## **RRR** Poster presentation

## July 22, Monday

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RRR1-01	Promoting CO <sub>2</sub> Electroreduction to Acetate by an Amine- Terminal, Dendrimer- Functionalized Cu Catalyst	*LIJUAN ZHANG1	(1. Fudan University)
RRR1-02	Gel transformation as a general strategy for fabrication of highly porous multiscale MOF architectures via 3D direct ink writing	*King Lun Yeung1, Zhang Liu1	(1. The Hong Kong University of Science and Technology)
RRR1-03	Effects of Different Silicon Sources on Physicochemical and Catalytic Properties of Beta Zeolites	Xue-Juan Chen1, *Bing Zhan1, Xiu-Feng Hou1	(1. Fudan University)
RRR1-04	Hydrophobicity Manipulation of Titanium-silicalite-1 with Enhanced Catalytic Performance via Liquid- mediated Defect-healing Treatment	*Boqing LI1, Kenta Iyoki1, Piyapatch Techasarintr2, Shanmugam Elangovan1, Raquel Simancas1, Tatsuya Okubo1, Toshiyuki Yokoi2, Toru Wakihara1	(1. The University of Tokyo, 2. Tokyo Institute of Technology)
RRR1-05	Bacteriostatic Effect of Heat- Treated Metal-Containing Zeolites on Bacteria and Fungi	Vladimer Tsitsishvili1,2, Nato Mirdzveli2, *Manabu Miyamoto3, Orlin Gemishev4, Nanuli Dolaberidze2, Manana Nijaradze2, Zurab Amiridze2, Bela Khutsishvili2	<ul> <li>(1. Georgian National Academy of Sciences, 2.</li> <li>I. Javakhishvili Tbilisi State University, 3. Gifu University, 4. Sofia University St. Kliment Ohridski)</li> </ul>
RRR1-06	Nickel Silicate CHA-Type Zeolites Prepared by Interzeolite Transformation and Their Catalytic Activity in Dry Reforming of Methane	*Trinh Thuan Khiet Nguyen1, Siyeon Lee1, Sungjoon Kweon1, Bum Min Park1	(1. Incheon National University)
RRR1-07	Gaseous Organic Chloride Adsorption over the Various Framework Atom Substituted MWW-Type Zeolitic Adsorbents	*Linh Mai Tran1, Yunhye Cho1, Sungjoon Kweon1, Min Bum Park1	(1. Incheon National University)
RRR1-08	Precise Control of Framework Composition in Beta-Type Titanoaluminosilicates Synthesized via the Interzeolite Transformation	*Junseong Park1, Sungjoon Kweon1, Min Bum Park1	(1. Incheon National University)
RRR1-09	Development of ordered amorphous silica-alumina with enhanced acidity and textural properties	*Batool Altaher1, Lianhui Ding 1, Faisal Alotaibi 1, Mohammad Bahhar1, Faisal Mulla1	(1. Saudi Aramco)
RRR1-10	Catalytic Upcycling of Polyethylene to Fuels over a Nanosized Beta Zeolite under Mild Conditions	*QING LIU1, Zhendong LIU1	(1. Tsinghua University)
RRR1-11	Large Language model assistant for designing organic structure-directing agents for zeolites	*Shusuke Ito1, Koki Muraoka1, Akira Nakayama1	(1. The University of Tokyo)

RRR1-12			
RRR1-13	Mesoporous nanocrystalline Zeolite Y Synthesis by Bottom- up Approach	*Hana Hashim Habboubi1, Ding Lianhui1, Faisal AlOtaibi1	(1. Research & Devolopment Center)
RRR1-14	Topologically Equivalent Zeolite Frameworks Identified from Hamiltonian Graphs	*Craig AJ Fisher1, Toru Wakihara2, Yukichi Sasaki1	(1. Japan Fine Ceramics Center, 2. The University of Tokyo)
RRR1-15	Synthesis of Self-Pillared Zeolite Microspheres with a Hierarchical Micro-Meso- Macroporous Structure	*Zhaoning Song1, Zhendong Liu1	(1. Tsinghua University)
RRR1-16	Research on the Sintering Resistance of Noble Metal Clusters Encapsulated by Molecular Sieve	*Mingyuan Shao1, Zhendong Liu1	(1. Tsinghua University)
RRR1-17	Physically-Mixed MOF-74- Derived Bi-Functional Catalysts for CO <sub>2</sub> Hydrogenation	*Mone Yamazaki1, Shunsaku Yasumura1, Masaru Ogura1	(1. The University of Tokyo)
RRR1-18	Adsorptive Removal of Perfluoroalkyl Substances in Aqueous Solution using aminofunctionalized MOF	*Koya Ishizawa1, Hiroki Konno1	(1. Toho University)
RRR1-19	Adsorptive Removal of Perfluoroalkyl Substances in Aqueous Solution using Porous Magnesium Oxide with High Surface Area	*Taiyo Nabata1, Hiroki Konno1	(1. Toho University)
RRR1-20	PET-derived bis(2- hydroxyethyl) terephthalate as a new linker source for rapid solvent-free MOF synthesis	*Philip Anggo Krisbiantoro1,2,3, Kevin CW. Wu1,2,3	(1. Molecular Science and Technology Program, Taiwan International Graduate Program, Academia Sinica, 2. International Graduate Program of Molecular Science and Technology, National Taiwan University, 3. Department of Chemical Engineering, National Taiwan University)

## July 24, Wednesday

## **RRR** Poster II Data-Driven Investigation of (1. The University of \*Jing Ping1,2, Koki Diffusion Behaviors in Small-Muraoka1, Zhendong Tokyo, 2. Tsinghua **RRR2-01** Pore Zeolites Liu2, Akira University) Nakayama1 Selective Adsorption of 2-\*Kazuhiro Onuki1, (1. Seikei Univ.) Propanol under Humid Keigo Tashiro1, RRR2-02 Environment into Zeolite Shigeo Satokawa1 Pores DFT Simulation of Nitrogen Kyung-Su Shin1, Bum-(1. Chonnam National Adsorption on Li-exchanged su Park1, Hyunchang University, 2. RRR2-03 LSX for Air Separation Shin2, Sangkyun Hanchang Ind. Co, Kang2, \*Sung-June Ltd.) Cho1 \*Gwang-Jin Na1, Enhanced Dispersion of (1. Korea Institute of RRR2-04 Platinum Nanoparticles Hongjun Park2, Ryong Energy Technology, 2. within Siliceous MFI Zeolite Ryoo1,2 Institute for Basic

-	due to Ammonia Treatment		Science)
RRR2-05	Proton Conductivity in Water over Synthesized Nano- sized Beta	*Haruka Ukita1, Keigo Tashiro1, Shigeo Satokawa1	(1. Seikei University)
RRR2-06	Determining Ti site in Zeolites Using High- resolution X-ray Absorption Spectroscopy	*Hiroki Yamada1,2, Boqing Li3, Tatsushi Yoshioka3, Kengo Nakada1, Yuki Sada1, Koji Ohara2,1, Masakuni Takahashi4, Kotaro Higashi1, Seiya Shimono1, Toshiaki Ina1, Naomi Kawamura1, Toru Wakihara3,5	<ul> <li>(1. Japan Synchrotron Radiation Research Institute, 2. Shimane University, 3.</li> <li>Department of Chemical System Engineering, The University of Tokyo, 4.</li> <li>Okayama University, 5. Institute of Engineering Innovation, School of Engineering, The University of Tokyo)</li> </ul>
RRR2-07	Synthesis of Two- dimensional AEI Zeolite	*Zinxin Xiao1, Zhendong Liu1	(1. Tsinghua University)
RRR2-08	High-throughput computational investigation of zeolite intergrowths	*Kota Oishi1, Koki Muraoka1, Akira Nakayama1	(1. The University of Tokyo)
RRR2-09	Mechanistic Study of Glucose Conversion over Post-modified Zeolites	*YIN LIU1, Yong Wang1, Toshiyuki Yokoi1	(1. Tokyo Technology of Institute)
RRR2-10	Stabilization of molecular TiO <sub>4</sub> species on the pore surface of mesoporous silica for photocatalytic $H_2$ evolution	*Hikaru Inada1, Masashi Morita1, Kazuyuki Maeda1	(1. Tokyo University of Agriculture and Technology)
RRR2-11	Different impacts of methanol on the crystallization process in Silicalite-1 and ZSM-5 zeolites	*Qi Li1, Liang Zhao1, Peipei Xiao1, Yong Wang1, Toshiyuki Yokoi1	(1. Tokyo Institute of Technology)
RRR2-12	Plastics-to-Single-walled Carbon Nanotube (SWCNT) Conversion through Sequential zeolite and Layered Double Hydroxide (LDH)-Derived Mixed Metal Oxide	*Yu-Chia Chang1, Abhay Raju2, Kevin CW. Wu1	(1. National Taiwan University, 2. Mahatma Gandhi University)
RRR2-13	Effect of hydrophobic character of diammonium- capping agents for the synthesis of nanocrystalline MOR zeolites	*Gayoung Lee1, Jongyeon Lim1, Changbum Jo1	(1. Inha University)
RRR2-14	Polyethylene hydrogenolysis over Ru supported on mesoporous MFI zeolite: Effects of mesoporosity and external acid sites	*Wonnok Hong1, Jingee Ahn1, Changbum Jo1	(1. Inha university)
RRR2-15	Crystal size and morphology control of SAPO-40 zeolite	*Jie Du1, Yin Liu1, Yong Wang1, Peipei Xiao1, Toshiyuki Yokoi1	(1. Tokyo Institute of Technology)
RRR2-16	Crystallization behavior of EMC-2 zeolite along with the	Kotori Matsuo1, Issei Yoshioka1, Chang Yi	(1. Shizuoka University)

	long induction period	Kong1, *Takahiko Moteki1	
RRR2-17	Enhancing Water Gas Shift Reaction: Preventing Reverse Reactions with Cu/ZnO Nanocatalysts on MFI Zeolite	Salma Liska1, Rawiyah Khairunida' Shalihah1, Gita Nur Sajida1, Elvi Restiawaty1, Hary Devianto1, Manabu Miyamoto, Norikazu Nishiyama, *Yogi Wibisono Budhi1	(1. Institut Teknologi Bandung)
RRR2-18	Self-assembled structures and properties of short peptides with catalytic functions	*Hao Dong1	(1. Nanjing University)
RRR2-19			
RRR2-20	PolyMOF Interlayers Modulated Interfacial Polymerization of Ultra-thin Nanofiltration Membranes with Efficient and Stable Desalination Performance	*Xiaolei Cui1, Zixi Kang2, Hailing Guo1	(1. College of Chemical and Chemical Engineering, China University of Petroleum (East China), 2. School of Materials Science and Engineering, China University of Petroleum (East China))