conversion of methane to liquid-phase oxygenates	Xiao Sun
P-275	Defect chemistry engineering for enhanced photocatalysis	Hefeng Cheng
P-276	Non-noble metal modified gallium-doped strontium titanate for photocatalytic overall water splitting	Junzhe Jiang
P-277	Sodium-doped lanthanum titanate synthesized by molten salt strategy for photocatalytic overall water splitting	Yongsheng Liu
P-278	The effect of post-treatments on photoactivity of TiO ₂ nanotubes film in the gas phase CO ₂ reduction	Janaina Santos
P-279	TiO ₂ facet-dependent reconstruction and photocatalysis of CuO _x /TiO ₂ photocatalysts in CO ₂ photoreduction	Fei Fang
P-280	Overall water splitting by SrTaO ₂ N-based photocatalyst using up to 600 nm	Kaihong Chen
P-281	Z-scheme water splitting using photocatalyst sheet based on carbon-based electronic mediators	Gu Chen
P-282	Catalytic role of platinum nanoparticles in photocatalytic hydrogen evolution with titanium oxide photocatalyst	Kexin Zou
P-283	Hydrogen peroxide production over Hf-based MOF photocatalysts with structural defects	Kotaro Honda
P-284	Modification of photocatalyst and study on mechanism of photocatalytic reduction of carbon dioxide	Jinlong Zhang
P-285	Study on the effect of ZSM-5 zeolite nanosheets on the production of light olefins in ex-situ catalytic pyrolysis of low-density polyethylene	Ting Wang
P-286	Study on the catalytic pyrolysis of waste plastics over three different catalysts	Jinqing Zhang





Transportation

Conference hotel information:

Name: InterContinental Hangzhou (杭州洲际酒店)

Address: No. 2 Jiefang East Road, Shangcheng District, Hangzhou (杭州市上城区解放东路

2号)

Telephone: +86 0571 89810000

Conference transportation:



1. Airport

- Metro Line 7 is recommended from the airport to the conference hotel, 29 km, about 1 h, 7 RMB.
- Taxi is another option, 26 km, about 30 min, 90 RMB.

2. Hangzhou Railway Station (The city station)

- □ Taxi is recommended from the Hangzhou Railway Station to the conference hotel, 5 km, about 12 min, 16 RMB.
- □ Metro Line 5 to Line 7 is another option, 5.3 km, about 25 min, 3 RMB.

3. HangzhouDong Railway Station (The east station)

- □ Metro Line 4 is recommended from the HangzhouDong Railway Station to the conference hotel, 6.7 km, about 24 min, 3 RMB.
- Taxi is another option, 9 km, about 21 min, 26 RMB.

4. HangzhouXi Railway Station (The west station)

- □ Taxi is recommended from the HangzhouXi Railway Station to the conference hotel, 35 km, about 45 min, 120 RMB.
- ❑ Subway is another option, 32 km, about 1 h, 7 RMB. Two routes are suggested. The first route is Metro Line 19→ Metro Line 9→ Metro Line 7, the second one is Metro Line 19→ Metro Line 1→ Metro Line 4.

5. HangzhouNan Railway Station (The south station)

- □ Taxi is recommended from the HangzhouNan Railway Station to the conference hotel, 18 km, about 25 min, 60 RMB.
- □ Subway is another option, 20 km, about 50 min, 5 RMB. Two routes can be considered, the first route is Metro Line 5→ Metro Line 7, the second route is Metro Line 5→ Metro Line 4.





Conference partner hotel information:

Name: Sorl Hotel Hangzhou (杭州瑞立江河汇酒店)

Address: No. 9 Sanxin Road, Shangcheng District, Hangzhou (杭州市上城区三新路 9 号) Telephone: +86 0571 87337777

Transportation from Sorl Hotel to conference hotel:



1. By taxi

Taxi is recommended from the Sorl Hotel to the conference hotel, 3 km, about 12 min, 14 RMB.

2. By bus

The conference will provide a bus transfer service.

3. By walk

□ Walking is also an option. One can enjoy the beautiful scenery of the Qiantang River along the way, 2.4 km, 30 min.

4. By subway

Subway is another option, 5 km, about 30 min, 2 RMB. Two routes can be considered, the first route is Metro Line 7→ Metro Line 9, and the second one is Metro Line 4→ Metro Line 9.





Conference contact information

ltem	Contact person		
Registration	Yifeng Liu (刘屹枫) 19817864218		
Accommodation	Hai Wang (王海) 17367078347		
Transfer service	Qinming Wu (吴勤明) 13616504519		
Venue	Xuedi Qin (秦雪迪) 18268199517		
Poster	Lujie Liu (刘露杰) 18767118094		
Sponsors and Exhibitors	Hangjie Li (李航杰) 18768176915		
Invoice	Linghua Zhang (张玲华) 15167168062		





Conference notes

Instructions for presenters

- Participants are kindly asked to turn off their cell phones or keep the cell phones in vibration state during the lectures and in the poster areas.
- Speaker Check-In Procedures: It is strongly recommended that all speakers visit the session room 1 hour before their presentation. Speakers can review their presentation(s) in order to avoid compatibility issues with computers supplied in the session room. Volunteers will also be available to assist speakers with uploading their presentation. All electronic files must be in either PowerPoint or PDF format.
- Presenters should bring their files on a USB drive or send the files to the session volunteers or host in advance. The standard audiovisual equipment provided for technical sessions will consist of a computer (with a mouse), a computer projector, switcher, screen, microphone, and a laser pointer. Mac users can connect to the computer-aided projectors if they bring their own computers and connecting cords.

Posters

The posters schedule and location are as follows:

- □ P1-P96: 13:30-18:00, Nov. 1, Room D (Hangzhou-2 Hall)
- Description P97-P286: 13:30-18:00, Nov. 1, Room G (Shanghai Hall)

Excellent Poster Award

The conference will set up 10 of "Excellent Poster Award" sponsored by *Carbon Future*. Please ensure that you have submitted your abstract for the poster presentation, and you will be nominated as a candidate of "Excellent Poster Award". After having the peer review of the poster presentation, the award winner(s) will be given the certificate for the prize during the conference.

Award ceremony: Awarding session were presented at the closing ceremony, 16:00, 2nd November, 2023

Weather

Nowadays, the temperature in Hangzhou ranges from 12 to 20 °C. Please remember to take a coat if you are going outside.

To keep updated

Information in this handbook is last-updated on Oct. 24, 2023. Any change or update made after Oct. 24, 2023 will not be displayed in this handbook. For latest information, please check our conference website (<u>https://www.apcat9.com</u>).





Conference record













Acknowledgement

The organizing committee of 9th Asia-Pacific Congress on Catalysis would like to express the heartfelt thanks to the following units, thank you for the strong support.

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Activities of Carbon Future in APCAT-9:

Face to editors: 13:30-14:30, 1st Nov., Room E; Carbon Future Salon: 16:00-17:00, 1st Nov., Room F; Carbon Future Booth: No.12

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高灵敏光电离 / 质子转移反应飞行时间质谱仪

Highly Sensitive Photoionization/PTR TOF

基于 VUV 灯的光电离 (PI) 及质子转移反应复合光电离技术 ,可在秒级响应时间内完成 pptv 量级的苯系物、烃类、醛类、酮类、酸类、醚类、酚类、有机硫化物等化合物的快速痕量分析, 质量分辨率高达 6000,且碎片离子少易于分析,满足气、液、固体中痕量 VOCs/SVOCs 的在 线分析需求。

- ·催化反应产物 / 反应中间体的在线分析
- 工业过程挥发性有机物在线分析
- ・食品、药品、日化品等挥发性气味成分在线分析
- ・环境中挥发性有机物实时快速分析
- ・二噁英前驱体在线分析
- 人体代谢物中挥发性有机物在线分析

Photoionization (PI) and PTR combined photoionization technology based on VUV lamp can complete the rapid trace analysis of benzene series, hydrocarbons, aldehydes, ketones, acids, eths, phenols, organic sulfides and other compounds of PPTV in the second response time, with a mass resolution of up to 6000, and less debris ions are easy to analyze. Meet the online analysis needs of trace VOCs/SVOCs in gas, liquid and solid.

光电离原位在线过程质谱仪

Photoionization In-situ Process TOF

采用 VUV 灯的单光子电离 - 光电子电离复合电离源,碎片离子少,谱图易于识别,可实 现过程产物中挥发性有机物 (VOCs) 和无机气体等多组分的同时在线检测。仪器具有秒级的响 应速度,质量分辨率可达 1000,兼具便携性和高分辨的要求,能够精确捕捉动态反应过程中 产物的快速变化。

- ・工业过程实时在线监测
- MOFs 材料性能分析

0

- •环境 VOCs 快速现场检测
- •催化反应产物原位快速分析
- ·危化品及燃烧产物快速检测
- ·污染源排放跟踪

The single photon ionization-photoelectron ionization composite ionization source of VUV lamp has less debris ions and easy identification of the spectrum, which can realize the simultaneous online detection of volatile organic compounds (VOCs) and inorganic gases in the process products. With a response speed of seconds and a mass resolution of up to 1000, the instrument has the requirements of portability and high resolution, which can accurately capture the rapid changes of products during dynamic reactions.



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Kehan company is a national high-tech enterprise specializing in the manufacture of Silica Sol, and is the only one innovative enterprise with three manufacturing silica sol methods, which are "Silicon hydrolysis method",

"Water glass ion exchange method" and "Sol-gel method to produce ultra-pure Silica Sol". Our company establish Silica sol enterprise with annual production capacity of more 400000 tons and storage capacity of more than 40000 tons. The company Products has more than 200 varieties. Kehan company's total assets of 500 million, is the world's excellent manufacturer of Silica Sol.

Kehan company concentrates on high-purity silica solcomposite nano-materials. At present, Kehan company mass-produced alkaline silica sol (JN series), acid silica sol(KHAS series), neutral silica sol (KHZ series), ammonia silica sol(KHAN series) , low sodium silica sol (KHWR series), small and large particle silica sol (KHL series), and High purity large particle size silica sol(ZCM series), and other products can be used for paper making, coating, refractory, semconductor polishing, petrochemical, investment casting, battery industry, and other industries, we can provide high-end personalized customization services.

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High purity silica sol for zeolite molecular sieve

高纯硅溶胶



碱性硅溶胶

酸性硅溶胶 Acidic silica sol



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Zhiyu Wang, et al., Advanced Materials, 2023,2212039 Can Li, et al., Journal of Catalysis, 2018,367,53–61

时空分辨的光电成像:



锂电池充放电过程中的原位拉曼

紫外激光拉曼光谱采用紫外激光 作为激发光源能成功地避开了荧 光干扰,大幅度提高了灵敏度, 是进行催化、材料和生物等领域 原位光谱研究的强有力的手段。



光电成像用于研究光生载流子的动力学研究:
1.空间和时间尺度研究载流子传输、复合利用等问题。
2. 光生载流子的产生、迁移、分布等动力问题。
3. 晶面、助催化剂、异相结、表面等离子基元、缺陷等对电荷传输的机理研究。
4. 定量研究电荷分离的驱动力。



粉末ALD沉积:









联系人: 朱剑 15542518503

ALD选择性沉积抑制逆反应 Canli, et al., Nature Catalysis, 2023

催化促进碳达峰 仪器助力碳中和



专注材料评价分析 系统解决方案 Focus on Material Evaluation Analysis, System Solution

微反热催化解决方案 CO₂系统解决方案 光催化解决方案 原位红外池 光电化学 (PECX) 光电系统 (TPV,TAS,IPCE,SPV,Raman) Micro reaction thermal catalysis solution CO₂ System Solution Photocatalytic solution In-situ IR Cell Photoelectrochemistry Photoelectric System













光源系统

LED光源、氙灯光源、汞灯光源、钨灯光源、太阳光模拟器、 模拟日光氙灯光源、光功率计(光强)、光纤光谱仪(光谱)、 滤光片(石英镀膜)

原位红外光谱

原位红外高真空系统(10³Pa、400°C)、高温高压超临界原 位红外(300°C、40MPa、50ml、SCCO。、SCHFC)

气相色谱仪GC7920/离子色谱仪

光电化学测试系统

氙灯光电催化系统PECX、 光电化学量子效率测试系统QE/IPCE、 高温高压光电反应釜、波长可调单色光系统、 ZAHNER、Admiral、PINE、CHI电化学工作站、 电极及电解池、光电化学反应器、光电化学分析系统

光电测试系统

表面光电压测试系统SPV、瞬态光电压谱TPV、 瞬态吸收谱TAS(纳秒闪光光解)、 整机进口Nd:YAG脉冲纳秒激光器、可调谐OPO激光器、 太阳能电池(单晶、多晶、DSC、钙钛矿)QE/IPCE、 IV测试系统、远程在线原位拉曼

光催化系统

光催化活性评价系统(光解水制氢、制氧、二氧化碳还原)、 光催化降解(染料、VOCs、NOx、污染物等)、 多位光解仪LAB500、LED平行反应仪LAB200、 LED光化学反应仪(pcrd300-12位)、 气相光催化反应系统GPPCN/GPPCL、 GPCR100不锈钢控温国标光催化反应器、 APR100H光化学控温一体反应器、 GPRT100m式光催化反应等

光热/热催化系统

高温光热催化反应系统(光热协同催化OPTH)、 微型光热催化微反系统GPPCM、 光催化微型反应装置GPPCH、 催化剂评价微反装置(常规定制)、 热催化微反系统(化学、化工、工业催化)、 光热催化反应釜HPRT/常规高压反应釜、恒流泵 SSI/PPS

Light Source System

LED light source, xenon lamp light source, mercury lamp light source, tungsten light source, solar simulator, solar simulator xenon lamp light source, optical power meter, fiber spectrometer, optical filter

In-situ IR spectrum

In-situ IR high vacuum system(10-3 Pa,400°C),High temperature and High pressure Supercritical In-situ IR (300°C, 40MPa, 50ml, SCCO2, SCHFC)

Gas Chromatograph CG7920/Ion Chromatography

Photoelectric Measurement System

Xenon lamp photoelectrocatalysis system PECX,Photoelectrochemical quantum efficiency measurement system,High temperature and high pressure photoelectric reaction kettle,Tunable monochromatic light source system, ZAHNEr,Admiral,PINE,Electrochemical workstation,electrode,Electrolytic cell,photoelectrochemical reactor,photoelectrochemical analysis system

Photoelectric Measurement System

Surface Photovoltaic Spectroscopy Measurement System, Transient Photovoltaic Spectroscopy, Transient Absorption Spectroscopy(Nanosecond flash photolysis), Complete machine import Nd: YAG Nanosecond Pulsed Lasers, tunable OPO laser, Solar cell(monocrystal, polycrystal, DSC, Perovskite)QE/IPCE, IV measurement system, Remote online in-situ Raman spectroscopy

Photocatalysis system

Photocatalysis activity evaluation system(photocatalytic hydrogen/Oxygen production/Reduction of carbon dioxide),Photocatalysis degradation(Dye, VOCs, NOx, Contaminants),Multidigit Photochemical reaction instrument LAB500,LED parallel reaction instrument,LED Photochemical reaction instrument(pcrd300-12 digit),Gas phrase Photocatalysis reaction system GPPCN/GPPCL,Stainless steel temperature control national standard Photocatalysis reactor GPRC,Photochemical temperature control integrated reactor APR100H,Photocatalytic reactor(Tripod style) GPRT100

Photothermal/Thermal catalysis system

High temperature photothermal catalysis reaction system(Photothermal synergistic catalysis OPTH),Photothermal catalysis micro reaction system GPPCM,Photocatalysis micro reaction apparatus GPPCH,Catalyst evaluation micro reaction apparatus (standard.customization),Thermalcatalysis micro reaction system(Chemistry, chemical industry,industry catalysis),Photothermal catalysis reaction kettle HPRT, Conventional high pressure reaction kettle,Constant flow pump SSI/PPS

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多路气体自动切换系统







KENTE

肯特催化材料股份有限公司是一家主要从事季铵(鏻)化合物产品研 发、生产和销售的高新技术企业,创立于2009年,座落在浙江省仙 居县经济开发区,下辖全资子公司江西肯特化学有限公司和浙江肯特 催化材料科技有限公司,在浙江仙居现代工业集聚区、江西永新化工 工业园建有生产基地。

KENTE CATALYSTS INC., founded in 2009, is a high-tech enterprise which focuses on the development, production and sales of Quaternary Ammonium/Phosphonium Compound. It is located in Xianju Economic Development Zone. It has two wholly-owned subsidiaries: JIANGXI KENTE CHEMICALS CO., LTD, ZHEJIANG KENTE CATALYSTS TECHNOLOGIES CO., LTD and two production sites: Xianju Modern Industrial Park, Yongxin Chemical Industrial Zone.

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The company has four series of products: quaternary ammonium salts, quaternary ammonium hydroxides, quaternary phosphonium salts and crown ethers, which more than 40 items. Kente Catalysts Inc. is devoted to provide scale products and customized services to customers from pharmaceuticals, zeolites, powder coating, polyurethane material, oil field chemicals and liquid crystal Material, etc.



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