

Singapore Catalysis Society Forum 2024

Held by Singapore Catalysis Society

13 May 2024

ISCE²@Jurong Island, Singapore

Conference Programme

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Singapore Catalysis Society Forum 2024

13th May 2024 | MPH, ISCE² @ JI, 1 Pesek Road, Jurong Island, 627833, Singapore

8:30	Shuttle bus pickup at the place between FP1 And FP2 (map and instruction will be emailed to attendees)	
9:15 – 9:45	Registration / coffee / setup poster and sponsor exhibition (attendees to be seated at 9:50am)	
9:50 – 10:00	Opening Remarks by Dr. Ng Wai Kiong, Acting ED of ISCE ² . (chaired by Prof Yan Ning, President of Singapore Catalysis Society)	
Plenary (MPH, ISCE2 @ JI)		
10:00 – 10:45	Catalytic upgrading of biomass-derived oxygenates <i>Prof Yong WANG, School of Chemical Engineering and Bioengineering, Washington State University, USA (chaired by Dr Zhang Lili)</i>	
10:45 – 11:30 PL2	Switchable metal and oxygen redox triggered by light for more efficient water splitting <i>Assoc. Prof Junmin XUE, National University of Singapore, Singapore (chaired by Dr Chen Luwei, vice president of SCS)</i>	
11:30 – 12:30	Lab tour	
12:30 – 14:00	Lunch & poster presentation	
	Parallel Session 1 (MPH)	Parallel Session 2 (Seminar room at level 3)
	Chaired by Dr. Liu Yan	Chaired by Assoc. Prof. Yeo Boon Siang, Jason
14:00 – 14:25	Keynote: Modulating defects in spinel supports for catalytic methane oxidation <i>Asst. Prof. Paul LIU, NTU</i>	Keynote: Effect of Cathodic Potential in Electrochemical CO ₂ reduction <i>Asst. Prof. Lei WANG, NUS</i>
14:25 – 14:40	Invited: Efficient Carbon Conversion via Molecular Catalysts Featuring Heterocyclic Phosphine Ligands <i>Dr James David NOBBS, ISCE2, A*STAR</i>	Invited: The Activity Gap of Iridium Electrocatalysts for Water Oxidation <i>Dr Jiajian GAO, ISCE2, A*STAR</i>
14:40 – 14:55	Invited: Unravelling the Mechanism and the Role of Boronic Acid Groups in ZIF-catalysed CO ₂ Conversion <i>Dr Xinglong ZHANG, IHPC, A*STAR</i>	Invited: Physics-based AI for Material Design <i>Dr Joyjit CHATTORAJ, IHPC, A*STAR</i>
14:55 – 15:10	Amine synthesis from FexN and alcohols <i>Dr Hao Yue LI, NUS</i>	Flavin-Dependent Enzyme PrnC: A Biocatalytic Tool for Sustainable Halogenation of Pyrrole-Based Molecules <i>Dr Guangrong PEH, ISCE2, A*STAR</i>
15:10 – 15:40	Tea Break (Poster session)	

	Parallel Session 1 (MPH)	Parallel Session 2 (Seminar room at level 3)
	Chaired by Dr Zhang Jia/ Dr Tej Salil Choksi	Chaired by Dr Zhang Yugen/ Dr Zhou Kang
15:40 – 15:55	CO ₂ hydrogenation on 2D materials <i>Asst Prof Sergey KOZLOV, NUS</i>	Multifunctional Catalysts for Selective Hydrocracking of Polypropylene to liquid hydrocarbons in jet fuel range under Mild Condition <i>Dr Gillian GOH, ISCE2, A*STAR</i>
15:55 – 16:10	CO ₂ to hydrocarbons over Fe-based catalysts: a theoretical study of K promoter <i>Dr Wen-Qing LI, IHPC, A*STAR</i>	Enhanced Charge Transfer Kinetics for the Electroreduction of Carbon Dioxide on Silver Electrodes Functionalized with Cationic Surfactants <i>Dr Wei Jie TEH, NUS</i>
16:10– 16:25	Evaluation of Catalytic Pyrolysis of Lignin Biomass using Py-GCMS <i>Dr Sathrugnan Karthikeyan, Frontier Laboratories</i>	Ionic strength boosts electrocatalytic reduction in organic chemicals <i>Dr Mingwu TAN, ISCE², A*STAR</i>
16:25 – 16:35	Innovations in Catalyst Designs for Catalytic Methane Decomposition <i>Mr Kang Hui LIM, NUS</i>	Cu/LaF ₃ Interfaces Boost Electrocatalytic CO-to-Acetate Conversion <i>Mr Yilin ZHAO, NUS</i>
16:35 – 16:45	Efficient Methylcyclohexane Dehydrogenation Catalysis by Al ₂ O ₃ -Supported Pt-Fe Cluster Alloy Catalysts <i>Mr Akhoundzadeh HOSSEIN, NTU</i>	Efficient and Robust Electrochemical CO ₂ -to-Formate Conversion at Pd/C ₆₀ interface <i>Ms Jingyi CHEN, NUS</i>
16:45 – 16:55	Directing the Formation of Multicarbon Products in CO Reduction by Changing Cu Precursors <i>Mr Siming Yang, NUS</i>	Breaking out the Overpotential: Optimizing Mass Transport for Enhanced Oxygen Reduction to Hydrogen Peroxide <i>Mr Bihao Hu, NUS</i>
16:55 – 17:30	Singapore Catalysis Society Annual General Meeting (@MPH), Chaired by Assoc. Prof. Yeo Boon Siang, Jason, secretary of SCS	
17:30 – 17:50	Award Ceremony and Closing Remark by Prof Yan Ning (@MPH), Chaired by Asst. Prof Tej Salil Choksi, Vice president of SCS	
17:50	Departure to Dinner Venue (Free Shuttle Bus will be provided) J65, Jen Hotel, Tanglin, Singapore	

SCS Forum 2024 – Organizing Committee	
Name	University/Institution
Dr. Luwei Chen	<i>A*STAR</i>
Dr. Yan Liu	<i>A*STAR</i>
Dr. Jia Zhang	<i>A*STAR</i>
Dr. Yugen Zhang	<i>A*STAR</i>
Dr. Lili Zhang	<i>A*STAR</i>
Prof. Ning Yan	<i>National University of Singapore</i>
Prof. Kang Zhou	<i>National University of Singapore</i>
Prof. Tej Salil Choksi	<i>Nanyang Technological University</i>