Poster presentation

July 22, Monday
Poster I

P1-01	Image Analysis & Machine Learning Approaches to Synthesis of Zeolite Membranes	*Saki Moriya1, Kota Murakami1, Naoyuki Sakamoto1, Takahiko Takewaki1	(1. Mitsubishi Chemical Corporation)
P1-02	Influence of preparation conditions on the dehydration performance of carbon molecular sieve membranes	*IZUMI KUMAKIRI1, Hiroto Nishi1, Kazuhisa Ninomiya1	(1. Yamaguchi University)
P1-03	Direct Formation of Mixed-Ligand MOF Membranes for Ethanol Dehydration and Gas Separation	*Li-Tang Chi1, Dun-Yen Kang1	(1. National Taiwan University)
P1-04	Application of FAU zeolite membranes to promote isopropyl palmitate synthesis by selective removal of methanol.	*Chulita Pornpitakdamrong1,2, Izumi Kumakiri1, Worapon kiatkittipong2	(1. Yamaguchi University, 2. Silpakorn University)
P1-05	Ionic liquid-containing silsesquioxane modified NaZSM-5 membranes for H_2O/H_2 separation at high temperature	*Yuichiro Hirota1, Kasumi Tani1, Motomu Sakai2	(1. Nagoya Institute of Technology, 2. Waseda University)
P1-06	Fabrication of Hierarchical Zeolite Membranes via Vapor Phase Transformation using Mesoporous Silica Spheres as Porogen	Huayu Zhang1, Lucy Wang1, Chunjie Liu1, *Zhengbao Wang1	(1. Zhejiang University)
P1-07	Fabrication and Gas Permeation Properties of Metal–Organic Framework Nanosheet Membranes	*Zilun Guo1, Shunsuke Tanaka1	(1. Kansai University)
P1-08	Zeolite membrane for fruit juice concentration in forward osmotic operation	*Motomu Sakai1, Eri Negishi1, Masahiko Matsukata1	(1. Waseda University)
P1-09	Fabrication of Single and Bilayer MFI and BEA Type Zeolite Membranes for Catalytic Membrane Reactor	*ABDULJELIL WORKU SABIR1, Pyung Soo Lee1	(1. Chung Ang University)
P1-10	Synthesis of carbon molecular sieve membrane from polymer precursor layers with zeolite nanosheet	*DONGYUN HAN1, Pyung Soo Lee1	(1. Chung-Ang University)
P1-11	Zeolite Nanosheet Carbon Composite for Photothermal Evaporation	*Se Wan Kim1, Pyung Soo Lee1	(1. Chung-Ang University)
P1-12	Zeolite MFI films on wafer substrates by secondary growth method	*TAE WON KIM1, PYUNG SOO LEE1	(1. Chung-Ang university)
P1-13	Investigating Gas Separation Properties of MOF-Based Membranes	Dun-Yen Kang1, *Li-Huai Kuo1	(1. National Taiwan University)
P1-14	Zeolite-Templated Carbons: a New Solid-State Synthesis Route	*Alain Moissette1, Steven Compere2, Annaig Le Person1, Thibaud Aumond2,	(1. University of Lille, 2. University of Poitiers)

		Isabelle Batonneau-Gener2, Hervé Vezin1, Alexander Sachse2	
P1-15	Bi-functional MWW-type Cobalt Silicate Catalyst for Selective Catalytic Oxidation of Ammonia	*Siyeon Lee1, Sang Woo Byun2, Sungjoon Kweon1, Hyeonwoo Shin2, Trinh Thuan Khiet Nguyen1, Hyung-Ki Min3, Sung Bong Kang2, Min Bum Park1	(1. Incheon National University, 2. Gwangju Institute of Science and Technology, 3. Lotte Chemical Research Institute)
P1-16	Synthesis of Multi-cage Small Pore Zeolites via Cooperative Structure Direction Using Multiple OSDAs	*Xiaoduo Qi1, Vivek Vattipalli1, Lihua Shi2, Mingming Wei1, Yu Dai1, Robert McGuire1, Ahmad Moini1	(1. BASF Environmental Catalyst and Metal Solutions, 2. China Catalyst Holding Co. Ltd.)
P1-17	Generating Ultra-small Zeolite Subcrystal with Infinitesimal Intracrystalline Diffusion Limitation and Their Catalytic Behavior	*Yahong Zhang1, Ke Du1, Zhizheng Sheng1,2	(1. Fudan University, 2. SINOPEC Corp)
P1-18	Cobalt(III) complexes as structure-directing agents in the synthesis for zeolites	*Janina Carolin Höner1, Andreas Schaate1, Yasar Krysiak1	(1. Leibniz University Hannover)
P1-19	The Development of Novel Structure-Directing Agents for the Synthesis of MSE-type Zeolites	*Yusuke Nakanishi1, Keisuke Araki2, Masato Yoshioka1, Naoto Nakazawa1, Ryo Mitsuhashi1, Keita Nakao1	(1. Tosoh Corporation, 2. Sagami Chemical Research Institute)
P1-20	Nickel Silicate MFI-Type Zeolite Catalyst Prepared by Interzeolite Transformation: Investigation of Transition Zeolitic Structures and Chemical States of Nickel Species	*Sungjoon Kweon1, Yunhye Cho1, Junseong Park1, Min Bum Park1	(1. Incheon National University)
P1-21	Rational Design of Zeolites for Catalysis: Myth or Reality?	*Benoit Louis1	(1. University of Strasbourg)
P1-22	move to Oral Presentation (OA4-05)		
P1-23	Strategies to Control the Al Distribution in Zeolites: Thermodynamic, Kinetic Aspects and KFI Examples	*Juna Bae1, Michiel Dusselier1	(1. Katholieke Universiteit Leuven)
P1-24	Machine-learning assistance to design OSDAs for the synthesis of small-pore zeolites.	*Cecilia Paris1, Estefanía Bello1, Soon Kwon2, Daniel Schwalbe-Koda3, Mathias Nero4, Yuriy Román2, Avelino Corma1, Tom Willhammar4, Rafael Gómez-Bombarelli3, Manuel Moliner1	(1. Instituto de Tecnología Química UPV-CSIC, 2. Department of Chemical Engineering. Massachusetts Institute of Technology, 3. Department of Materials Science and Engineering. Massachusetts Institute of Technology, 4. Stockholm University)
P1-25	Scale-up synthesis of AEI-type zeolite with excellent NH_3-SCR catalytic performance and low N_2O emissions	*Qiao Han1, Hisashi Shima1, Takahiko Takewaki1	(1. Mitsubishi Chemical Corporation)
P1-26	A versatile ultrasonic reactor for high temperature zeolite	*Elena Brozzi1, Michiel Dusselier1, Simon Kuhn1	(1. KU Leuven)

	synthesis: towards fast and controlled continuous manufacturing		
P1-27	Tuning the amount of Aluminum pairs in the Mordenite Zeolite to improve Oxidation of Methane to Methanol.	*Peter Ng'ang'a Njoroge1, Sebastian Prodinger1	(1. University Of Oslo)
P1-28	Preparation of organic-inorganic composite using SiO_2-pillared $HCa_2Nb_3O_{10}$	*Masataka Ogasawara1, Rena Akanuma1, Yuichiro Hirai1, Kanji Saito1,2, Sumio Kato1	(1. Akita University, 2. Waseda University)
P1-29	Nanozeolites from Inorganic Multi-Cation Precursor Suspensions: Synthesis and Properties	*Edwin B. Clatworthy1, Aymeric Magisson1, Sajjad Ghojavand1, Svetlana Mintova1	(1. Normandie Université, UNICAEN, ENSICAEN, CNRS)
P1-30	Distant Binuclear Vanadium V(II) Cationic Sites in Ferrierites: Local Geometry and Redox Properties	*Stepan Sklenak1, Jiri Dedecek1, Agnieszka Monika Kornas1	(1. J. Heyrovsky Institute of Physical Chemistry of the Czech Academy of Sciences)
P1-31	Excited-state dynamics in a cerium metal−organic framework	*Zhao Xue Luan1, Xin Ping Wu1	(1. ECUST)
P1-32	Optimizing ZIF-67: A Comprehensive Study on Gas Separation Efficiency and Catalytic Stability	*Enrique V. Ramos-Fernandez1,2, David Villalgordo-Hernandez2, Vijay Velisoju1, Javier Narciso2, Jorge Gascon1, Pedro Castaño1	(1. King Abdullah University of Science and Technology (KAUST), 2. Universidad de Alicante)
P1-33	Screening hydrophobic zeolites on their ability to remove emerging contaminants from water	*Jakob Brauer1,2, Michael Fischer1,2	(1. Crystallography & Geomaterials Research, Faculty of Geosciences, University of Bremen, 2. Bremen Center for Computational Materials Science and MAPEX Center for Materials and Processes, University of Bremen)
P1-34	Ambient Temperature Gas Sorption in a van Der Waals Solid	*Daniel Padeanu1, George Shimizu1	(1. University of Calgary)
P1-35	A novel multifunctional sensor for electrochemical detection and removal sulfadiazine based on antimony-doped zeolite	Xinyu Zhu1, Zhuozhe Li1, Yifeng E1, Xiyuan Tong1, Yuying Jiang1, Pengyan Wei1, Qianqian Bian1, *Kun Qian1	(1. Jinzhou Medical University)
P1-36	Selective External Acidity Control of ZSM-5 Zeolites Via Quaternary Ammonium Hydroxides Treatment For Shale Gas Aromatization.	*Yangho Jeong1, Yong Hyun Lim1, Do Heui Kim1, Jong Hun Kang1	(1. Seoul National University)
P1-37	An efficient synthesis of metal-organic framework CALF-20 in aqueous methanol solution at room temperature	*Shumpei Yonetsu1, Yuto Higuchi1, Shunsuke Tanaka1, Saki Moriya2, Miki Yamada2, Takahiko Takewaki2	(1. Kansai University, 2. Mitsubishi Chemical Corporation)
P1-38	Influence of Aging Treatment on CHA-type Zeolite Synthesis with Understanding	*Yukie Okada1, Yuki Sada1, Shoko Miyagi1, Hiroki Yamada2, Koji Ohara3,	(1. The University of Tokyo, 2. Japan Synchrotron Radiation Research Institute /

	Properties of Amorphous Precursors	Yutaka Yanaba1, Masato Yoshioka4, Tomoya Ishikawa4, Yusuke Naraki4, Tsuneji Sano1, Tatsuya Okubo1, Raquel Simancas1, Toru Wakihara1	SPring-8, 3. Shimane University, 4. Tosoh Corporation)
P1-39	Comparative studies focused on OSDA for designed synthesis of SSZ-13	*Muyao Li1, Koki Muraoka2, Takahiko Moteki3, Masaru Ogura1	(1. IIS The University of Tokyo, 2. Chemsys The University of Tokyo, 3. Appchem & Biochemeng Shizuoka University)
P1-40	Synthesis of SSZ-13 Zeolite using liquid crsatal display waste glass (LCDWG) as silica source	*Tsung-Cheng Yang1, Tsung-Chou Hsu1, Ethan Andrew Yang1, Chia-Min Yang1	(1. Department of Chemistry, National Tsing Hua University)
P1-41	Synthesis of Porous Aluminosilicates using Silanol-modified Oligosiloxanes as Building Blocks	*Hikaru Mochizuki1, Takuya Hikino2, Takamichi Matsuno1,3, Atsushi Shimojima1,3	(1. Department of Applied ChemistryWaseda University, 2. Department of Advanced Science and Engineering, Waseda University, 3. Kagami Memorial Research Institute for Materials Science and Technology, Waseda University)
P1-42	A Plausible Consideration in Interzeolite Conversion Process by Tracking pH Values Enables Significant Enhancement of GAM-2 Solid Yield	*Gensuke Nakai1, Kazuma Oka1, Soki Shimizu1, Kenichi Komura1	(1. Gifu university)
P1-43	Carbonized MOFs for High Adsorption Capacity: Correlation Between Surface Areas and Recovery Yields for Carbonized Zeolitic Imidazolate Frameworks (ZIFs)	*Hiroshi Matsutaka1,2, Aya Kashifuku1, Manabu Inukai1, Takaaki Orii1, Takeharu Yoshii2, Hirotomo Nishihara2,3, Naoki Uchiyama1,4, Daigo Miyajima1,5	(1. RIKEN, 2. Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, 3. Advanced Institute for Materials Research (WPI-AIMR), Tohoku University, 4. Atsumitec Co., Ltd., 5. The Chinese University of Hong Kong)
P1-44	Surface Modification of FAU-Zeolites with Hydrosilanes Having Different Molecular Sizes	Maki Fukuda1, Ryosuke Aoi1, Eiichi Yamamoto1, *Shinji Iwamoto1	(1. Gunma University)
P1-45	High-efficiency ethylene scavenger: hydrophobicity and increased ethylene adsorption	*Xicheng Jia1,2, Mutjalin Limlamthong2, Alex Yip2	(1. China University of Petroleum-Beijing at Karamay, 2. The University of Canterbury)
P1-46	Unravel the Adsorption and Mass Transfer Mechanisms of Benzene Series and OVOCs by Using ZIF-8 Derivatives with Controllable Pore Structure and Metal Site	*Junxian Qin1, Junjie Yang1, Yun Hu1	(1. South China University of Technology)
P1-47	Liquid-phase Adsorption Properties of Functionalized UiO-66 Frameworks as Adsorbents for Water Treatment	*Azuki Ono1, Ayu Tsukada1, Hiroki Konno1	(1. Toho University)

P1-48	Core-shell structured CHA zeolite/hydrophobic hyper-cross-linked polymer composite with improved propane adsorption capacity under dry and wet conditions	*Liye Bao1, Kai Zhou1, Haijun Chen1	(1. Nankai University)
P1-49	Effect of Acidic Functional Groups of Porous Activated Carbon on Removal of Mercury in Petroleum	*Yoshihiro Ikushima1, Yuki Nakanishi2, Kosuke Takahashi2, Hiroyuki Yamaura2, Syuhei Yamaguchi2, Hidenori Yahiro2	(1. IH technology, 2. Ehime University)
P1-50	Thermal Desorption Spectroscopic Study for Hydrogen Isotope Separation by CHA Zeolites	*Akira Taguchi1, Haruka Hamashima1	(1. HRC, University Toyama)
P1-51	A Novel Synthesis Route to SFH-type Aluminosilicate Zeolite Having Extra-large Pore	*Yibing Cai1, Masato Sawada1, Yao Lu1, Junko N. Kondo1, Toshiyuki Yokoi1	(1. Tokyo Institute of Technology)
P1-52	Synthesis and Application of Organic-inorganic Hybrid Zeolites	*Dan Zhou1, Qinghua Xia1	(1. Hubei University)
P1-53	Creation of the first drug candidate for trimethylaminuria (TMAU) using zeolite	*Shu Hikima1, Ryohji Ohnishi1, Noriko Minami1, Takahiko Takewaki1, Takumi Matsumoto2, Yuh Kohyama2, Junpei Kimura2, Ayako Nagae2, Yukiko Shoji2, Yuka Ikenaga2, Yui Hibino2	(1. Mitsubishi Chemical Corporation, 2. Mitsubishi Tanabe Pharma Corporation)
P1-54	Transition Metal Adsorption Analysis on MFI-Zeolite with Varying Si/Al Molar Ratios	*Woo Jin Yang1, Pyung Soo Lee1	(1. Chung-Ang University)
P1-55	PVDF/MFI electrospun nanofibers for vibration sensor	*Hee Ju Ko1, Pyung Soo Lee1, Hae Eun Na1	(1. Chung-Ang University)
P1-56	Development of a TiO_2/MFI nanosheets composite photocatalyst materials for water purification	*Nak Gyun Rim1, Pyung Soo Lee1	(1. Chung-Ang University)
P1-57	MOFs-based Photocatalysts on the Construction of Oxidation-reduction Coupled System	*Yun Hu1, Junxian Qin1, Sijia Liu1	(1. South China University of Technology)
P1-58	t-Bu(R,R)Co^{II}(salen)@FDU-12-C(TMOS) as Cathode Catalysts for Asymmetric Electrocarboxylation of 1-Phenylethyl Chloride	*Huan Wang1, Jia-Xing Lu1	(1. East China Normal University)
P1-59	Analysis of hydroxyl groups in zeolite defects using high-temperature vacuum TPD	*Takeharu Yoshii1, Shunsuke Shimizu1, Ryota Osuga2, Hirotomo Nishihara1	(1. Tohoku University, 2. Hokkaido University)
P1-60	Structure Determination of $Co[(bipyridine)_3]^{2+}$ Complexes Encapsulated in FAU Zeolite Using Single Crystal X-ray Diffraction	*Hidekazu Goto1, Yoshinobu Yokomori2, Koji Nishi2	(1. Tokyo Institute of Technology, 2. National Defense Academy)
P1-61	Probing the surface of metal oxides by DNP-enhanced ^{17}O	*Hiroki Nagashima1, Julien Trebosc3, Yoshihiro Kon1,	(1. National Institute of Advanced Industrial Science

	NMR spectroscopy	Olivier Lafon2, Jean-Paul Amoureux2,4	and Technology, 2. University of Lille, CNRS, Unité de Catalyse et Chimie du Solide, 3. University of Lille, CNRS, Institut Michel Eugène Chevreul, 4. Bruker Biospin)
P1-62	Elucidating Active Sites for Ammonia Synthesis over Cs-Promoted Ru Catalysts Supported on Mesoporous Carbon Plates with Varied Degree of Graphitization	Shihyuan Chen1, *Li-Yu Wang2	(1. National Institute of Advanced Industrial Science and Technology (AIST), 2. National Tsing Hua University)
P1-63	Three-dimensional B-FeP/N-RGO electrocatalysts for hydrogen precipitation over a wide pH range	*Yuanyuan Wang1,2, Shenqi Wei1,2, Liyi Dai1,2	(1. State Key Laboratory of Petroleum Molecular & Process Engineering, East China Normal University, 2. Shanghai Key Laboratory of Green Chemistry and Chemical Process Greening, East China Normal University)

July 24, Wednesday
Poster II

P2-01[CN]	Theoretical Investigation of Photocatalytic C–C Bond Cleavage in Lignin Boosted by Triazine-Heptazine-Based Carbon Nitride Heterojunctions	*Yi Chun Chu1, Xin Ping Wu1	(1. ECUST)
P2-02[CN]	Catalytic Glucose Conversion over Zeolitic Stannosilicates: A Comparative Study of Structural Properties	*Yunhye Cho1, Sungjoon Kweon1, Jun Seong Park1, Linh Mai Tran1, Min Bum Park1	(1. Incheon National University)
P2-03[CN]	Effect of acidity of zeolite on catalytic cracking of low-density polyethylene	*Soshi Tsubota1, Koji Miyake1, Yoshiaki Uchida1, Norikazu Nishiyama1	(1. Osaka university)
P2-04[CN]	Exploring the amine-impregnated CO_2 adsorbents for Direct Air Capture	*Nao Tsunoji1, Kumar Rajesh1, Masahiro Sadakane1	(1. Hiroshima University)
P2-05[CN]	BEA Zeolite Catalysts: Synthesis, In-Situ Incorporation, and Performance in CO_2 Methanation	*Galal A. Nasser1, Akolade Idris Bakare2, Mohammed Ahmed Sanhoob2, Jan Kopyscinski1	(1. McGill University, 2. King Fahd University of Petroleum & Minerals (KFUPM))
P2-06[CN]	Zeolite-filled Mixed Matrix Membrane for CO_2 separation	*Miki Sugita1, Saki Moriya1, Takahiko Takewaki1	(1. Mitsubishi Chemical Corporation)
P2-07[CN]	Mechanochemical assisted preparation of lignin-based O-rich N-doped porous carbon with plentiful ultramicropore for green and efficient CO_2	*lishu shao1,2, Yingluo He1, Noritatsu Tsubaki1	(1. University of Toyama, 2. Central South University of Forestry and Technology)

	capture		
P2-08[CN]	Copper doped small pore zeolites for CO_2 capture by honeycomb rotor with low temperature regeneration	*XinQian Fang1, Haijun Chen1	(1. Nankai University)
P2-09[CN]	Reducing the usage of silane coupling agent in the synthesis of amine-grafted mesoporous silica and its application for CO_2 adsorption	*Jinrui Li1, Nao Tsunoji1, Masahiro Sadakane1	(1. Hiroshima University)
P2-10[CN]	CO2 Capture Using Low Silica X Zeolite Synthesized from Low-grade Coal Gangue via a Two-step Activation Method	*Chenghao Liu1,2, Fu Rao1, Yalou Guo3, Guoping Hu1	(1. Ganjiang Innovation Academy, Chinese Academy of Sciences, 2. University of Science and Technology of China, 3. The University of Melbourne)
P2-11[CN]	Synthesis of phosphorous-modified chabazite membranes for gas separation	*Sadao Araki1, Koki Maekawa1, Nao Tsunoji2, Yuichiro Hirota3, Ayumi Ikeda4, Yasuhisa Hasegawa4, Hideki Yamamoto1	(1. Kansai University, 2. Hiroshima University, 3. Nagoya Institute of Technology, 4. National Institute of Advanced Industrial Science and Technology)
P2-12[CN]	A systematic study on the optimization of zeolite Y for the upcycling of polypropylene waste	*Claudia Fabris1, Sebastian Prodinger1, Valentina Giovanna Brunella2, Elena Groppo2, Silvia Bordiga2, Stian Svelle1	(1. University of Oslo, 2. University of Turin)
P2-13[CN]	Layered Doubled Hydroxide as electrocatalysts for CO_2RR: an in-situ ATR-IR study	*Melodj Dosa1, Margherita Cavallo1, Ryosuke Nakazato2, Natale Gabriele Porcaro1, Matteo Signorile1, Matthias Quintelier3, Joke Hadermann3, Silvia Bordiga1, Nataly Carolina Rosero-Navarro2,4, Kiyoharu Tadanaga2, Valentina Crocellà1, Francesca Bonino1	(1. University of Turin, 2. Hokkaido University, 3. University of Antwerp, 4. Instituto de Cerámica y Vidrio, CSIC)
P2-14[CN]	Preferential adsorption of propane on Si-beta zeolite	Satoshi Inagaki1, *Kengo Tsunoda1, Masato Hayashi1, Yuko Nishi1, Keita Nakao2, Naoto Nakazawa2, Yoshihiro Kubota1	(1. Yokohama National University, 2. Tosoh Corporation)
P2-15[CN]	Anthraquinone-modified graphene oxide electrode applied to electro-swing adsorption system for the capture and release of	*Keigo Kumano1, Kazuya Ohuchi1, Yuta Nishina2, Masato Komoda2, Yoshihiro Kubota1, Satoshi	(1. Yokohama National University, 2. Okayama University)

	CO_2	Inagaki1	
P2-16[CN]	Catalytic cracking of n-paraffin over zeolite-Pt/SiO2 in the presence of hydrogen	*Takuya Kitagawa1, Satoshi Inagaki1, Yoshihiro Kubota1	(1. Yokohama National University)
P2-17[CN]	Selective synthesis of methanol from CO_2 using zeolite-encapsulated Cu-ZnO catalyst	*Koki Awano1, Ryokuto Kanomata1, Kentaro Kimura1, Hiroyasu Fujitsuka2, Raquel Simancas3, Syuhei Yasuda4, Takeshi Matsumoto5, Toru Wakihara3, Toshiyuki Yokoi1, Teruoki Tago1	(1. Tokyo Insititute of Technology, 2. Kyoto University, 3. The University of Tokyo, 4. Toyama University, 5. Hokkaido Research Organization)
P2-18[CN]	Adsorption of Small Molecules on Zeolite SSZ-45	*Susana Valencia1, Alberto Barros1, Jose Valero1, Fernando Rey1	(1. Instituto de Tecnologia Quimica (UPV-CSIC))
P2-19[CN]	MgO-CeO_2/Zeolite nanocomposites – effective catalysts for cyclic carbonate synthesis from styrene under CO_2 pressure	Oleksiy Shvets1, Mykhailo Kurmach1, Dmytro Kyryliuk1, *Nataliya D. Shcherban1	(1. L.V. Pisarzhevskii Institute of Physical Chemistry NAS of Ukraine)
P2-20[CN]	Exfoliated Layered Metal Oxide-Supported Ruthenium Catalysts for Base-free Oxidation of 5-Hydroxymethylfurfural into a Renewable Bio-plastic Precursor	*Nuttapat Thiensuwan1,2, Sivashunmugam Sankaranarayanan2, Toshiyuki Yokoi3, Chawalit Ngamcharussrivichai1, 2,4	(1. Department of Chemical Technology, Chulalongkorn University, 2. Center of Excellence in Catalysis for Bioenergy and Renewable Chemicals (CBRC), Chulalongkorn University, 3. Tokyo Institute of Technology, 4. Center of Excellence on Petrochemical and Materials Technology (PETROMAT), Chulalongkorn University)
P2-21[CN]	Highly Selective Iron-based Catalysts Derived from Al-containing MIL-53 for CO_2 Hydrogenation to Light Olefins	*Hannarong Pitayachinchot1,2, Prasert Reubroycharoen1,2,3, Pattarapan Prasassarakich1,3, Chawalit Ngamcharussrivichai1, 2,3	(1. Department of Chemical Technology, Chulalongkorn University, 2. Center of Excellence in Catalysis for Bioenergy and Renewable Chemicals (CBRC), Chulalongkorn University, 3. Center of Excellence on Petrochemical and Materials Technology (PETROMAT), Chulalongkorn University)
P2-22[CN]	Development of zeolite-encapsulated nickel particulate catalysts for	*Mana Takano1, Tsuki Yokosawa1, Pimwipa Tayraukham1,2,	(1. Tokyo institute of Technology, 2. Suranaree University of

	steam reforming of biomass pyrolysis oil	Kentaro Kimura1, Jatuporn Wittayakun2, Teruoki Tago1	Technology)
P2-23[CN]	Synthesis and Applications in Molecular Separations of CAU-23 Membrane	*Chia-Hui Chuang1, Dun-Yen Kang1	(1. National Taiwan University)
P2-24[CN]	Interfacial Synthesis of UTSA-280 Membrane on Tubular Support for Gas Separation	*Hsiang-Yu Wang1, Dun-Yen Kang1	(1. National Taiwan University)
P2-25[CN]	MOF-808 Membranes for Applications in Molecular Separations	*Pei-Shan Hsu1, Dun-Yen Kang1	(1. National Taiwan University)
P2-26[CN]	Metal-Organic Framework Membranes for Efficient Carbon Dioxide Separation	*Li-Wei Hsiao1, Dun-Yen Kang1	(1. National Taiwan University)
P2-27[CN]	Cu_2O activated MOF-derived Bi_2O_3 toward efficient photoelectrochemical CO_2 reduction	*Wanli Li1, Jingwei Hong1, Chaohai Wei1, Yun Hu1	(1. South China University of Technology)
P2-28[CN]	Porous Metal-Organic Frameworks for Electroreduction of Carbon Dioxide to Ethylene	*Wei-Yin Sun1	(1. Nanjing University)
P2-29[CN]	Influence of the Microtexture and Surface Chemical Heterogeneity of Microporous Carbons on the Adsorption of CO_2	Yoon Ku Kwon1, In Taek Oh1, *Moon Hyeon Kim1	(1. Daegu University)
P2-30	Impact of phosphorus introduction methods on local environments of zeolite support: the case study of phosphorus ZSM-5	*Ming Feng Hsieh1, Stephen P Day1	(1. Johnson Matthey Technology Centre)
P2-31	Preparation of Fe complexes encapsulated into mesoporous zeolite for oxidation of benzene with hydrogen peroxide	*Syuhei Yamaguchi1, Yuito Ishida1, Hitomu Koga1, Hidenori Yahiro1	(1. Ehime University)
P2-32	Co-confined core-shell silicalite-1 zeolite catalyst promoting propane dehydrogenation	*Shohei Kubota1, Koji Miyake1, Yoshiaki Uchida1, Norikazu Nishiyama1	(1. Osaka university)
P2-33	Cation-induced Speciation of Port-Size in Mordenite Zeolite Synthesis and their Influence on the Selective Methane Oxidation	*Peter Ng'ang'a Njoroge1, Sebastian Prodinger1, Bjørn Gading Solemsli1, Izar Capel Berdiell1, Tomas Cordero-Lanzac1, Agnieszka Seremak1, Nishant Patel2, Elisa Borfecchia2, Unni Olsbye1, Pablo	(1. University of Oslo, 2. University of Torino, 3. Topsoe A/S)

		Beato3, Stian Svelle1	
P2-34	Cracking Reactivity of ZSM-5 Zeolite Prepared from Vietnamese Coal Ash Components	Hung Viet Quang Nguyen1, Koki Kunieda1, Shinya Matsuura2, Tadanori Hashimoto1, *Atsushi Ishihara1	(1. Mie University, 2. Mie Prefecture Industrial Research Institute)
P2-35	Preparation and catalytic performance of YFI-type zeolite for methanol-to-olefin reaction	*Kaoru Ito1, Keisuke Nishimura1, Satoshi Inagaki1, Yoshihiro Kubota1	(1. Yokohama National University)
P2-36	Selective catalytic reduction of NOx by methanol on zeolite catalysts	*Haijun Chen1, Han Sun1, Dekai Liu1 and Hao Cheng2	(1. Nankai University, 2. Dalian Institute of Chemical Physics)
P2-37	Platinum deposited onto 2D and 3D mesoporous silica materials for the catalytic oxidation of m-xylene and methanol	*Ching-Shiun Chen1,2, Tse-Ching Chen2, Hung-Chi Wu1, Pin-Hsuan, Huang1, Hsien-Ming Kao3	(1. Chang Gung University, 2. Chang Gung Memorial Hospital, 3. National Central University)
P2-38	Surface Modification of Methanol-SCR DeNOx Catalyst and Its Potassium Sulfate Resistance Performance	*Dekai Liu1, Han Sun1, Chenyang Li1, Ziying Hong1, Haijun Chen1	(1. Nankai University)
P2-39	Guest molecule induced 3D atomic distortion of chemical bonds in zeolite imaged by 4D-STEM with subangstrom resolution	*Yi-Chi Wang1,2, Hao Xiong1, Xiao Chen1, Lin Gu2, Fei Wei1	(1. Department of Chemical Engineering, Tsinghua University, 2. School of Material Science and Engineering, Tsinghua University)
P2-40	Synthesis of Bisphenol F from Formaldehyde and Phenol using Zeolite Y Catalysts	Yeongseo Park1, Seoyeon Hwang1, *Seyeon Won1, Yehee Kim1, Sooyeon Hong1, Jong Ki Jeon1	(1. Kongju National University)
P2-41	Effective stabilization of metal nanoparticles on layered zeolite supports	*Michal Mazur1, Ang Li1, Daria Sudakova1, Samuel Kolesár1, Muhammad Numan2, Changbum Jo2	(1. Charles University, 2. Inha University)
P2-42	Layered silica zeolites of MWW topology doped with titanium as catalysts for diphenyl sulfide oxidation process in the presence of hydrogen peroxide	*Wiktoria Dubiel1,2, Anna Furgał1, Andrzej Kowalczyk1, Urbano Díaz3, Lucjan Chmielarz1	(1. Faculty of Chemistry, Jagiellonian University, 2. Doctoral School of Exact and Natural Sciences, Jagiellonian University, 3. Instituto de Tecnología Química, Universitat Politècnica de València–Consejo Superior de Investigaciones Científicas)
P2-43	Propylene hydrogenation over Pt-supported on organic-functionalized	*Taehoon Kim1, Numan Muhammad1, Changbum Jo1	(1. Inha University)

	zeolites: Effect of diluent and functional groups		
P2-44	Synthesis of MFI zeolite-encapsulated metal nanoparticulate catalysts by dry-gel conversion method for its application for naphtha cracking reaction	*Misaki Endoh1, Nodoka Nakatani1, Kentaro Kimura1, Teruoki Tago1	(1. Tokyo Institute of Technology)
P2-45	Hierarchical Zeolite Synthesized without OSDA and its Coke Deposition Resistance	*Hidekazu Goto1, Kentaro Kimura1, Teruoki Tago1	(1. Tokyo institute of Technology)
P2-46	Incorporation of Impregnated Zeolite Carbon in P84 Co-polyimide Matrix Polymer Membrane to Improve Gas Separation Performance	Triyanda Gunawan1*, Nurul Widiastuti1*, Alvin Rahmad Widyanto1, Hamzah Fansuri1, Wan Norharyati Wan Salleh2 , Ahmad Fauzi Ismail2 , Rijia Lin3, Julius Motuzas3 , Simon Smart3	(1. Institut Teknologi Sepuluh Nopember, 2. Universiti Teknologi Malaysia, 3. The University of Queensland)
P2-47	UV Raman Spectroscopic Insight into the Evolution of Titanium Species in Ti-MWW Zeolite during Acid Treatment	*Shaoqing Jin1, Hongmin Sun1, Weimin Yang1	(1. SINOPEC Shanghai Research Institute of Petrochemical Technology)
P2-48	Near-infrared Spectroscopic Observation for the Adsorption Dynamics of H_2O Molecules within the Micropores of Zeolites	*Masato Takeuchi1, Hiroki Sumabuchi1, Akihiro Mikuni1, Masaya Matsuoka1	(1. Osaka Metropolitan University)
P2-49	High Selectivity CO Hydrogenation to Aromatics Employing ZnCr2O4/ZSM-5 with Fully Exposed Sinusoidal Channels	*Xiaoyu Liang1, Xiao Chen1, Fei Wei1	(1. Tsinghua University)
P2-50	Binuclear cationic sites in the FER zeolite: a new concept with using vanadium species	Mariia Lemishka1,2, Jiri Dedecek1, Edyta Tabor1, Stepan Sklenak1, Dalibor Kaucky1, Hana Jirglova1, Kinga Mlekodaj1, *Agnieszka Kornas1	(1. J. Heyrovsky Institute of Physical Chemistry, 2. University of Pardubice)
P2-51	Efficient catalysts for low-temperature NH_3-SCR process obtained by modification of MCM-41 and MCM-48 silicas with copper using ADP method	*Aleksandra Gomułka1,2, Andrzej Kowalczyk1, Pegie Cool3, Lucjan Chmielarz1	(1. Faculty of Chemistry, Jagiellonian University, 2. Doctoral School of Exact and Natural Sciences, Jagiellonian University, 3. University of Antwerp)
P2-52	Hydroxyl group substitution reaction of allyl alcohols using BEA	*kotaro kawaguchi1, Kazu Okumura1	(1. kogakuin University)

	type zeolite as a catalyst		
P2-53	Ti-MWW zeolites functionalized with transition metals in the conversion of nitrogen oxides: influence of structure, synthesis procedure and chemical composition on catalytic performance	*Aleksandra Jankowska1, Klaudia Fidowicz1, Natalia Kokowska1, Andrzej Kowalczyk1, Lucjan Chmielarz1	(1. Jagiellonian University)
P2-54	IR spectroscopic characterization of acid sites on a commercial bentonite for dehydration of primary alcohols	*Margherita Cavallo1, Melodj Dosa1, Adil Allahverdiyev2, Valentina Crocellà1, Harald Gröger2, Francesca Bonino1	(1. Università di Torino, 2. Bielefeld University)
P2-55	Low-Temperature Pre-Oxidation of NO to NO_2 with Mesoporous MnO_2-CeO_2 Catalysts for Fast SCR Process	*Chungwei Fu1, Chun-Nan Kuo1, Ju-Chen Hsu1, Yu-Lun Lai1	(1. Industrial Technology Research Institute)
P2-56	Pyridine Induced Activity and Selectivity Variation of Lewis Acid Zeolites	*Jan Přech1, Klára Veselá1, Jun Xie1, Kinga Gołąbek1	(1. Charles University)
P2-57	Liquid and Solid Phase Characterization of AEI-type Zeolite Precursor Gels and In-situ Raman Spectroscopic Study on the Formation Mechanism of the Zeolite	*Masakazu Koike1, Qiao Han2, Kohei Takatani1, Yasuko Tomida1, Takahiko Takewaki2	(1. MCL, SIC, Mitsubishi Chemical Corporation, 2. IML, SIC, Mitsubishi Chemical Corporation)
P2-58	Aromatic Formation over Zeolite Catalysts from Rapid Pyrolysis of Plastics Using Tandem Reactor System	*Kazumasa Oshima1, Yuki Takeda1, Fuka Tsuneyoshi1, Masahiro Kishida1	(1. Kyushu University)
P2-59	Methanol to Olefins Catalysis with USY@ZSM-5 Composite	*Francesco Dalena1, Ruizhe Zhang2, Hongjuan Zhao3, Jiujiang Wang3, Honghai Liu3, Camille Longue1, Ludovic Pinard1, Zhengxing Qin2, Svetlana Mintova1	(1. Normandie University, ENSICAEN, UNICAEN, CNRS, 2. China University of Petroleum (East China), 3. PetroChina Company Limited)
P2-60	How does a bottom-up approach using biomass for the synthesis of hierarchical ZSM-5 zeolites affect the MTO reaction?	*Camille Longue1,2, Yu Zhang2, Qianwen Zheng2, Rogeria Bingre2, Camila Gomes Flores2, Alessandra Vieira Silva3, Marcelo Maciel Pereira3, Ludovic Pinard1, Benoît Louis2	(1. CNRS-University of Strasbourg, 2. ENSICAEN - Laboratoire Catalyse & Spectrochimie – LCS, 3. Universidade Federal do Rio de Janeiro)
P2-61	Catalytic performance of MEL type aluminosilicate and gallosilicate zeolites in methanol-to-aromatics reactions	*Jundai Tsukamoto1, Koji Miyake2, Norikazu Nishiyama2, Yuichiro Hirota1	(1. Nagoya Institute of Technology, 2. Osaka University)

P2-62	Preparation of MFI zeolite-encapsulated metal particle catalysts by zeolite conversion of metal-supported silica gel and their application to dehydrogenation reaction	*RAICHI ASAMI1, Kenichi YOSHIDA1, Hidekazu GOTO1, Kentaro KIMURA1, Teruoki TAGO1	(1. Tokyo Institute of Technology)
P2-63	Unconventional coke composition originating from catalytic fast pyrolysis model reaction	N Pichot1,2,3, *Thomas Lemaître3, N Chaouati3, Y Pouilloux1, A Dufour2, Ludovic Pinard3	(1. Université de Poitiers, 2. Université de Lorraine, 3. ENSICaen)
P2-64	Rapid and facile synthesis of nanosized Silicalite-1 zeolites from solid silica in a semi-solid-like system via a two-step crystallization method	*Qiancheng Zheng1, Zhengbao Wang1	(1. Zhejiang University)