

Oral Session

July 21 (Sun)

Room A

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| 13:30 | Registration | |
| 14:50 | Opening | |
| | Chair: | Tatsuya Okubo |
| 15:00 | SL1 | The quest for extra-large pore zeolites: Where is the limit? *Valentin Valtchev ¹ (1. CNRS) |
| 15:50 | Break (10 min) | |
| | Chair: | Masaihko Matsukata |
| 16:00 | SL2 | Hierarchical Zeolite Containing Systems - Comparison of Preparation Pathways and Potential Applications *Wilhelm Schwieger ¹ (1. Friedrich-Alexander-Universität Erlangen-Nürnberg) |
| 16:50 | Break (10 min) | |
| | Chair: | Norikazu Nishiyama |
| 17:00 | PL1 | Membrane Separation and Reaction Technologies Using Zeolites: How Zeolites Can Greatly Contribute to Carbon Neutrality? *Masahiko Matsukata ¹ (1. Waseda University) |
| 17:45 | Intermission | |
| 18:00 | Welcome Party (Room X) | |

July 22 (Mon)

| | Room A | Room B | Room C |
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| 9:00 | <p>Chair: Manabu Miyamoto</p> <p>PL2</p> <p>Elucidating and Controlling Zeolite Crystallization for the Design of Advanced Materials</p> <p>*Jeffrey D. Rimer¹ (1. University of Houston)</p> | | |
| 9:45 | Break (10 min) | | |
| | <p>Chair: Dan Zhou</p> | <p>Chair: Manuel Moliner</p> | <p>Chair: Mathilde Lepoitevin</p> |
| 9:55 | <p>Chair: Atsushi Shimojima</p> <p>KN1</p> <p>ITQ-70: A NEW EXTRALARGE PORE ZEOLITE AND VERY LOW FRAMEWORK DENSITY</p> <p>Juan I. Tirado¹, Andrés Sala¹, Partha Pratim Das², Lukáš Palatinus³, Stavros Nicolopoulos², Jose L. Jordá¹, Alejandro Vidal-Moya¹, M. Teresa Blasco Lanzuela Blasco¹, German Sastre¹, Susana Valencia¹, *Fernando Rey Garcia¹</p> <p>(1. Instituto de Tecnología Química (UPV-CSIC), Universitat Politècnica de València-Consejo Superior de Investigaciones Científicas, 2. NanoMEGAS SPRL, 3. Institute of Physics, Academy of Sciences of the Czech Republic, v.v.i.)</p> | <p>Chair: Kenichi Komura</p> <p>OB1-01</p> <p>In-situ Atomic Imaging Reveals Sub-cell Flexibility in ZSM-5 Zeolite</p> <p>*Hao Xiong¹, Xiao Chen^{1,2}, Fei Wei^{1,2} (1. Tsinghua University, 2. Ordos Laboratory)</p> | <p>Chair: Yuichiro Hirota</p> <p>OC1-01</p> <p>Microporous Al-MOF for post-combustion carbon capture: from fundamental studies to large scale synthesis.</p> <p>*Georges Mouchaham¹, Bingbing Chen¹, Dong Fan², Iurii Dovgaliuk¹, Rosana V. Pinto^{1,3}, Debanjan Chakraborty¹, Nicolas Heymans³, Moisés Pinto⁴, Marco Daturi⁵, Farid Nouar¹, Guy De Weireld³, Guillaume Maurin², Christian Serre¹ (1. Institut des Matériaux Poreux de Paris, Ecole Normale Supérieure, ESPCI Paris, CNRS, PSL University, 2. ICGM, Univ. Montpellier, CNRS, ENSCM, 3. Service de Thermodynamique et de Physique Mathématique, Faculté Polytechnique, Université de Mons, 4. CERENA, Departamento de Engenharia Química, Instituto Superior Técnico, Universidade de Lisboa, 5. Normandie Université, ENSICAEN, UNICAEN, CNRS, Laboratoire Catalyse et Spectrochimie)</p> |
| 10:10 | | <p>OB1-02</p> <p>Structure Study on Nanoporous Crystals and Their Composites</p> <p>Qing Zhang¹, Alvaro Mayoral^{1,2}, Yi Zhou¹, Junyan Li^{3,1}, Pengyu Chen¹, Keiichi Miyasaka⁴, Yanhang Ma¹, Jihong Yu³, *Osamu Terasaki¹ (1. Centre for High-resolution Electron Microscopy (C_hEM), SPST and Shanghai Key Laboratory of High-resolution Electron Microscopy, ShanghaiTech University, 2. Instituto de Nanociencia y Materiales de Aragón (INMA), CSIC-Universidad de Zaragoza, 3. State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry; International Center of Future Science, Jilin University, 4. Echo Electricity Co. Ltd.)</p> | <p>OC1-02</p> <p>Porous Salts Containing Unprecedented Cationic Al₂₄-Hydroxide Clusters from a Scalable, Green Synthesis Route</p> <p>Bastian Achenbach¹, *Norbert Stock¹ (1. Christian-Albrechts-University)</p> |

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| 10:25 | OA1-03 | Encapsulation of Cu Nanoparticles in ZSM-5 Zeolite for CO ₂ Hydrogenation *Raquel Simancas ¹ , Saeko Yamaguchi ¹ , Ryokoto Kanomata ² , Koki Awano ² , Shuhei Yasuda ³ , Hiroyasu Fujitsuka ⁴ , Teruoki Tago ² , Toshiyuki Yokoi ⁵ , Tatsuya Okubo ¹ , Toru Wakihara ^{1,6} (1. Department of Chemical System Engineering, The University of Tokyo, 2. Department of Chemical Science and Technology, Tokyo Institute of Technology, 3. Faculty of Engineering, University of Toyama, 4. Graduate School of Engineering, Kyoto University, 5. Institute of Innovative Research, Tokyo Institute of Technology, 6. Institute of Engineering Innovation, The University of Tokyo) | KN2 | Hydrogel – mesoporous silica nanoparticle hybrid materials for drug delivery applications *Mika Lindén ¹ (1. Universitaet Ulm, Institute of Inorganic Chemistry II) | OC1-03 | Preparation of New Isorecticular Phosphonate MOFs Using Tetratopic Oligophenyl-Based Linkers Hiroki Shudou ¹ , Atsushi Fumikura ¹ , Atsushi Kondo ¹ , *Kazuyuki Maeda ¹ (1. Tokyo Univ. Agric. Technol.) |
| 10:40 | OA1-04 | Accelerated crystallization kinetics of MFI zeolite via imidazolium-based synthesis *Tianzhao Liu ^{1,2} , Xuemin Li ^{1,2} , Owen J. Curnow ³ , Jungkyu Choi ⁴ , Alex C.K. Yip ^{1,2} (1. MacDiarmid Inst. Adv. Mater. Nanotechnol., 2. Dept. Chem. Process Eng., Univ. Canterbury, 3. Sch. Phys. Chem. Sci., Univ. Canterbury, 4. Dept. Chem. Biol. Eng., Korea Univ.) | | | OC1-04 | Wash-Free Synthesis of Biocompatible and Biodegradable Cyclodextrin-Based Metal-Organic Framework (CD-MOF) for Application in Drug Delivery Systems *Shunsuke Tanaka ¹ , Shuhei Fujita ¹ , Hiromasa Uchiyama ² , Kazunori Kadota ² , Yuichi Tozuka ² (1. Kansai University, 2. Osaka Medical and Pharmaceutical University) |
| 10:55 | Break (10 min) | | | | | |
| | Chair: | Wei Fan | Chair: | Mika Lindén | Chair: | Norbert Stock |
| | Chair: | Masanori Takemoto | Chair: | Masato Takeuchi | Chair: | Kazuyuki Maeda |
| 11:05 | OA1-05 | Crystallization of Fe-containing Zeolites inside Ordered Nanoporous Iron Oxides *Takamichi Matsuno ^{1,2} , Daichi Oka ¹ , Atsushi Shimojima ^{1,2} (1. Department of Applied Chemistry, Faculty of Science and Engineering, Waseda University, 2. Kagami Memorial Research Institute for Materials Science and Technology, Waseda University) | OB1-05 | Atomic resolving local structures of porous materials and confined molecules to investigate host-guest interactions *Xiao Chen ^{1,2} , Hao Xiong ¹ (1. Tsinghua University, 2. Ordos Laboratory) | KN3 | Metal Organic Frameworks as candidates for indoor air quality *Christian Serre ^{1,2,3,4} (1. Ecole Normale Supérieure, 2. ESPCI Paris, 3. CNRS, 4. PSL university) |
| 11:20 | OA1-06 | Revealing the Crystallization Pathway of VSV-type Zincosilicate Zeolite *Zimu Zhou ¹ , Peidong Hu ^{1,2} , Tatsuya Okubo ¹ , Toru Wakihara ^{1,2} (1. Department of Chemical System Engineering, The University of Tokyo, 2. Institute of Engineering Innovation, The University of Tokyo) | OB1-06 | Revealing Invisibles: Analysis of Porous Nanocrystals by 3D Electron Diffraction *Zhehao Huang ^{1,2} (1. Stockholm University, 2. South China University of Technology) | | |

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| 11:35 | OA1-07 | Dissolution and Deposition Behavior of Heteroatoms during Hydrothermal Treatment by Synchrotron X-ray Spectroscopy *Koki Itamoto ¹ , Kakeru Ninomiya ^{1,2,3} , Atsushi Muramatsu ^{1,2,3} , Maiko Nishibori ^{1,2,3} (1. Graduate School of Environmental Science Tohoku Univ., 2. International Center for Synchrotron Radiation Innovation Smart Tohoku Univ., 3. Institute of Multidisciplinary Research for Advanced Materials Tohoku Univ.) | OB1-07 | Atomic-scale insights into topotactic reactions and transformations in extra-large pore silicate zeolites using 3D electron diffraction *Yi Luo ^{1,4} , Hao Xu ^{2,3} , Yue Han ² , Wen Tong ² , Meichen Jiao ² , Naihong Wang ² , Jinggang Jiang ² , Xiaodong Zou ¹ , Peng Wu ^{2,3} (1. Department of Materials and Environmental Chemistry, Stockholm University, 2. Shanghai Key Laboratory of Green Chemistry and Chemical Processes, School of Chemistry and Molecular Engineering, East China Normal University, 3. Institute of Eco-Chongming, 4. State Key Laboratory of Green Chemical Engineering and Industrial Catalysis, Sinopec shanghai research institute of petrochemical technology CO., LTD) | OC1-07 | Phototherapeutic dressings for wound care enhanced with Metal-Organic Frameworks (MOFs) against drug-resistant bacteria. *Mathilde Lepoitevin Lepoitevin ¹ , Zhihao Yu ¹ , christian Serre ¹ , Xiali Fu ² , Anne Jamet ² (1. Institut des Matériaux Poreux de Paris, ENS, ESPCI Paris, CNRS, PSL University, 2. Université Paris Cité, INSERM UMR-S1151, CNRS UMR-S8253, Institut Necker Enfants Malades, Team « Pathogenesis of systemic infections ») |
| 11:50 | OA1-08 | Hollownest-structured Zeolites (HSZs): Controlled Synthesis and Catalytic Application *Dan Zhou ¹ , Qing Xia ¹ (1. Hubei University) | OB1-08 | Direct Visualisation of the Flexibility of RHO Nanozeolite *Edwin B. Clatworthy ¹ , Simona Moldovan ² , Kalthoum Nakouri ² , Stoyan P. Gramatikov ³ , Francesco Dalena ¹ , Marco Daturi ¹ , Petko St. Petkov ³ , Georgi N. Vayssilov ³ , Svetlana Mintova ¹ (1. Laboratoire Catalyse et Spectrochimie, Normandie Université, UNICAEN, ENSICAEN, CNRS, 2. Groupe de Physique des Matériaux, CNRS, INSA Rouen Normandie, Université Rouen Normandie, 3. Faculty of Chemistry and Pharmacy, University of Sofia) | OC1-08 | New solution for recovering zinc or cobalt from spent batteries lixiviates through ZIFs precipitation *David Peralta ¹ , Despoina Andriotou ¹ , Anna-Caroline Lavergne-Bril ¹ , Pascale Maldivi ¹ , Jean-François Colin ¹ , Gaëlla Frajer ¹ , Emmanuel Billy ¹ , Arthur Roussey ¹ (1. Univ. Grenoble Alpes, CEA-LITEN) |
| 12:05 | LUNCH | | | | | |
| 13:30 | Chair: | Yasunori Oumi | | | | |
| 13:30 | PL3 | Translating Metal-Organic Framework Research from Lab to Applications *Georges Shimizu ¹ , David Evans ¹ , Racheal Huynh ¹ , Arvind Rajendran ² (1. Department of Chemistry, University of Calgary, 2. Department of Chemical and Materials Engineering, University of Alberta) | | | | |
| 14:15 | Break (10 min) | | | | | |

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| | Chair: | Francesca Rosso | Chair: | Kevin C.-W. Wu | Chair: | Georgi N. Vayssilov |
| | Chair: | Koji Nishi | Chair: | Izumi Kumakiri | Chair: | Hiromitsu Takaba |
| 14:25 | | | OB1-09 | Microstructural Optimization of MFI Zeolite Membranes towards Superior Butane Isomer Separation *Yi Liu ¹ (1. Dalian University of Technology) | OC1-09 | Photocatalytic degradation of organic dyes under sunlight using Zn complex embedded porous materials *Mahuya Bandyopadhyay ¹ , Madhu Pandey ¹ , Sourav Das ¹ , Nao Tsunoji ² (1. Institute of Infrastructure, Technology, Research and Management, IITRAM, 2. Hiroshima University) |
| 14:40 | KN4 | Design Synthesis of Novel Metallosilicates for Selective Catalyses *Peng Wu ¹ , Hao Xu ¹ , Yue Ma ¹ , Mingming Peng ¹ , Jin-Gang Jiang ¹ (1. East China Normal University) | OB1-10 | Plate-like MFI crystals for membrane fabrication on polymer supports *Pingping Li ¹ , Kemal Celebi ^{1,2} (1. Zhejiang University, 2. University of Illinois Urbana-Champaign) | OC1-10 | Advanced Copper Nanoparticle Encapsulation in ZIF-8 for Efficient CO ₂ Hydrogenation *Enrique V. Ramos-Fernandez ^{1,2} , Vijay Velisoju ¹ , Jose Luis Cerrillo ¹ , Rafia Ahmad ¹ , Hend Mohamed ¹ , Yerraya Attada ¹ , Osama Shekhah ³ , Selvedin Telalovic ¹ , Javier Narciso ² , Luigi Cavallo ¹ , Yu Han ¹ , Mohamed Eddaoudi ³ , Pedro Castaño ¹ (1. KAUST Catalysis Center (KCC), King Abdullah University of Science and Technology (KAUST)), 2. Laboratorio de Materiales Avanzados, Departamento de Química Inorgánica – Instituto Universitario de Materiales de Alicante, Universidad de Alicante, 3. King Abdullah University of Science and Technology (KAUST), Physical Sciences and Engineering 11 Division, Advanced Membranes and Porous Materials (AMPM) Center) |
| 14:55 | OA1-11 | Control of framework Al Distribution in Large-pore Zeolites by Post-acid treatment *Hiroto Toyoda ¹ , Masato Sawada ¹ , Junko Nomura Kondo ¹ , Toshiyuki Yokoi ¹ (1. Tokyo Institute of Technology) | OB1-11 | Rapid synthesis of silicalite-1 membrane using a tubular reactor *Rizqan Jamal ¹ , Masaya Shoji ² , Yuta Kayukawa ² , Manabu Miyamoto ³ , Yasuhisa Hasegawa ⁴ , Yasunori Oumi ⁵ , Shigeyuki Uemiya ³ (1. Department of Engineering Science, Graduate School of Engineering, Gifu University, 2. Department of Materials Science and Processing, Graduate School of Natural Science and Technology, Gifu University, 3. Department of Chemistry and Bimolecular Science, Faculty of Engineering, Gifu University, 4. The National Institute of Advanced Industrial Science and Technology, 5. Institute for Advanced Study, Gifu University) | OC1-11 | Design of Metal-Organic Frameworks and Reaction Systems for Efficient Photocatalytic H ₂ O ₂ Production *Hiromi Yamashita ¹ , Yifan Zhao ¹ , Yoshifumi Kondo ¹ , Yasutaka Kuwahara ¹ , Kohsuke Mori ¹ (1. Osaka University) |

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| 15:10 | OA1-12 | Controlling Defects and Si/Al of High-Silica LTA Zeolites using Charge Balancing Approach *Wei Fan ¹ , Song Luo ¹ , Tongkun Wang ¹ , Muhammad Shah ¹ , Jason Gulbinski ¹ , Long Qi ² , Geoffrey Tompsett ³ , Michael Timko ³ , Scott Auerbach ¹ (1. University of Massachusetts, Amherst, 2. U.S. DOE Ames Laboratory, Iowa State University, 3. Worcester Polytechnic Institute) | OB1-12 | Impact of Al distribution in ZSM-5 membrane on its permeation and separation properties *Motomu Sakai ¹ , Masahiko Matsukata ¹ (1. Waseda University) | OC1-12 | Theoretical Design of Metal–Organic Framework Photocatalysts Ting-Ting Liu ¹ , Zhao-Xue Luan ¹ , Zi-Jian Zhou ¹ , Bryan Kit Yue Ng ² , Tian-Fu Liu ³ , Xue-Qing Gong ⁴ , Shik Chi Edman Tsang ² , *Xin-Ping Wu ¹ (1. East China University of Science and Technology, 2. University of Oxford, 3. Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, 4. Shanghai Jiao Tong University) |
| 15:25 | OA1-13 | Revealing the Evolution of Local Structure in the Formation Process of Alkaline Earth Metal Cation-Containing Zeolite from Glass *Peidong Hu ^{1,2} , Makiko Deguchi ² , Hiroki Yamada ^{2,3,4} , Kentaro Kobayashi ⁴ , Koji Ohara ^{3,4} , Sohei Sukenaga ⁵ , Mariko Ando ⁶ , Hiroyuki Shibata ⁵ , Akihiko Machida ⁷ , Yutaka Yanaba ⁸ , Zhendong Liu ^{1,2} , Tatsuya Okubo ² , Toru Wakihara ^{1,2} (1. Institute of Engineering Innovation, The University of Tokyo, 2. Department of Chemical System Engineering, The University of Tokyo, 3. Japan Synchrotron Radiation Research Institute/SPring-8, 4. Faculty of Materials for Energy, Shimane University, 5. Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 6. Graduate School of Engineering, Tohoku University, 7. Synchrotron Radiation Research Center, National Institutes for Quantum Science and Technology (QST), 8. Institute of Industrial Science, The University of Tokyo) | KN5 | Understanding Zeolite CO₂ Adsorbents That Work Better Wet vs Dry Hwangho Lee ¹ , Dan Xie ² , Kun-Lin Wu ³ , Shu Hikima ⁴ , Le Xu ¹ , Alexander Okrut ¹ , Ambar Kulkarni ³ , Ryouji Onishi ⁴ , Takahiko Takewaki ⁴ , Stacey I. Zones ² , *Alexander Katz ¹ (1. Department of Chemical and Biomolecular Engineering; University of California, Berkeley, 2. Chevron Energy Technology Company, 3. Department of Chemical Engineering; University of California, Davis, 4. Mitsubishi Chemical Corporation; Science & Innovation Center) | OC1-13 | Investigation of CO ₂ and H ₂ O adsorption mechanism in a perfluorinated CeIV-based metal organic framework *Margherita Cavallo ¹ , Matteo Signorile ¹ , Cesare Atzori ² , Ferdinando Costantino ³ , Lucia Calucci ⁴ , Marco Taddei ⁵ , Valentina Crocellà ¹ (1. Department of Chemistry, NIS and INSTM Centers, University of Torino, 2. European Synchrotron Radiation Facility, 3. Department of Chemistry Biology and Biotechnology, INSTM research centre, Università di Perugia, 4. Institute of Chemistry of Organometallic Compounds, INSTM research centre, Consiglio Nazionale delle Ricerche, 5. Department of Chemistry and Industrial Chemistry, University of Pisa) |
| 15:40 | OA1-14 | Template-Free Synthesis of ZSM-23 Zeolite: Significance of pH and Aging Period *Supak Tontisirin ¹ , Thanawan Nitikriengkrai ¹ (1. King Mongkut's University of Technology North Bangkok) | | | OC1-14 | Characterization of Unique Adsorption Behavior of CO ₂ on Layered MOF *Akihiko Matsumoto ¹ , Hiroyuki Ozeki ¹ (1. Toyohashi University of Technology) |
| 15:55 | Break (10 min) | | | | | |

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| | Chair: | Peng Wu | Chair: | Alexander Katz | Chair: | Zhenxin Zhang |
| | Chair: | Ryutaro Wakabayashi | Chair: | Masahiro Seshimo | Chair: | Hiromi Yamashita |
| 16:05 | OA1-15 | Constructing dendritic ZSM-5 zeolites through an in-situ formation of polyhedral oligomeric silsesquioxane (POSS) – like species *María del Mar Alonso-Doncel ¹ , Elena A. Giner ¹ , David P. Serrano ² (1. Termochemical Processes Unit, IMDEA Energy Institute, 2. Termochemical Processes Unit, IMDEA Energy Institute. Chemical and Environmental Engineering Group, Rey Juan Carlos University) | OB1-15 | Single-Walled Zeolite Nanotubes: Synthesis & Application in Catalysis or Adsorption *Christopher W Jones ¹ , Akshay Korde ¹ , Byunghyun Min ¹ , Anthony Wallace ¹ , Gabriel N Short ¹ , Dhrumil R Shah ¹ , Sankar Nair ¹ (1. Georgia Institute of Technology) | KN6 | Catalytic Conversion of Plastic Waste into Hydrogen and Single-Walled Carbon Nanotubes over Nanoporous Catalysts *Kevin C.-W. Wu ¹ (1. National Taiwan University) |
| 16:20 | OA1-16 | Synthesis and Characterization of a Silsesquioxane Molecule with a Dinuclear Ti site *Takuya Hikino ¹ , Yuka Kawakubo ² , Takamichi Matsuno ^{2,3} , Atsushi Shimojima ^{2,3} (1. Department of Advanced Science and Engineering, Faculty of Science and Engineering, Waseda University, 2. Department of Applied Chemistry, Faculty of Science and Engineering, Waseda University, 3. Kagami Memorial Research Institute for Materials Science and Technology, Waseda University) | OB1-16 | Fluoride-free synthesis of Si-CHA zeolite membranes for CO ₂ separation *Jiayu Wu ¹ , Rongfei Zhou ¹ , Nana Wang ¹ , Bo Liu ¹ (1. Nanjing Tech University) | | |
| 16:35 | OA1-17 | Preparation of titanasilicate catalyst from MSE-type zeolite synthesized without using organic structure-directing agent and its catalytic performance Kaisei Nakamura ¹ , Kai Okubo ¹ , Shengxiang Zhang ¹ , Satoshi Inagaki ¹ , *Yoshihiro Kubota ¹ (1. Yokohama National University) | OB1-17 | Exploring the High-Efficient Zeolite Structure for CO ₂ Separation Membranes by Machine Learning and Molecular Simulations *Hiromitsu Takaba ¹ , Kazuki Morisaki ¹ , Hayato Kawata ¹ , Masaya Miyagawa ¹ (1. Kogakuin University) | OC1-17 | Zeolitic octahedral metal oxides for gas separation *Zhenxin Zhang ¹ , Qianqian Zhu ¹ , Masahiro Sadakane ² , Yanshuo Li ¹ , Wataru Ueda ³ (1. Ningbo University, 2. Hiroshima University, 3. Kanagawa University) |
| 16:50 | OA1-18 | SPECTROSCOPIC CHARACTERIZATION OF Ti SITES IN MWW ZEOLITE IN PRESENCE OF H ₂ O ₂ *Francesca Rosso ¹ , Alessia Airi ¹ , Matteo Signorile ¹ , Silvia Bordiga ¹ , Valentina Crocellà ¹ , Francesca Bonino ¹ (1. Univ. di Torino) | OB1-18 | Investigation of active sites in the methane conversion reaction through spectroscopic analysis *Kengo Nakamura ¹ , Xiao Peipei ¹ , Junko N Kondo ¹ , Toshiyuki Yokoi ¹ (1. Tokyo Institute of Technology) | OC1-18 | A new zeolitic octahedral metal oxide for alkyne and alkene separation *Qianqian Zhu ¹ , Yanshuo Li ¹ , Zhenxin Zhang ¹ (1. Ningbo University) |
| 17:05 | OA1-19 | Superior Hierarchical Catalysts by Partial Zeolite Interconversion Monica Mendoza-Castro ¹ , Noemi Linares ¹ , *Javier García-Martínez ¹ (1. Laboratorio de Nanotecnología Molecular, Departamento de Química Inorgánica, Universidad de Alicante) | OB1-19 | Effect of modification of mesoporous carbon replicas with nitrogen and oxygen functionalities on their catalytic performance in oxidation of sulfurous acid *Katarzyna Barańska ^{1,2,3} , Sebastian Jarczewski ¹ , Anna Rokicińska ¹ , Olaf Klepel ³ , Piotr Kuśtrowski ¹ (1. Department of Chemical Technology, Faculty of Chemistry, Jagiellonian University, 2. Doctoral School of Exact and Natural Sciences, 3. Faculty 2 – Environment and Natural Sciences, Brandenburg University of Technology Cottbus-Senftenberg) | OC1-19 | Enhanced Adsorption Capability by Modulating the Electron Density Distribution of Sorbents at Excited States *Shi-Chao Qi ¹ , Xiao-Qin Liu ¹ , Lin-Bing Sun ¹ (1. Nanjing Tech University) |
| 17:20 | Break (10 min) | | | | | |

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| 17:30 | Chair: | Satoshi Inagaki | | | | |
| | PL4 | Advances and Challenges in Zeolite synthesis and applications *Suk Bong Hong ¹ (1. Center for Ordered Nanoporous Materials Synthesis, Division of Environmental Science and Engineering, POSTECH) | | | | |
| 18:15 | | Intermission | | | | |
| 18:30 - 20:30 | Poster Session 1 (Room P) | | | | | |

July 23 (Tue)

| | Room A | Room B | Room C |
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| 9:00 | Chair: Shunsuke Tanaka PL5 Metal-organic frameworks for catalysis and energy *Qiang Xu ¹ (1. Southern University of Science and Technology (SUSTech)) | | |
| 9:45 | Break (10 min) | | |
| | Chair: Zhendong Liu | Chair: Svetlana Mintova | Chair: Dun-Yen Kang |
| | Chair: Kenta Iyoki | Chair: Akihiko Matsumoto | Chair: Teruoki Tago |
| 9:55 | KN7 Toluene Disproportionation for para-Xylene Production Catalyzed by Silica-coated MFI-type Zeolite: Generation of Shape Selectivity by Pore-opening Size Control but Not by Inactivation of Acid Site on External Surface *Naonobu Katada ¹ (1. Tottori University) | OB2-01 Aspects of Gas Storage: Confined Geometry Effects on the High-Pressure Adsorption Behavior of Supercritical Fluids Simon Eder ¹ , Jincheng Xu ¹ , *Matthias Thommes ¹ (1. Institute of Separation Science & Technology, Friedrich Alexander University, Erlangen-Nürnberg) | OC2-01 Charge Transfer Complexes between Gaseous Iodine and MOF Materials: Exploring Dynamics and Reactivity *Matthieu HUREAU ¹ , Pedro Henrique Andrade Morais ¹ , Christophe Volkringer ² , Thierry Loiseau ² , Hervé Vezin ¹ , Alain Moissette ¹ (1. LASIRE, 2. UCCS) |
| 10:10 | | OB2-02 Assessment of ZTC for hydrogen and methane adsorption: effect of structural and textural properties on storage capacity *Girolamo Giordano ¹ , Massimo Migliori ¹ , Enrico Catizzone ¹ , Daniela Cozza ¹ , Giuseppe Conte ² , Alfonso Policicchio ² , Oreste De Luca ² , Raffaele Giuseppe Agostino ² (1. CECaSP_Lab University of Calabria, 2. Dep.t of Physics University of Calabria) | OC2-02 Pore Engineering of Metal-Organic Frameworks for Ammonia Separation *Shihyuan Chen ¹ , Chung-Kai Chang ² , Dun-Yen Kang ² , Genki Horiguchi ¹ , Takehisa Mochizuki ¹ , Martin Keller ³ (1. National Institute of Advanced Industrial Science and Technology (AIST), 2. Department of Chemical Engineering, National Taiwan University, 3. Global Zero Emission Research Center (GZR), AIST) |
| 10:25 | OA2-03 Positive effects of controlled nanoconfined metals for LOHC regeneration *Maya El Zayed ¹ , Ludovic Pinard ¹ , Philippe Bazin ¹ , Francesco Dalena ¹ , Rhuizheng Zhang ¹ (1. Laboratoire Catalyse et Spectrochimie (LCS), Université de Caen, CNRS) | KN8 The IUPAC universal standard archive file for adsorption data *Stefan Kaske ^{1,2} (1. Fraunhofer IWS, 2. TU Dresden) | OC2-03 Fast Water Diffusion in Metal-Organic Frameworks *Ozgur Yazaydin ¹ , Romain Reocreux ¹ , Mengru Zhang ¹ , Stefani Setiono ¹ (1. University College London) |
| 10:40 | OA2-04 Ir/ITQ-1 catalyst for selective hydrogenolysis of methylcyclopentane in the presence of excess methylcyclohexane *Satoshi Inagaki ¹ , Yuki Maekawa ¹ , Rikuto Wakatsuki ¹ , Keiju Tokita ¹ , Kaname Yoshida ² , Yoshihiro Kubota ¹ (1. YOKOHAMA National University, 2. Japan Fine Ceramics Center) | | OC2-04 The Solid-Solid Interface Effect on Guest-Induced Structural Transition Behavior *Homare Arima ¹ , Shotaro Hiraide ¹ , Satoshi Watanabe ¹ (1. Kyoto University) |
| 10:55 | Break (10 min) | | |

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| | Chair: | Christopher Jones | Chair: | Matthias Thommes | Chair: | Matthieu Hureau |
| | Chair: | Masataka Ogasawara | Chair: | Yoshihiro Kamimura | Chair: | Akira Endo |
| 11:05 | OA2-05 | Post-Synthetic Control of Framework Aluminum Atoms and Silanol Defects in MOR Zeolites Yuki Fujikawa ¹ , Tatsushi Yoshioka ¹ , *Kenta Iyoki ^{1,2} , Takahiro Ohkubo ³ , Tatsuya Okubo ¹ , Toru Wakihara ¹ (1. UTokyo, 2. JST PRESTO, 3. Chiba Univ.) | OB2-05 | Stepwise adsorption of gmelinite zeolite and application to CO ₂ adsorbent *Yuto Higuchi ¹ , Chihiro Yasuda ¹ , Yuna Suetsugu ² , Shunsuke Tanaka ^{1,2} (1. Graduate School of Science and Engineering, Kansai University, 2. Department of Chemical, Energy and Environmental Engineering, Kansai University) | KN9 | Polyhedlite: Packing of Metal-Organic Polyhedra into Porous Solids *Syuhei Furukawa ¹ (1. Kyoto Institute for Advanced Study, Kyoto University) |
| 11:20 | OA2-06 | Supporting Metal Nanoparticles within Preformed Small- and Medium-pore Zeolites and Their Analogues assisted by Mercaptoamine *Changbum JO ¹ , Minseok Song ¹ , Eunji Eom ¹ (1. Inha University) | OB2-06 | Carbon dioxide capture using LTA zeolite: a step-by-step approach to large-scale applications Margherita Cavallo ¹ , Marco D'Agostini ² , Natale Gabriele Porcaro ¹ , Andrea Rizzetto ³ , *Melodj Dosa ¹ , Marco Piumetti ³ , Paolo Colombo ² , Francesca Bonino ¹ , Giorgia Franchin ² , Valentina Crocellà ¹ (1. Department of Chemistry, NIS and INSTM Centers, University of Torino, 2. Department of Industrial Engineering, University of Padova, 3. Department of Applied Science and Technology, Politecnico di Torino) | | |
| 11:35 | OA2-07 | A Generalized, Ultrafast Method to Encapsulate Metal Nanoclusters into Zeolites Tao Yu ¹ , Yundong Wang ¹ , Jianhong Xu ¹ , *Zhendong Liu ¹ (1. Department of Chemical Engineering, Tsinghua University) | OB2-07 | Towards "infinite" selectivity: Mg-exchanged GIS for CO ₂ /N ₂ and CO ₂ /CH ₄ separations *Jaouad Al-Atrach ¹ , Igor Golub ¹ , Edwin Clatworthy ¹ , Jérôme Rey ¹ , Ying Xiong ¹ , Ayoub Diali ² , Marie Desmurs ¹ , Michael Badawi ² , Rémy Guillet ¹ , Valentin Valtchev ¹ (1. Université de Normandie, ENSICAEN, UNICAEN, CNRS, Laboratoire Catalyse et Spectrochimie (LCS), 2. Université de Lorraine, CNRS, Laboratoire de Physique et Chimie Théoriques (LPCT)) | OC2-07 | Knock-Off Mechanism for Water Transport in UTSA-280 Membrane *Cheng-Hsun Hsu ¹ , Hsin-Yu Yu ¹ , Ho Jun Lee ² , Pei-Hao Wu ³ , Shing-Jong Huang ⁴ , Jong Suk Lee ^{2,5} , Tsyng-Yan Yu ^{3,6,7} , Yi-Pei Li ¹ , Dun-Yen Kang ^{1,6,8} (1. Department of Chemical Engineering, National Taiwan University, 2. Department of Chemical and Biomolecular Engineering, Sogang University, 3. IAMS, Academia Sinica, 4. Instrumentation Center, National Taiwan University, 5. Institute of Emergent Materials, Sogang University, 6. NTU-MST, National Taiwan University, 7. MSTP, TIGP, Academia Sinica, 8. Center of Atomic Initiative for New Materials, National Taiwan University) |

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| 11:50 | OA2-08 | <p>Large Pore Copper Silicate with Controllable Pore Composition for CO₂ Adsorption</p> <p>*Stanislav Ferdov¹, Boris Shivachev², Nikola Drenchev³, Konstantin Hadjiivanov³, Svetlana Simova⁴, Rositsa Titorenkova², Nadia Petrova², Mihail Tarassov², Rositsa Nikolova² (1. Physics Centre of Minho and Porto Universities (CF-UM-UP), University of Minho, 2. Institute of Mineralogy and Crystallography, Bulgarian Academy of Sciences, 3. Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, 4. Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences)</p> | OB2-08 | <p>Adsorption Behavior of Nitrous Oxide on Ion-Exchanged MOR-Type Zeolite</p> <p>*Hanlong Ya¹, Peidong Hu^{1,2}, Peipei Xiao³, Junko Nomura Kondo³, Toshiyuki Yokoi³, Tatsuya Okubo¹, Toru Wakihara^{1,2} (1. Department of Chemical System Engineering, The University of Tokyo, 2. Institute of Engineering Innovation, The University of Tokyo, 3. Institute of Innovative Research, Tokyo Institute of Technology)</p> | OC2-08 | <p>Interfacial Solar Steam Generation for Water Production using a Janus Membrane with MOF-303</p> <p>Dun-Yen Kang¹, *Yi-Hsuan Lin¹ (1. National Taiwan University)</p> |
| 12:05 | Lunch Box for Excursion | | LUNCH | | | |
| 13:00 | Departure for Excursion | | | | | |
| 13:30 | Excursion | | | | | |
| 18:30 | Dinner on Excursion | | | | | |

July 24 (Wed)

| | Room A | Room B | Room C |
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| 9:00 | Chair: Shigeo Satokawa PL6[CN] Zeolite Catalysis for a Sustainable Chemical Industry *Emiel J. M. Hensen ¹ (1. Eindhoven University of Technology) | | |
| 9:45 | Break (10 min) | | |
| | Chair: Heloise de Oliveira Pastore | Chair: Javier Ruiz-Martinez | Chair: Stefan Kaskel |
| 9:55 | Chair: Toshiyuki Yokoi | Chair: Junko N. Kondo | Chair: Nao Tsunoji |
| 10:10 | KN10[CN] Design of Amine-Containing Nanoporous Materials for CO₂ Capture from Engineering Perspectives *Minkee Choi ¹ (1. KAIST) | OB3-01 Optimization of Mo/MWW-type catalysts for the dehydroaromatization of shale gas *Eun Ji Choi ¹ , Yong Hyun Lim ¹ , Do Heui Kim ¹ , Jong Hun Kang ¹ (1. Seoul National University) | OC3-01 Influence of the organic structure-directing agents on the germanium distribution in the double four-rings of SCM-14 and SCM-15 germanosilicates - computational modeling Stoyan P. Gramatikov ¹ , Petko St. Petkov ¹ , Zhendong Wang ² , Weimin Yang ² , *Georgi N. Vayssilov ¹ (1. University of Sofia, Faculty of Chemistry and Pharmacy, 2. State Key Laboratory of Green Chemical Engineering and Industrial Catalysis; Sinopec Shanghai Research Institute of Petrochemical Technology Co. Ltd.) |
| | | OB3-02 Shape Selectivity for Naphthalene Ring Methylation Generated by Chemical Vapor Deposition of Silica on YFI Type (YNU-5) Zeolite *Ryota Kato ¹ , Manami Matsuo ¹ , Yu Moriwaki ¹ , Etsushi Tsuji ¹ , Naonobu Katada ¹ (1. Center for Research on Green Sustainable Chemistry, Tottori University) | OC3-02 Shape-Selective Sn-Zeolite Catalysts by i-ADOR Synthesis Approach Sarrah Abdi ¹ , Daniel N. Rainer ¹ , Martin Kubů ¹ , Christopher J. Heard ¹ , Jiří Čejka ¹ , *Mariya Shamzhy ¹ (1. Charles university) |
| 10:25 | OA3-03[CN] Fabrication of Swellable Organic-inorganic Hybrid Polymer and Its Catalytic Performance for CO ₂ Assisted Hydration of Propylene Epoxide Lulu Dang ^{1,2} , Ziyi Wang ^{1,2} , *Guohua Gao ^{1,2} (1. East China Normal University, 2. Institute of Eco-Chongming) | KN11 Porous liquid mediated synthesis of MOF Mixed-Matrix Membranes *Jorge Gascon ¹ (1. King Abdullah University of Science and Technology (KAUST)) | OC3-03 Electrochemical tools for record-breaking and fine-tuned heteroatom-containing zeolite synthesis *Gleb Ivanushkin ¹ , Mostafa Beydokhti Torke ¹ , Juan Salvador Martinez-Espin ² , Michiel Dusselier ¹ (1. KU Leuven, 2. Topsoe A/S) |
| 10:40 | OA3-04[CN] Catalytic Cycloaddition of CO ₂ to Epoxides over Ge-containing MFI Zeolite: an Operando FTIR Study *Francesco Dalena ¹ , Qiudi Yue ¹ , Svetlana Mintova ¹ (1. Normandie Univ, ENSICAEN, UNICAEN, CNRS, Laboratoire Catalyse et Spectrochimie) | | OC3-04 In situ Ultrasonic Monitoring of Zeolite and MOF Crystallization *Martin Hartmann ¹ , Hasan Baser ² , Marcus Fischer, Rebecca Reber ¹ , Wilhelm Schwieger ² (1. FAU Erlangen-Nürnberg, Erlangen Center for Interface Research and Catalysis, 2. Institute of Chemical Reaction Engineering, FAU Erlangen-Nürnberg) |
| 10:55 | Break (10 min) | | |

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| | Chair: Michiel Dusselier | Chair: Jong Hun Kang | Chair: Cristian Serre |
| | Chair: Takahiko Moteki | Chair: Yasutaka Kuwahara | Chair: Atsushi Ishihara |
| 11:05 | OA3-05[CN] Synthesis of Si-rich LTA type zeolite membrane for practical use of methanol-synthesis membrane reactor *Masahiro Seshimo ¹ , Akiyoshi Fujii ¹ , Yuta Nishikawa ² , Nobuyuki Shigaki ² , Hidetoshi Kita ¹ , Katsunori Yogo ¹ (1. Research Institute of Innovative Technology for the Earth, 2. JFE Steel Corporation) | OB3-05 Influence of Anion Species on Crystallization and Aluminum Localization in MFI-Zeolites Synthesized via Neutral Alcohol Routes *Liang Zhao ¹ , Yong Wang ^{1,2} , Peipei Xiao ¹ , Hiroto Toyoda ¹ , Yao Lu ¹ , Toshiyuki Yokoi ^{1,2} (1. Institute of Innovative Research, Tokyo Institute of Technology, 2. iPEACE223 Inc.) | KN12 Synthetic Methods to Tune Active Site Distribution in MFI Zeolites and Consequences for Regioselective Arene Methylation Sopuruchukwu Ezenwa ¹ , Andrew Norfleet ¹ , *Rajamani Gounder ¹ (1. Purdue University) |
| 11:20 | OA3-06[CN] Zeolites applications for direct CO ₂ hydrogenation to aromatics and oxygenates via tandem catalytic reactions *Jong Wook Bae ¹ , Xu Wang ¹ , Mansoor Ali ¹ (1. Sungkyunkwan University) | OB3-06 Methanol to olefins: Effect of template alteration on SAPO-34 properties and MTO activity Mohammad Ghavipour ¹ , Ralph Al Hussami ¹ , *Jan Kopycinski ¹ (1. McGill University) | |
| 11:35 | OA3-07[CN] CO ₂ Hydrogenation to Renewable Methane on Ni/Ru Modified micro-mesoporous ZSM-5 Zeolites *Margarita Popova ¹ , Manuela Oykova ¹ , Motmtchil Dimitrov ¹ , Daniela Karashanova ² , Daniela Kovacheva ³ , Genoveva Atanasova ³ , Ágnes Szegedi ⁴ (1. Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, 2. Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences, 3. Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, 4. Research Centre for Natural Sciences, Institute of Materials and Environmental Chemistry, Hungary) | OB3-07 The Effect of Active Sites Locations in the Methanol-to-Aromatics Process *Teng Li ¹ (1. King Abdullah University of Science & Technology) | OC3-07 A Mesostructural Design of Phenylene Containing Aluminum Organophosphonate Using CnTMA Type Surfactant Atsushi Takamori ¹ , *Tatsuo Kimura ¹ (1. National Institute of Advanced Industrial Science and Technology (AIST)) |
| 11:50 | OA3-08[CN] Separation of Methane/Nitrogen Using Ionic Liquidic Zeolites (ILZ) By Pressure Swing Adsorption (PSA): from Laboratory to Industry *Guoping Hu ^{1,2,4} , Gang Kevin Li ² , Paul A. Webley ³ , Eric F. May ⁴ (1. Ganjiang Innovation Academy, Chinese Academy of Sciences, 2. The University of Melbourne, 3. Monash University, 4. The University of Western Australia) | OB3-08 The role of acid sites of ZSM-5 in catalytic dehydration of methanol and ethanol mixtures: effect of acidity on conversion and products distribution Giorgia Ferrarelli ¹ , Paolo Bruno ¹ , *Enrico Catizzone ¹ , Massimo Migliori ¹ , Girolamo Giordano ¹ (1. University of Calabria) | OC3-08 Synthetic Routes to Templated Porous Polymers for Proton Conduction Applications *Valerie Brunskill ¹ , George Shimizu ¹ (1. University of Calgary) |
| 12:05 | Luncheon Seminar <MicrotracBEL> | LUNCH | |

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| 13:30 | Chair: | Yoshihiro Kubota | | | | |
| | PL7[CN] | Elucidating Design Principles of Type 3 Porous Liquids for Selective Carbon Capture *Tina M. Nenoff ¹ , Jessica M. Rimsza ¹ , Matthew J. Hurlock ¹ , Matthew S. Christian ¹ , Dennis C. Robinson Brown ¹ (1. Sandia National Laboratories) | | | | |
| 14:15 | Break (10 min) | | | | | |
| | Chair: | Martin Hartmann | Chair: | Jorge Gascon | Chair: | Rajamani Gounder |
| | Chair: | Masaru Ogura | Chair: | Toru Wakihara | Chair: | Peidong Hu |
| 14:25 | KN13[CN] | Small pore zeolite synthesis control in the context of CO₂ conversion *Michiel Dusseelier ¹ (1. Katholieke Universiteit Leuven) | OB3-09 | How to activate molecular oxygen into an active form that can oxidize CH ₄ *Agnieszka Kornas ¹ , Edyta Tabor ¹ , Dominik Kazimierz Wierzbicki ² , Stepan Sklenak ¹ , Jiri Dedecek ¹ , Radim Pilar ¹ , Sofiia Tvorynska ¹ , Kinga Mlekodaj ¹ (1. J. Heyrovsky Institute of Physical Chemistry, 2. Paul Scherrer Institut) | OC3-09 | Synthesis of Hollow Porous Silica Nanoreactors Encapsulating VO _x -decorated Pt Nanoparticles for the Reverse Water-Gas Shift Reaction *Yasutaka Kuwahara ¹ , Caiyun Xu ^{1,2} , Takehiro Yamada ¹ , Shenghu Zhou ² , Hiromi Yamashita ¹ (1. Osaka University, 2. East China University of Science and Technology) |
| 14:40 | | | OB3-10 | Direct Oxidation of Methane to Methanol over Transition-Metal-Free Ferrierite Zeolite Catalysts *PEIPEI XIAO ¹ , Yong Wang ¹ , Yao Lu ¹ , Kengo Nakamura ¹ , Hermann Gies ^{1,2} , Toshiyuki Yokoi ^{1,3} (1. Nanospace Catalysis Unit, Institute of Innovative Research, Tokyo Institute of Technology, 2. Institute of Geology, Mineralogy and Geophysics, Ruhr-University Bochum, 3. iPEACE223 Inc.) | OC3-10 | The Effect of the Support Pore Structure on the Oxidative Desulfurization of dibenzothiophene Ardian Nurwita ¹ , *Maciej Trejda ¹ (1. Adam Mickiewicz University, Poznań, Faculty of Chemistry) |
| 14:55 | OA3-11[CN] | Controlled synthesis of coke-resistant mesoporous ZSM-5 catalysts for polyolefins upgrading *Victor Drozhzhin ¹ , Nikolay Kosinov ¹ , Emiel J.M. Hensen ¹ (1. Department of Chemical Engineering and Chemistry, Eindhoven University of Technology) | KN14 | Role of intra-porous solvent environment in the promotion of liquid-phase catalysis *Yuriy Román-Leshkov ¹ (1. Department of Chemical Engineering, Massachusetts Institute of Technology (MIT)) | OC3-11 | Will zeolites still remain key players in the XXIth Century Energy Roadmap ? *Benoit Louis ¹ (1. UNIVERSITY OF STRASBOURG) |
| 15:10 | OA3-12[CN] | Property Optimization of Zeolite Beta for Low-Temperature Catalytic Conversion of Polyolefins in Open Semi-batch Reactors Hankyeul Kang ¹ , Insoo Ro ² , Ki Hyuk Kang ³ , Soohwa Jeong ⁴ , *Jong Hun Kang ¹ (1. Seoul National University, 2. Seoul National University of Science and Technology, 3. Korea Research Institute of Chemical Technology, 4. Korea Institute of Industrial Technology) | | | OC3-12 | Proton Conduction over the Dealuminated Zeolite for the Water Electrolysis *Keigo Tashiro ¹ , Taisei Saito ¹ , Kojiro Goto ¹ , Junki Masuda ¹ , Takumi Miyakage ² , Shuhei Shimoda ² , Takashi Toyao ² , Nao Tshunoji ³ , Ken-ichi Shimizu ² , Hiroshige Matsumoto ⁴ , Shigeo Satokawa ¹ (1. Seikei Univ., 2. Hokkaido Univ., 3. Hiroshima Univ., 4. Kyushu Univ.) |
| 15:25 | Break (10 min) | | | | | |

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| | Chair: | Michele L. Sarazen | Chair: | Minkee Choi | Chair: | Benoit Louis |
| | Chair: | Motomu Sakai | Chair: | Koki Muraoka | Chair: | Simancas Raquel |
| 15:35 | OA3-13[CN] | Development of Hydrotalcite-coated ZSM-5 with Acid-Base Functionality for Glucose Conversion to 5-hydroxymethylfurfural *Kentaro Kimura ¹ , Jeraldine Docil Calangi ¹ , Teruoki Tago ¹ (1. Tokyo institute of Technology) | OB3-13 | Structure-Reactivity Relationships of Novel [Cu-O-Cu] ₂ ⁺ and [CuOH] ⁺ in Cu-Exchanged Zeolites for Methane Oxidation to Methanol *Dieter Plessers ¹ , Hannah M. Rhoda ² , Alexander J. Heyer ² , Max L. Bols ¹ , Jing Ma ¹ , Robert A. Schoonheydt ¹ , Edward I. Solomon ² , Bert F. Sels ¹ (1. Center for Sustainable Catalysis and Engineering, KU Leuven, 2. Department of Chemistry, Stanford University) | KN15 | Exploring new opportunities in porous materials assembly *Ana Palčić ¹ (1. Rudjer Boskovic Institute) |
| 15:50 | OA3-14[CN] | Deactivation and Reductive Regeneration of Sn-Beta for Liquid-Phase Biomass Conversion *Juan S. Martinez-Espin ¹ , Søren Tolborg ¹ , Yunfei Bai ^{1,2} , Anna Katerinopoulou ¹ , Lars Pilsgaard Hansen ¹ , Ulla Gro Nielsen ³ , Esben Taarning ¹ (1. Topsoe A/S, 2. Aarhus University, 3. University of Southern Denmark) | OB3-14 | Mechanism of the Direct Oxidation of Methane to Methanol by Dioxxygen on the Distant Binuclear Fe(II) Cationic Sites in Ferrierites *Stepan Sklenak ¹ , Jiri Dedecek ¹ , Agnieszka Monika Kornas ¹ (1. J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences) | | |
| 16:05 | OA3-15[CN] | Catalytic Co-pyrolysis of Pre-treated Wheat Straw and Cameline Oil over n-ZSM-5 as Effective Route to Enhance Mono-cyclic Aromatic Hydrocarbons Production Maurizio Pagano ^{1,2} , *Jennifer Cueto ¹ , Inés Moreno ^{1,2} , David Pedro Serrano ^{1,2} (1. Imdea Energy, 2. Rey Juan Carlos University) | OB3-15 | Catalysis of zeolite for polypropylene decomposition in light gas oil *Takumi Omata ¹ , Tohru Kamo ² , Motomu Sakai ¹ , Masahiko Matsukata ^{1,2,3} (1. Department of Applied Chemistry, Waseda University, 2. Research Organization for Nano & Life Innovation, Waseda University, 3. Advanced Research Institute for Science and Engineering, Waseda University) | OC3-15 | Delamination of Inorganic Montmorillonite Clay in Water –Acetonitrile Mixed Solvents *Teruyuki Nakato ¹ , Kosei Orio ¹ , Emiko Mouri ¹ , Munehiro Kubota ² , Yusuke Yamauchi ^{3,4} , Hirokatsu Miyata ^{3,4} (1. Kyushu Institute of Technology, 2. Kunimine Industries Co. Ltd., 3. ERATO, JST, 4. Nagoya Univ.) |
| 16:20 | OA3-16[CN] | Alternative to Claus process through COS as intermediate:CO ₂ and H ₂ S competitive adsorption and reaction on sodium zeolites *Marco Fabbiani ¹ (1. LCS, CNRS-ENSICAen-UniCaen) | OB3-16 | Relationship between Al–Al distance and catalytic activity for benzene methylation in Co/MFI zeolite: A periodic DFT study *Nobuki Ozawa ¹ , Etsushi Tsuji ² , Keigo Kanehara ² , Taiga Sakamoto ² , Hitoshi Matsubara ² , Naonobu Katada ² , Momoji Kubo ³ (1. Kyoto University, 2. Tottori University, 3. Tohoku University) | OC3-16 | V-substituted ETS-10: effect of vanadium on band-gap values *Heloise de Oliveira Pastore ¹ , Lanousse Petiotte ¹ , Monize Picinini ¹ (1. Institute of Chemistry, University of Campinas) |
| 16:35 | Poster Session 2 (Room P) | | | | | |
| 18:35 | Intermission | | | | | |
| 18:40 | Banquet / Student Party | | | | | |

July 25 (Thu)

| | Room A | Room B | Room C | | | |
|-------|--------------------------|--|---|--|---|--|
| 9:00 | Chair: Takahiko Takewaki | | | | | |
| 9:15 | PL8 | Reengineering of Zeolite Synthesis and the Processings *Tatsuya Okubo ¹ (1. The University of Tokyo) | | | | |
| 9:30 | | | | | | |
| 9:45 | Break (10 min) | | | | | |
| | Chair: Chia-Min Yang | Chair: Ludovic Pinard | Chair: Wen-Yueh Yu | | | |
| | Chair: Naonobu Katada | Chair: Tatsuo Kimura | Chair: Shunsaku Yasumura | | | |
| 9:55 | KN16 | OB4-01 | Toluene Alkylation to Mono-benzylated Toluene over Micro-mesoporous Zeolite: Effect of Post-synthetic Treatment and Catalytic Application *Rajib Bandyopadhyay ¹ , Hardik Koshti ¹ (1. Pandit Deendayal Energy University) | OC4-01 | Design Synthesis of novel zeolites with bifunctional organic structure-directing agents *Hao Xu ¹ , Kun Lu ¹ , Jilong Wang ¹ , Yejun Guan ¹ , Peng Wu ¹ (1. East China Normal University) | |
| 10:10 | | Toward Intrinsic Catalytic Rates and Selectivities of Hierarchical Zeolites in the Presence of Limiting Diffusion and Deactivation Hayat I. Adawi ¹ , Jun Zhi Tan ¹ , Cole W. Hullfish ¹ , *Michele L. Sarazen ¹ (1. Princeton University) | OB4-02 | Isomerization of methylenedianilines using shape-selective zeolites *Sam Van Minnebruggen ¹ , Ka Yan Cheung ¹ , Trees De Baerdemaeker ² , Niels Van Velthoven ¹ , Matthias Degelin ¹ , Hiroto Toyoda ⁴ , Andree Iemhoff ² , Imke Müller ² , Andrei-Nicolae Parvulescu ² , Torsten Mattke ² , Jens Ferbitz ² , Qinming Wu ³ , Feng-Shou Xiao ³ , Toshiyuki Yokoi ⁴ , Nils Bottke ² , Dirk De Vos ¹ (1. Centre for Membrane Separations, Adsorption, Catalysis and Spectroscopy for Sustainable Solutions, KU Leuven, 2. Group Research, BASF, 3. Department of Chemistry, Zhejiang University, 4. Nanospace Catalysis Unit, Tokyo Institute of Technology) | OC4-02 | Impact of the Si/Al Ratio of the Seed of CON-type Zeolite Catalyst *Masato Sawada ¹ , Yao Lu ¹ , Hiroaki Onozuka ² , Susumu Tsutsuminai ² , Toshiyuki Yokoi ¹ (1. Tokyo Institute of Technology, 2. Mitsubishi Chemical Corporation) |
| 10:25 | OA4-03 | A rational design of the crystallinity of frameworks in the synthetic process of aerosol-assisted mesoporous alumina *Ryutaro Wakabayashi ¹ , Tatsuo Kimura ¹ (1. National Institute of Advanced Industrial Science and Technology (AIST)) | OB4-03 | Hydrocracking of n-Heptadecane Using Pt-Supported Zeolite-Al ₂ O ₃ Composite Catalysts for Production of Jet Fuel Fraction Shunma Mitsuoka ¹ , Kousuke Murata ¹ , Yuugo Nishiura ¹ , Tadanori Hashimoto ¹ , Ning Chen ² , Yuki Jonoo ² , Sho Kawabe ² , Keita Nakao ² , *Atsushi Ishihara ¹ (1. Mie University, 2. Tosoh Corporation) | OC4-03 | Competition Between Mononuclear and Binuclear Copper Sites across Different Zeolite Topologies *Chris Paolucci ¹ , Asanka Wijerathne ¹ (1. University of Virginia) |

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| 10:40 | OA4-04 | Connectivity defects and the location of fluoride in silicalite-1 synthesized with tetra-alkyl ammonium and tetra-alkyl phosphonium as organic structure directing agents Joaquin Martinez-Ortigosa ¹ , Reisel Millan ¹ , Jorge Simancas ¹ , J. Alejandro Vidal-Moya ¹ , Mercedes Boronat ¹ , Charlotte Charlotte Martineau-Corcoss ² , *Teresa Blasco ¹ , Fernando Rey ¹ (1. Instituto de Tecnología Química, Universitat Politècnica de València -Consejo Superior de Investigaciones Científicas, (UPV-CSIC), 2. CortecNet, Les Ulis) | KN17 | Viscosity-Confined Dry Gel Conversion Processes for Zeolite Membrane Fabrication Quyen Tran ¹ , Anush Venkataraman ¹ , Shaowei Yang ¹ , Byunghyun Min ¹ , Akshay Korde ¹ , Qiang Fu ¹ , Christopher W. Jones ¹ , *Sankar Nair ¹ (1. School of Chemical & Biomolecular Engineering, Georgia Institute of Technology) | OC4-04 | A study of (de)activation of Fe/CHA catalysts for NH ₃ -SCR of NO _x by hydrothermal treatment *Damian Broens ^{1,2} , Veselina Georgieva ³ , Ming-Feng Hsieh ³ , Iulian Dugulan ² , Emiel Hensen ¹ (1. Eindhoven, University of Technology, 2. Delft, University of Technology, 3. Johnson Matthey, Technology Center Chilton/Sonning) |
| 10:55 | OA4-05 | Template-confinement-induced entropy effects mediate ITH/ITR intergrown zeolite synthesis *Mingyu Zhao ¹ , Xiao Chen ¹ , Fei Wei ¹ (1. Tsinghua university) | | | OC4-05 | Hydrothermal Aging Enhances Nitrogen Oxides Reduction over Iron-Exchanged Zeolites at 150 °C *Xuechao Tan ¹ , Pablo García-Aznar ² , German Sastre ² , Suk Bong Hong ¹ (1. POSTECH, 2. Instituto de Tecnología Química (UPV-CSIC), Universidad Politècnica de Valencia) |
| 11:10 | Break (10 min) | | | | | |
| | Chair: | Teresa Blasco | Chair: | Rajib Bandyopadhyay | Chair: | Christopher Paolucci |
| | Chair: | Koji Miyake | Chair: | Takamichi Matsuno | Chair: | Kentaro Kimura |
| 11:20 | OA4-06 | Insights into Hierarchical Zeolite Formation during Post-synthetic Base Leaching via In-situ MAS NMR *Nina Tsereshko ¹ , Sang-Ho Chung ¹ , Teng Li ¹ , Polina Lavrik ¹ , Javier Ruiz-Martinez ¹ (1. King Abdullah University of Science and Technology) | OB4-06 | Solvent-free hydrocracking of oleic acid over zeolite-supported Pd catalysts *Nataliya D. Shcherban ^{1,2} , Mark Martinez-Klimov ² , Olha Yevdokimova ² , Mykhailo Kurmach ¹ , Päivi Mäki-Arvela ² , Dmitry Yu. Murzin ² (1. Department of Porous Substances and Materials, L.V. Pisarzhevsky Institute of Physical Chemistry, National Academy of Sciences of Ukraine, 2. Johan Gadolin Process Chemistry Centre, Faculty of Science and Engineering, Åbo Akademi University) | OC4-06 | Research on Methanol-SCR reaction on FER zeolite *Han Sun ¹ , Dekai Liu ¹ , Haijun Chen ¹ (1. Nankai University) |
| 11:35 | OA4-07 | Direct visualization in the intracrystalline architecture of zeolite particles -How does Al distribution in a submicron scale can be observed after dealumination of various zeolites?- *Yoshihiro Kamimura ¹ , Tetsuya Kodaira ¹ , Akira Endo ¹ (1. National Institute of Advanced Industrial Science and Technology (AIST)) | OB4-07 | Zeolite Y-supported Highly-dispersed Monometallic Cobalt Sites for Acetylene Semi-hydrogenation *Essa Ali Alhashmi ¹ , Klaus Hellgardt ¹ (1. Imperial College London) | OC4-07 | Spectroscopic Characterizations of Active Copper Species in Cu-Exchanged Y-Zeolite for Selective Catalytic Reduction of Nitric Oxide with Ammonia *Wen-Yueh Yu ¹ , Ming-Pei Lin ¹ (1. National Taiwan University) |
| 11:50 | OA4-08 | Preparation and catalytic application of Ti-containing YFI-type zeolite with hierarchical pore-structure *Shengxiang Zhang ¹ , Satoshi Inagaki ¹ , Yoshihiro Kubota ¹ (1. Division of Materials Science and Chemical Engineering, Yokohama National University) | OB4-08 | Anisole disproportionation on HZSM-5: the key role of Si/Al ratio on auto-inhibition effect Nathan Pichot ¹ , Jean-Wilfrid Hounfodj ³ , Valentin Valtchev ¹ , Svetlana Mintova ¹ , Jean-Pierre Gilson ¹ , michael badawi ² , *Ludovic Pinard ¹ (1. CNRS, 2. University of Lorraine, 3. University of Benin) | OC4-08 | Simultaneous Removal of NO and N ₂ O by NH ₃ and CH ₄ on Fe-Zeolite *Shuran Liu ¹ , Shunsaku Yasumura ¹ , Masaru Ogura ¹ (1. Institute of Industrial Science, The University of Tokyo) |

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| 12:05 | OA4-09 | Thiolated Hollow Mesoporous Silica Nanoparticles as an Immunoadjuvant for Bladder Cancer Chemotherapy *Chia-Min Yang ¹ , Cheng-Che Chen ² , Yu-Chen Fa ² , Yen-Yu Kuo ¹ , Yi-Chun Liu ² , Chih-Yu Lin ¹ , Yu-Huan Lu ¹ , Yu-Han Chiang ² , Li-Chen Wu ³ , Ja-an A. Ho ² (1. National Tsing Hua University, 2. National Taiwan University, 3. National Chi Nan University) | OB4-09 | Synthesis of Bio-Jet Fuel Precursors through Aldol Condensation of Furfural and Cyclopentanone using Titanium-Modified Dendritic ZSM-5 Zeolites *Jennifer Cueto ¹ , Daniel de la Calle ¹ , María del Mara Alonso-Doncel ¹ , Elena A. Giner ¹ , Rafael A. García Muñoz ² , David P. Serrano ^{1,2} (1. IMDEA Energy Institute, 2. Rey Juan Carlos University) | | |
| 12:20 | | | | | | |
| 12:25 | Closing Remarks | | | | | |
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| 13:00 | | | | | | |