

July 25, Monday, 19:00-20:00, Live discussion (Online)

P1001	Accelerated discovery of reverse water-gas shift catalysts using extrapolative machine learning approach	Duotian CHEN, Shinya MINE, Gang WANG, <u>Takashi TOYAO</u> , Ichigaku TAKIGAWA, Koichi MATSUSHITA, Hitoshi MAZAKI, Ken-ichi SHIMIZU	Hokkaido University
P1002	Synthesis of secondary mono-alcohols from terminal vicinal alcohols over Ru-ReOx/SiO <sub>2</sub> catalyst	<u>Ben LIU</u> , Naoyuki SEKINE, Yoshinao NAKAGAWA, Masazumi TAMURA, Mizuho YABUSHITA, Keiichi TOMISHIGE	Tohoku University
P1003	Selective hydrodeoxygenation of guaiacol to phenolic compounds over iron-ceria-based catalysts with platinum single-atom alloy clusters as a promoter	<u>Congcong LI</u> , Yoshinao NAKAGAWA, Mizuho YABUSHITA, Keiichi TOMISHIGE	Tohoku University
P1004	Synthesis of primary anilines via acceptorless dehydrogenative aromatization catalyzed by supported Pd nanoparticles using NH <sub>3</sub> as a nitrogen source	Hui LI, Takafumi YATABE, Satoshi TAKAYAMA, Kazuya YAMAGUCHI	The University of Tokyo
P1005	Selective removal of inorganic elements from real fast pyrolysis bio-oil using sorbents at ambient conditions	Emma-Olsson MANSSON, Abdenour ACHOUR, Olov OHRMAN, Prakhar ARORA, Derek CREASER, Louise OLSSON	Chalmers University of Technology
P1006	Heterogeneously catalyzed selective decarbonylation of aldehydes by highly dispersed non-electron-rich Ni(0) nanospecies supported on CeO <sub>2</sub>	Takehiro MATSUYAMA, Takafumi YATABE, Tomohiro YABE, Kazuya YAMAGUCHI	The University of Tokyo
P1007	Solvolytic reaction of benzyl phenyl ether in aqueous ethanol solution under high-pressure carbon dioxide	<u>Kenkichi TANIGUCHI</u> , Ety Nurlia KUSUMAWATI, Hidetaka NANAŌ, Chandrashekhar V. RODE, Osamu SATO, Aritomo YAMAGUCHI, Masayuki SHIRAI	Iwate University
P1008	A powerful catalyst for high-speed processing of CH <sub>4</sub> dry reforming: spiral-type Ni-based-structured catalyst	<u>Shuzo HATANO</u> , Masaki TANEBAYASHI, Ryo WATANABE, Yoshiumi KOHNO, Choji FUKUHARA	Shizuoka University
P1009	Construction of a novel hydrogen production system with a combination of methane steam reforming and solid carbon capture	<u>Hosea-Adinata DJAJAKIRANA</u> , Masaki TANEBAYASHI, Ryo WATANABE, Choji FUKUHARA	Shizuoka University
P1010	Methane dry reforming process for solid carbon capture from CO <sub>2</sub> : Enhancement of carbon capture rate	<u>Kosuke TAKAHASHI</u> , Masaki TANEBAYASHI, Yoshito MATSUI, Ryo WATANABE, Choji FUKUHARA	Shizuoka University
P1011	Hydrogenolysis of benzofuran over supported platinum catalysts in aqueous ethanol solution	<u>Ety-Nurlia KUSUMAWATI</u> , Yushi HIRAIISHI, Kenkichi TANIGUCHI, Hidetaka NANAŌ, Osamu SATO, Aritomo YAMAGUCHI, Masayuki SHIRAI	Iwate University
P1012	Reverse water gas shift reaction via chemical-looping on Cu modified In <sub>2</sub> O <sub>3</sub>	Sota KAKIHARA, Jun-ichiro MAKIURA, Takuma HIGO, Yuichiro HIRANO, Yasushi SATO, Yasushi SEKINE	Waseda University
P1013	Role of potassium in K-Co/SiO <sub>2</sub> catalyst for CO <sub>2</sub> -FTS	<u>Shohei HARADA</u> , Shigeo SATOKAWA, Masaru OGURA	The University of Tokyo
P1014	Low-temperature conversion of carbon dioxide to methane promoted by an electric field	Ryota YAMANO, Kensei YAMADA, Shuhei OGO, Takuma HIGO, Yasushi SEKINE	Waseda University
P1015	Production of normal paraffins with even-carbon-numbered via hydrodeoxygenation of methyl laurate over Ni-based catalysts	<u>Kihoon KIM</u> , Mingming PENG, Eika W QIAN	Tokyo University of Agriculture and Technology
P1016	Effect of support species on auto-methanation performance of Ru-based catalyst	<u>Ren OZAKI</u> , Nozomu HIRATA, Ryo WATANABE, Choji FUKUHARA	Shizuoka University
P1017	Synthesis of oxazolidinone compounds from sugar alcohol derived from chitin	<u>Takuya SAGAWA</u> , Hirokazu KOBAYASHI, Mieno HASHIZUME, Aisushi FUKUOKA	Tokyo University of Science
P1018	Effects of zeolite frameworks and pore-opening structures on catalytic bioethanol dehydration: <i>Operando</i> DRIFTS study	<u>Ploychanok IADRAT</u> , Chadatip RODAUM, Peerapol PORNSETMETAKUL, Anawat THIVASASITH, Chularat WATTANAKIT	Vidyasirimedhi Institute of Science and Technology
P1019	A green approach for alcohols transformations over a heterogeneous cobalt catalyst	<u>Endah SUARSIH</u> , Yusuke KITA, Keigo KAMATA, Michikazu HARA	Tokyo Institute of Technology
P1020	Promoter effect of Ti and Zr on catalytic activity of iron-oxide based catalysts for production of phenol from degraded lignin	<u>Hiroya ISHIMARU</u> , Takuya YOSHIKAWA, Yuta NAKASAKA, Eri FUMOTO, Shinya SATO, Takao MASUDA	Hokkaido University
P1021	Na-salt-modified Au nanoparticles supported on metal oxides as catalysts for intramolecular cyclization of alkyenoic acid	<u>Qi-An HUANG</u> , Takaaki IKEDA, Seiya KAWAI, Eiji YAMAMOTO, Haruno MURAYAMA, Tamao ISHIDA, Tetsuo HONMA, Makoto TOKUNAGA	Kyushu University
P1022	Acrylic acid production from lactic acid over hydroxyapatite solid solution catalysts	Ayumu ONDA, <u>Momoka INUI</u> , Yuki MATSUURA, Kazuya IMAMURA, Shuhei OGO	Kochi University
P1023	Three-step synthesis of 1,3-butanediol from ethanol over heterogeneous and homogeneous catalysts	<u>Mahlet N. GEBRESILLASE</u> , Jeong SEO	Hanyang University
P1024	Vapor-phase dehydration of 1,4-butanediol using cerium oxide catalyst	<u>Kairi ONODERA</u> , Yosuke NAKAJI, Mizuho YABUSHITA, Yoshinao NAKAGAWA, Keiichi TOMISHIGE	Tohoku University

P1025	Hydrogenolysis of tetrahydrofuran-2-carboxylic acid over tungsten-modified rhodium catalyst	Kota HASAMA, Takehiro ASANO, Yoshinao NAKAGAWA, Masazumi TAMURA, Mizuho YABUSHITA, Keiichi TOMISHIGE	Tohoku University
P1026	Electroconversion of lower alcohols into value-added chemicals	Takumi HAKAMATA, Daisuke KAWAGUCHI, Shady ABDELNASSER, Miru YOSHIDA-HIRAHARA, Hitoshi OGIHARA, Hideki KUROKAWA	Saitama University
P1027	Investigation of passive layer formation on Ta <sub>3</sub> N <sub>5</sub> photoanode	Sang-Youn CHAE, Eun Duck PARK	Ajou University
P1028	Uniform NiFeO <sub>x</sub> catalyst as a protective layer of transparent Ta <sub>3</sub> N <sub>5</sub> photoanode for efficient and stable oxygen evolution reaction	Yudai KAWASE, Tomohiro HIGASHI, Keisuke OBATA, Kazunari DOMEN, Kazuhiro TAKANABE	The University of Tokyo
P1029	Photothermal enhancement of sacrificial hydrogen evolution using granular photocatalysts	Hiroaki SAKURAI, Takuro MORINO, Hiroyuki ENOMOTO, Tetsuro JIN	National Institute of Advanced Industrial Science and Technology (AIST)
P1030	Photocatalytic steam reforming of methane over fine crystals of potassium hexatitanate prepared by a flux method	Wirya SARWANA, Akira YAMAMOTO, Hisao YOSHIDA	Kyoto University / Sumbawa University of Technology
P1031	Photocatalytic oxygen formation on cobalt hydroxide modified TiO <sub>2</sub> nanosheets under visible light irradiation	Hidehisa HAGIWARA, Katsuaki HAYAKAWA	University of Toyama
P1032	Synthesis of narrow bandgap GaN-ZnO solid-solutions exposing characteristic facets and their photocatalytic activity	Natsutogi IWASA, Zhenyuan TENG, Guijun MA, Takashi HISATOMI, Kazunari DOMEN	Shinshu University
P1033	Indium doped copper tungstate for enhanced photoelectrochemical water splitting	Jin Uk LEE, Jeong Hun KIM, Jae Sung LEE	UNIST
P1034	Highly active photocatalyst property of tobermorite intercalated with TiO <sub>2</sub>	Shinnosuke KAMEI, Masaki YOSHII, Naoki TOYAMA, Shigeki FURUKAWA	Nihon University
P1035	Visible-light CO <sub>2</sub> reduction using an FeOOH-loaded Al <sub>2</sub> O <sub>3</sub> catalyst and a Ru photosensitizer	Daehyeon AN, Shunta NISHIOKA, Tomoki KANAZAWA, Shunsuke NOZAWA, Kazuhiko MAEDA	Tokyo Institute of Technology
P1036	Water splitting under visible light over a Z-scheme photocatalyst sheet using metal sulfide and BiVO <sub>4</sub> photocatalysts necked with a conductive polymer	Kenjo NAGATSUKA, Shunya YOSHINO, Yuichi YAMAGUCHI, Akihiko KUDO	Tokyo University of Science
P1037	Photoacoustic infrared spectroscopic analysis of energy levels and accumulation process of trapped electrons in titanium (IV) oxide photocatalyst particles	Tatsuki SHINODA, Naoya MURAKAMI	Kyushu Institute of Technology
P1038	Development of metal complexes with various ligands as an electron mediator in Z-schematic water splitting under visible light irradiation	Kotaro WADA, Shunya YOSHINO, Yuichi YAMAGUCHI, Tomiko M. SUZUKI, Takeshi MORIKAWA, Akihiko KUDO	Tokyo University of Science
P1039	Photocatalytic property of Mg ion doped SrTiO <sub>3</sub> to the overall H <sub>2</sub> O splitting	Yoshihisa SAKATA, Junzhe JIANG, Kosuke SENDA, Akira YAMAKATA, Tsuyoshi TAKATA	Yamaguchi University
P1040	Flux-assisted method effectively enhancing H <sub>2</sub> evolution over a narrow-bandgap Y <sub>2</sub> Ti <sub>2</sub> O <sub>5</sub> S <sub>2</sub> nanoflake photocatalyst	Xizhuang LIANG, Lihua LIN, Xiaoping TAO, Hiroaki YOSHIDA, Tsuyoshi TAKATA, Takashi HISATOMI, Kazunari DOMEN	Shinshu University
P1041	Z-scheme water splitting by using transition metal-substituted polyoxometalate as shuttle redox mediator	Osamu TOMITA, Hiroki NAITO, Takuro KIDO, Hajime SUZUKI, Ryu ABE	Kyoto University
P1042	An efficient metal-organic framework-derived nickel catalyst for the light-driven methanation of CO <sub>2</sub>	Diego MATEO, Il Son KHAN, Genrikh SHTERK, Tuiana SHOINKHOROVA, Daria POLONEEVA, Luis GARZON-TOVAR, Jorge GASCON	King Abdullah University of Science and Technology
P1043	Solvothermal synthesis of spinel-type MFe <sub>2</sub> O <sub>4</sub> (M: Ni, Mn and Ca) particles smaller than 5 nm in diameter	Wataru IKUTA, Takumi TAROHATA, Etsushi TSUJI, Satoshi SUGANUMA, Naonobu KATADA	Tottori University
P1044	Efficient photocatalytic overall water splitting under vapor feeding achieved by metal (hydr)oxide thin layer coating	Takuya SUGURO, Fuminao KISHIMOTO, Tsuyoshi TAKATA, Kazunari DOMEN, Kazuhiro TAKANABE	The University of Tokyo
P1045	Pulsed laser-assisted synthesis of platinum dark TiO <sub>2</sub> nanoparticles for photocatalytic hydrogen generation and water purification	Zhanna FEDOROVICH, Olesia REUTOVA, Liubov MALIY, Elena FAKHRUTDINOVA, Olga VODYANKINA, Valery SVETLYCHNYI	National Research Tomsk State University
P1046	Photo-anode property of Mo-doped CuWO <sub>4</sub> for water oxidation	Keita IKEUE, Takuto UENO, Yuichiro YOKOMICHI, Yuki GOYA	Sanyo-Onoda City University
P1047	Flux-assisted synthesis of Gd <sub>2</sub> Ti <sub>2</sub> O <sub>5</sub> S <sub>2</sub> with enhanced photocatalytic activity	Xiaoping TAO, Hiroaki YOSHIDA, Lihua LIN, Xizhuang LIANG, Tsuyoshi TAKATA, Takashi HISATOMI, Kazunari DOMEN	Shinshu University
P1048	One-step preparation of reduced graphene oxide incorporated BiVO <sub>4</sub> photocatalyst with various cocatalysts for Z-schematic water splitting	Misa MORIYA, Akihide IWASE	Meiji University
P1049	PbBi <sub>3</sub> O <sub>4</sub> X <sub>3</sub> (X=Cl, Br) with single/double halogen layers as a photocatalyst for visible-light-driven water splitting: impact of halogen layer on band structure and stability	Hajime SUZUKI, Masanobu HIGASHI, Osamu TOMITA, Yusuke ISHII, Akinori SAEKI, Hiroshi KAGEYAMA, Ryu ABE	Kyoto University

P1050	Rh and Cs-codoped WO <sub>3</sub> responding up to 600 nm as an O <sub>2</sub> -evolving photocatalyst for Z-schematic water splitting	<u>Kenta WATANABE</u> , Yugo MISEKI, Kazuhiro SAYAMA	National Institute of Advanced Industrial Science and Technology (AIST)
P1051	Photocatalytic hydrogenation of nitrobenzene to aniline in two-phase reaction system using titanium (IV) oxide particles	<u>Masato SUENAGA</u> , Naoya MURAKAMI	Kyushu Institute of Technology
P1052	Photoelectrochemical properties of plasma-induced nanostructured tungsten oxide	<u>Shuangyuan FENG</u> , Shin KAJITA, Masanobu HIGASHI, Anja bieberle-Hutter, Tomoko YOSHIDA, Noriyasu OHNO	National Institutes of Natural Sciences, National Institute for Fusion Science
P1053	Catalytic decomposition of polyethylene and polypropylene in cetane over *BEA zeolite	<u>Eri MIURA</u> , Mahiro MATSUSHITA, Tohru KAMO, Motomu SAKAI, Masahiko MATSUKATA	Waseda University
P1054	Gas phase CO <sub>2</sub> photoreduction over Cu <sub>2</sub> O-loaded TiO <sub>2</sub> nanotube arrays under high vacuum	<u>Hayato GOTO</u> , Hikaru MASEGI, Shivaji B. SADALE, Kei NODA	Keio University
P1055	Synthesis of modified titanium dioxide for enhancing photocatalytic production of hydrogen	<u>Yuta TAKAI</u> , Mai FURUKAWA, Ikki TATEISHI, Hideyuki KATSUMATA, Satoshi KANEKO	Mie University
P1056	Improvement of photocatalytic activity of g-C <sub>3</sub> N <sub>4</sub> by modifying aromatic rings	<u>Motoki SATO</u> , Hideyuki KATSUMATA, Ikki TATEISHI, Mai FURUKAWA, Satoshi KANEKO	Mie University
P1057	Solar water splitting over highly efficient powder-based Cu <sub>3</sub> VS <sub>4</sub> photocathode with 1.55 eV of a band gap	Hirofumi FUKAI, Kengo NAGATSUKA, <u>Yuichi YAMAGUCHI</u> , Akihide IWASE, Akihiko KUDO	Japan Technological Research Association of Artificial Photosynthetic Chemical Process (ARPCHEM)
P1058	Enhanced photocatalytic hydrogen production of CdS/Cu <sub>7</sub> S <sub>4</sub> under visible light irradiation	<u>Takumi KOBAYASHI</u> , Ikki TATEISHI, Mai FURUKAWA, Hideyuki KATSUMATA, Satoshi KANEKO	Mie University
P1059	Highly efficient photocatalytic methylene-blue decomposition over nanorod-like tungsten trioxide composed of hexagonal and triclinic phase	<u>Kosei ITO</u> , Ryota UCHIDA, Kei NODA	Keio University
P1060	Improvement of photocatalytic activity of Ag-excess AgTaO <sub>3</sub> via HNO <sub>3</sub> treatment	<u>Satoshi NAKAYAMA</u> , Fumiaki AMANO	The University of Kitakyushu
P1061	Surface treated (CuGa) <sub>0.5</sub> ZnS <sub>2</sub> as a H <sub>2</sub> -evolving photocatalyst for enhanced Z-schematic water splitting under visible light irradiation	<u>Koki YAGISHITA</u> , Akihide IWASE	Meiji University
P1062	A two-dimensional metal-organic framework acts as a hydrogen evolution cocatalyst for overall photocatalytic water splitting	<u>Jingyan GUAN</u> , Hajime SUZUKI, Osamu TOMITA, Ryu ABE, Ryota SAKAMOTO	Kyoto University
P1063	Role of additional annealing in argon on photoelectrochemical properties of Ti-doped Fe <sub>2</sub> O <sub>3</sub> electrodes	<u>Dewangga Oky Baqus APRIANDANU</u> , Fumiaki AMANO	The University of Kitakyushu
P1064	Photocatalytic CO <sub>2</sub> reduction to CH <sub>4</sub> using H <sub>2</sub> O as an electron donor over a Pd-Ru-loaded NaTaO <sub>3</sub> :Sr photocatalyst	<u>Suguru YAGIHASHI</u> , Shunya YOSHINO, Yuichi YAMAGUCHI, Akihiko KUDO	Tokyo University of Science
P1065	Temperature dependence of photocatalytic water splitting under visible light irradiation using IrO <sub>x</sub> /SrTiO <sub>3</sub> :Rh, Sb sequentially loaded with metal cocatalysts	<u>Erika KIKUCHI</u> , Hiroaki NEMOTO, Shunya YOSHINO, Yuichi YAMAGUCHI, Akihiko KUDO	Tokyo University of Science
P1066	Effects of rare-earth metal addition on photocatalytic activity of aluminum-doped strontium titanate for overall water splitting	<u>Riku OKAMOTO</u> , Ryota TOMIZAWA, Ken-ichi OKUMURA, Taizo MASUDA, Akira KIMURA, Shigeru IKEDA	Konan University
P1067	Hydrogen evolution from alcohol in aqueous suspension of tungsten oxide in the presence of oxygen and copper ion	<u>Chihiro SHIBA</u> , Kazuki HAYAMI, Atsuhiko TANAKA, Hiroshi KOMINAMI	Kindai University
P1068	Bromine substitution of organic modifiers fixed on a titanium (IV) oxide photocatalyst: A new strategy accelerating visible light-induced hydrogen-free hydrogenation of furfural to furfuryl alcohol	<u>Hibiki TODA</u> , Yuhei YAMAMOTO, Atsuhiko TANAKA, Hiroshi KOMINAMI	Kindai University
P1069	Catalytic activities of 12-ring zeolites for methylation of naphthalene	<u>Yu MORIWAKI</u> , Moeri FUKUI, Manami MATSUO, Satoshi SUGANUMA, Etsushi TSUJI, Naonobu KATADA	Tottori University
P1070	Solid acid catalytic property of sulfonated SnO <sub>2</sub> -loaded graphene oxide	<u>Mayu TANAKA</u> , Chiaki USHIJIMA, Keita IKEUE	Sanyo-Onoda City University
P1071	pH-adjusted Synthesis of Al-grafted SBA-15 for Conversion of Glucose to 5-Hydroxymethylfurfural	<u>Paramabhorn TOSUWAN</u> , Shih-Yuan CHEN, Takehisa MOCHIZUKI, Apanee LUENGNARUEMITCHAI	Chulalongkorn University
P1072	Surfactant-assisted direct crystallization of CON-type zeolites with particle size and acid-site location controlled	<u>Masato SAWADA</u> , Takeshi MATSUMOTO, Ryota OSUGA, Shuhei YASUDA, Sungsik PARK, Yong WANG, Junko N. KONDO, Hiroaki ONOZUKA, Susumu TSUTSUMINAI, Toshiyuki YOKOI	Tokyo Institute of Technology

P1073	Investigation of acid site location in MSE-type aluminosilicate zeolites by spectroscopic approaches combined with catalytic activity	Hiroto TOYODA, Ryota OSUGA, Yong WANG, Takeshi MATSUMOTO, Junko Nomura KONDO, Koji YAZAWA, Hermann GIES, Christopher J. GILBERT, Bilge YILMAZ, C. P. KELKAR, Toshiyuki YOKOI	Tokyo Institute of Technology
P1074	Fabrication of AEI-type aluminosilicate catalyst with sheet-like morphology and its catalysis on propene to butenes reaction	Takeshi MATSUMOTO, Takashi TAKEUCHI, Masato SAWADA, Ryota OSUGA, Yusuke KUNITAKE, Shuhei YASUDA, Hiroaki ONOZUKA, Susumu TSUTSUMINAI, Junko N. KONDO, Hermann GIES, Toshiyuki YOKOI	Tokyo Institute of Technology
P1075	Design and synthesis of bifunctional zeolite catalyst for catalytic conversion of methane into methanol followed by lower hydrocarbons	Kengo NAKAMURA, Shuhei YASUDA, Takeshi MATSUMOTO, Junko N. KONDO, Toshiyuki YOKOI	Tokyo Institute of Technology
P1076	Cyanosilylation of benzaldehyde with TMSCN over LaMO <sub>3</sub> perovskite-type oxide catalyst	Syuhei YAMAGUCHI, Rikito GODA, Hiroyuki YAMAURA, Hidenori YAHIRO	Ehime University
P1077	Mechanochemical synthesis of Fe-Substituted MWW-type zeolites catalysts	Ryota OSUGA, Ginpei TANAKA, Mizuho YABUSHITA, Kakeru NINOMIYA, Sachiko MAKI, Maiko NISHIBORI, Kiyoshi KANIE, Atsushi MURAMATSU	Tohoku University
P1078	Synthesis of sulfated SnO <sub>2</sub> -TiO <sub>2</sub> solid acid with higher activity by solid-liquid interface reaction	Hiromi MATSUHASHI, Yuuki NISHIYAMA	Hokkaido University of Education
P1079	Direct alkylation of aromatics with alkanes using a catalyst mixture of solid acid zeolites and hydrotalcite supported Pd	Moe TAKABATAKE, Satoshi MISAKI, Wang-Jae CHUN, Yuichi MANAKA, Ken MOTOKURA	Tokyo Institute of Technology
P1080	<i>Withdrawn</i>		
P1081	<i>Moved to oral presentation (OC104)</i>		
P1082	Development of oxygenase mimicking immobilized metal complex catalysts for alkane hydroxylation with peroxides	Shiro HIKICHI, Hiroe FUKUZAKI, Yuta AKIZAWA, Nana AIZAWA, Sho IKEDA, Masaya OKAMURA	Kanagawa University
P1083	Low-temperature activation of methane using nitric oxide over Pt/Al <sub>2</sub> O <sub>3</sub> catalyst	Tatsuya YAMASAKI, Atsushi NISHIDA, Nobuya SUGANUMA, Yang SONG, Xiaohong LI, Junichi MURAKAMI, Tetsuya KODAIRA, Kyoko K. BANDO, Tatsumi ISHIHARA, Tetsuya SHISHIDO, Atsushi TAKAGAKI	Kyushu University
P1084	Direct methane oxidation to formaldehyde by iron phosphate nanoparticle catalyst	Aoi MATSUDA, Haruka TATENO, Keigo KAMATA, Michikazu HARA	Tokyo Institute of Technology
P1085	Synthesis of CoAl mixed oxide nanocomposite catalyst derived from layered double hydroxides: Application for aerobic alcohol oxidation	Febi YUSNIYANTI, Takayoshi HARA, Nobuyuki ICHIKUNI	Chiba University
P1086	Superior performance of copper phosphate catalysts composed of crystallized alpha-copper pyrophosphate for partial oxidation of methane into formaldehyde	Mana SHIMAKAWA, Taiki AKIYAMA, Sakae TAKENAKA	Doshisha University
P1087	Synthesis of Ga-substituted zeolites by mechanochemical method and their catalytic application to methane reforming reaction	Ryoma MICHINOBU, Ryota OSUGA, Kakeru NINOMIYA, Mizuho YABUSHITA, Sachiko MAKI, Maiko NISHIBORI, Kiyoshi KANIE, Toshiyuki YOKOI, Atsushi MURAMATSU	Tohoku University
P1088	Lithium-based silicates Li <sub>2</sub> CaSiO <sub>4</sub> and Li <sub>4</sub> SiO <sub>4</sub> as highly active catalysts for the oxidative coupling of methane	Tomohiro MATSUMOTO, Satoshi ISHIKAWA, Miwa SAITO, Wataru UEDA, Teruki MOTOHASHI	Kanagawa University
P1089	Pt-Cu bimetallic catalysts supported on alumina with worm-like-structured mesopore for <i>n</i> -butane dehydrogenation	Yuki OSHIMA, Seiji KUCHIKI, Miru HIRAHARA, Hitoshi OGIHARA, Hideki KUROKAWA	Saitama University
P1090	<i>n</i> -Pentane dehydrogenation over supported Pt catalysts -Effects of co-fed gas-	Misuzu KOMURO, Takayuki URAKAWA, Honoka ANEZAKI, Miru HIRAHARA, Hitoshi OGIHARA, Hideki KUROKAWA	Saitama University
P1091	Synthesis of crushed and mixed photocatalysts of TiO <sub>2</sub> and CaCO <sub>3</sub> loaded with Au nanoparticles	Akihiro KOHNO, Kenta KATO, Takeshi KOMATSU, Yasuko Y. MARUO	NTT Device Technology Labs / Tohoku Institute of Technology
P1092	Photochemical process: High selective reduction of nitrate to nitrogen via a UV/ HCOOH system	Wei Yu CHEN, Sofia Ya Hsuan LIOU	National Taiwan University

July 26, Tuesday, 19:00-20:00, Live discussion (Online)

P2001	Capturing ethylene glycol with dimethyl carbonate towards depolymerization of polyethylene terephthalate at ambient temperature	Shinji TANAKA, <u>Yumiko NAKAJIMA</u>	National Institute of Advanced Industrial Science and Technology
P2002	Decoration of Au/TiO <sub>2</sub> surface by thin layer of metal-organic framework and its catalytic activity	<u>Shintaro KADOWAKI</u> , Akihiro NAKAYAMA, Toru MURAYAMA, Norihito SAKAGUCHI, Tetsuya SHIMADA, Shinsuke TAKAGI, Tamao ISHIDA	Tokyo Metropolitan University
P2003	Synthesis of lower olefins from through CO <sub>2</sub> hydrogenation over Iron catalyst	<u>Ryo-suke OSHIKATA</u> , Ryosuke OBA, Midori MORI, Kenji ASAMI	The University of Kitakyusyu
P2004	Preparation of Ni nanoparticles encapsulated with Silicalite-1 catalyst for high activity and coke suppression for Ethanol Steam Reforming	<u>Sirintra ARAYAWATE</u> , Tsuki YOKOSAWA, Hiroyasu FUJITSUKA, Teruoki TAGO	Tokyo Institute of Technology
P2005	Quantification of products by BID-GC and enhancement of selectivity by pressure elevation in direct methylation of benzene with methane on Co/MFI	<u>Taiga SAKAMOTO</u> , Akiho OHTSUKA, Hitoshi MATSUBARA, Masaya YASUDA, Etsushi TSUJI, Satoshi SUGANUMA, Naonobu KATADA	Tottori University
P2006	Selective oxidation of furfural to succinic acid over Lewis acidic Sn-Beta	<u>Yayati-Naresh PALAI</u> , Abhijit SHROTRI, Atsushi FUKUOKA	Hokkaido University
P2007	Enhanced reactivity and stability in methane dehydro-aromatization over Mo/HZSM-5 physically mixed with NiO	<u>Hae-Won RYU</u> , Kihun NAM, Yong Hyun LIM, Do Heui KIM	Seoul National University
P2008	Enhancement of toluene yield in methylation of benzene with methane catalyzed by Co/MFI zeolite	<u>Akiho OTSUKA</u> , Keigo KANEHARA, Hitoshi MATSUBARA, Etsushi TSUJI, Satoshi SUGANUMA, Naonobu KATADA	Tottori University
P2009	One-pot catalytic conversion of algal-derived alginate acid into value-added chemicals	<u>Seungdo YANG</u> , Hyungjoo KIM, Do Heui KIM	Seoul National University
P2010	Reductive amination of 5-formyl-2-furancarboxylic acid to 5-aminomethylfuran-2-carboxylic acid over a cobalt phosphide catalyst	<u>Tat BOONYAKARN</u> , Jan J WIESFELD, Atsushi FUKUOKA, Takato MITSUDOME, Kiyotaka NAKAJIMA	Hokkaido University
P2011	<i>Moved to oral presentation (OA505)</i>		
P2012	Thermally stable Ni-M nanoparticles encapsulated with SiO <sub>2</sub> shells (M = Co, Ce) under dry reforming of CH <sub>4</sub> with CO <sub>2</sub>	<u>Jae-Hyeon KWON</u> , Kyung Soo PARK, Jong Wook BAE	Sungkyunkwan University (SKKU)
P2013	Effect of pore size and solvent molecular size on polyolefin pyrolysis catalyzed by solid acid	<u>Yuya KAWATANI</u> , Satoshi SUGANUMA, Etsushi TSUJI, Naonobu KATADA	Tottori University
P2014	Aerobic oxidation of concentrated acetal-protected 5-HMF solutions to FDCA catalyzed by nitrogen-doped carbon-supported cobalt	<u>Jan-J. WIESFELD</u> , Emiel J.M. HENSEN, Atsushi FUKUOKA, Kiyotaka NAKAJIMA	Hokkaido University
P2015	Zeolite-supported ultra-small nickel as catalyst for oxidative conversion of methane to syngas	<u>Shuhei YASUDA</u> , Takeshi MATSUMOTO, Toshiyuki YOKOI	Tokyo Institute of Technology
P2016	Development of membrane reactor with an active Ru-based catalyst and a H <sub>2</sub> O selective permeation membrane for CO <sub>2</sub> methanation reaction	<u>Toru MATSUOKA</u> , Takuro EBISAWA, Keisuke IKEJIMA, Takeshi FURUSAWA	Utsunomiya University
P2017	Development of heterogeneous cobalt catalysts for primary amine synthesis at low temperature and hydrogen pressure	<u>Kahoko KATO</u> , Dian DENG, Yusuke KITA, Keigo KAMATA, Michikazu HARA	Tokyo Institute of Technology
P2018	Selective formation of isoprene in the dehydration of 3-methyl-1,3-butanediol over Y <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> catalyst	<u>Ryo KOBAYASHI</u> , Yasuhiro YAMADA, Satoshi SATO	Chiba University
P2019	Selective desulfation and depolymerization of algal polysaccharides into oligosaccharides	<u>Ayumu ONDA</u> , <u>Yuka SHIMIZU</u> , Kiriyo OHNO, Masanori HIRAOKA, Shuntaro TSUBAKI, Kazuya IMAMURA	Kochi University
P2020	Dehydration of sorbitol using a bi-phase system of cyclic ether solvent and acid catalyst	<u>Hideto TSUJI</u> , Toru OKOSHI, Yasuko HIGASHINO, Kohtarō INADA	Mitsubishi Chemical Corporation
P2021	Modified zeolites for the catalytic valorisation of furans to aromatics	<u>Guido de REIJER</u> , Per-Anders CARLSSON	Chalmers University of Technology
P2022	Synthesis of 2-imidazolidinone from ethylenediamine carbamate by CeO <sub>2</sub> catalyst without external CO <sub>2</sub> addition	<u>Shogen MIHARA</u> , Jie PENG, Masazumi TAMURA, Mizuho YABUSHITA, Ryotaro FUJII, Yoshinao NAKAGAWA, Keiichi TOMISHIGE	Tohoku University
P2023	Intramolecular cycloamination of primary amines using gold nanoparticles deposited on fibrillated citric acid-modified cellulose	<u>Butsaratip SUWATTANANURUK</u> , Yuta UETAKE, Hidehiro SAKURAI	Osaka University
P2024	Aerobic oxidative cleavage of 2-hydroxycyclohexanone to 2-hydroxyadipic acid	<u>Koki HASHIMOTO</u> , Yoshinao NAKAGAWA, Mizuho YABUSHITA, Keiichi TOMISHIGE	Tohoku University
P2025	Understanding hydrodeoxygenation reaction of vanillin to cycloalkanes over Ru/HZSM-5 catalysts in biphasic system	<u>Hyungjoo KIM</u> , Seungdo YANG, Yong Hyun LIM, Jeong-Myeong HA, Do Heui KIM	Seoul National University

P2026	Effects of Co/Al molar ratio in CoAPSO-34 catalysts on the physicochemical property and catalytic performance in the chloromethane to light olefins reaction	Tae Hyeop KIM, <u>Hyeong Dong JUNG</u> , Min Yeong GIM, Do Heui KIM	Seoul National University
P2027	Comparison of CeO <sub>2</sub> -catalyzed synthesis of dialkyl carbonate from CO <sub>2</sub> and alcohol using 2-furonitrile and 2-cyanopyridine as dehydrating agent	<u>Peilang LI</u> , Wen SUN, Marina OIKAWA, Mizuho YABUSHITA, Yoshinao NAKAGAWA, Keiichi TOMISHIGE	Tohoku University
P2028	Cu(OH) <sub>2</sub> nanoarray as electrocatalyst for efficient electrochemical reduction of CO <sub>2</sub> to C <sub>2</sub> H <sub>4</sub>	<u>Hyojung BAE</u> , Vishal BURUNGALÉ, Pratik MANE, Jiwon HEO, Jun-Seok HA	Chonnam National University
P2029	Determination of hydrogen peroxide by PPD oxidation using Ni-CoFe <sub>2</sub> O <sub>4</sub>	Maiko SHIBATA, Hideyuki KATSUMATA, Mai FURUKAWA, Ikki TATEISHI, Satoshi KANEKO	Mie University
P2030	Study on reaction condition dependences of zeolite-catalyzed polyolefin pyrolysis towards practical application	<u>Hiroki MASUDA</u> , Yuya KAWATANI, Satoshi SUGANUMA, Etsushi TSUJI, Naonobu KATADA	Tottori University
P2031	Hydrogenation of pyroglutamic acid over YFI zeolite supported Ru catalyst	Harumi IKUTA, Akihiro OTANI, Nanako YUZA, Satoshi SUGANUMA, Etsushi TSUJI, Naonobu KATADA	Tottori University
P2032	Degradation of tetracycline hydrochloride by accelerated oxidation method using CoFe <sub>2</sub> O <sub>4</sub>	Shotarou KAWAKAMI, Hideyuki KATSUMATA, Mai FURUKAWA, Ikki TATEISHI, Satoshi KANEKO	Mie University
P2033	Impact of raw materials for TS-1 zeolite on its crystallization process, state of Ti species and catalytic properties	Shunsuke YAMADA, Shuhei YASUDA, Willie YANG, Masamichi HOSAKI, Takeshi MATSUMOTO, Junko N. KONDO, Toshiyuki YOKOI	Tokyo Institute of Technology
P2034	Colorimetric analysis of glucose by CoFe <sub>2</sub> O <sub>4</sub> natural enzyme mimic using SAT-3 as a substrate	Kurumi MATSUI, Hideyuki KATSUMATA, Mai FURUKAWA, Ikki TATEISHI, Satoshi KANEKO	Mie University
P2035	Doping effect of K on Co/MgO catalyst for NH <sub>3</sub> synthesis	<u>Tomoko SHIBATA</u> , Shin-ichiro MIYAHARA, Hiroshi YAMADA, Katsutoshi SATO, Katsutoshi NAGAOKA	Nagoya University
P2036	Effect of microwave on dry reforming of methane over La-Ce-Ni oxide catalyst	<u>Tatsuya HAMASHIMA</u> , Hajime HOJO, Hisahiro EINAGA	Kyushu University
P2037	Selective hydrogenation of pyroglutaminol into prolinol catalyzed by supported noble metals under acidic conditions	<u>Agora CHIN</u> , Satoshi SUGANUMA, Etsushi TSUJI, Naonobu KATADA	Tottori University
P2038	Bifunctional catalytic N-formylation of amine using CO <sub>2</sub> over metal-oxide-cluster-derived catalyst	<u>Vorakit CHUDATEMIYA</u> , Soichi KIKKAWA, Jun HIRAYAMA, Ryo TAKAHATA, Toshiharu TERANISHI, Seiji YAMAZOE	Tokyo Metropolitan University
P2039	Optimization of a Ca/Cu/YCeO <sub>2</sub> -TiO <sub>2</sub> catalyst applied to the transient reduction of NO with CO and naphthalene under highly oxidizing conditions	<u>Sichem G. RUZ</u> , Luis SANCHEZ, Paulo ARAYA, Gonzalo AGUILA, Sergio QUIJADA	Universidad de los Andes
P2040	Catalytic activity of Cu doped TiO <sub>2</sub> for thermal oxidation of ethylene	<u>Rajendran KARUPPUSAMY</u> , Mandeep SHARMA, Augustine JAISON, Ankit D. TIWARI, Dinesh JAGADEESAN	Indian Institute of Technology Palakkad
P2041	Mechanistic investigation of catalytic N <sub>2</sub> O decomposition over ZrO <sub>2</sub> -supported RhO <sub>x</sub> catalyst	Yuan JING, Koichiro TAKETOSHI, <u>Ningqiang ZHANG</u> , Takashi TOYAO, Zen MAENO, Teppei OHORI, Naoya ISHIKAWA, Ken-ichi SHIMIZU	Hokkaido University
P2042	Reduction of selenate over supported noble metal catalyst in aqueous solution	<u>Eriko KONISHI</u> , Kyogo ITO, Kazumasa OSHIMA, Tsuyoshi YAMAMOTO, Masahiro KISHIDA	Kyushu University
P2043	Kinetic analysis of oxidation of arsenite in water using a plug-flow reactor filled with platinum catalyst	<u>Hiroimichi KONDO</u> , Takayuki URATA, Kazumasa OSHIMA, Tsuyoshi YAMAMOTO, Masahiro KISHIDA	Kyushu University
P2044	Effect of high temperature treatment on low temperature NO <sub>x</sub> adsorption and desorption over Pd-supported ZSM-5	<u>Kohei KUME</u> , Masahiko MATSUKATA	Waseda University
P2045	Effect of particle size of Ni/SiO <sub>2</sub> hollow spheres on their activity for reduction of 4-nitrophenol	Naoki TOYAMA, Haruto SATO, Norifumi TERUI, Shigeki FURUKAWA	Nihon University
P2046	Effect of oxygenated nitrogen species and water for low temperature ozone decomposition in the presence of acid treated Ce modified birnessite-type MnO <sub>2</sub>	<u>Jean-marc GIRAUDON</u> , Gréce ABDALLAH, Rim BITAR, Savita K. P. VEERAPANDIAN, Nathalie DE GEYTER, Rino MORENT, Jean-François LAMONIER	Univ. Lille/Univ. Artois
P2047	β-cyclodextrin-assisted synthesis of an efficient hydroxyapatite supported CuO catalyst in total oxidation of toluene	<u>Jean-Marc GIRAUDON</u> , Maya IBRAHIM, Madona LABAKI, Anne PONCHEL, Jean-François LAMONIER	Univ. Lille/Univ. Artois
P2048	Towards ultra-low-emission gasoline vehicle: focus on different catalyst design strategies	<u>Melissandre RICHARD</u> , Shreya NANDI, Christophe CHAILLOU, Emmanuel LAIGLE, Andre NICOLLE, Caroline NORSIC, Pascal GRANGER, Christophe DUJARDIN	Univ. Lille/Univ. Artois
P2049	Towards stable aromatics production at high pressure in methanol conversion	Tuiana-Bairovna SHOINKHOROVA, Adrian RAMIREZ, Tomas CORDERO-LANZAC, Sang-ho CHUNG, Javier RUIZ-MARTINEZ, Jorge GASCON	King Abdullah University of Science and Technology
P2050	Suppressing metal sintering by ultrathin SiO <sub>2</sub> shell decoration on Pd nanoparticles induced by photocatalytic reaction	<u>Ayato TAKABAYASHI</u> , Fuminao KISHIMOTO, Hiroto TSUCHIYA, Hitoshi MIKAMI, Kazuhiro TAKANABE	The University of Tokyo

P2051	Synthesizing zeolites with framework-incorporated cobalt for the removal of Rhodamine B by sulfate radical-based advanced oxidation process	<u>John-Mark L. OSIAS</u> , Bing-Hung CHEN	National Cheng Kung University
P2052	Catalytic purification of furnace gas of phosphorus production from phosphine using aqueous ammonia copper complexes	Akbope K. BORANGAZIEVA, <u>Yerzhan A. BOLEUBAYEV</u> , Zhuldyz U. IBRAIMOVA, Kirill A. VALISHEVSKIY, Gulshara S. POLIMBETOVA, Sholpan S. ITKULOVA	D.V. Sokolsky Institute of Fuel, Catalysis, and Electrochemistry
P2053	Low-temperature NO <sub>x</sub> removal under different atmospheres over cerium and manganese oxide supported graphene-based materials	<u>Hsing-Cheng HSI</u> , An-Chun CHU, Chih-Fu TSENG	National Taiwan University
P2054	Lean NO <sub>x</sub> reduction by CO at low temperature over bimetallic IrRu/Al <sub>2</sub> O <sub>3</sub> catalysts with different Ir:Ru ratios	Ji Hwan SONG, <u>Dong Chan PARK</u> , Young-Woo YOU, Tae Sun CHANG, Iljeong HEO, Do Heui KIM	Seoul National University
P2055	Enhanced catalytic stability and SO <sub>2</sub> resistance over physically mixed V <sub>2</sub> O <sub>5</sub> -WO <sub>3</sub> /TiO <sub>2</sub> and Fe <sub>2</sub> O <sub>3</sub> catalyst for low-temperature NH <sub>3</sub> -SCR	<u>Hyun Sub KIM</u> , Tae Hun KANG, Seunghee YOUN, Se Won JEON, Do Heui KIM	Seoul National University
P2056	Methane combustion over mesoporous cobalt oxide catalysts: Effects of acid treatment	<u>Sangbeom YOO</u> , Eun Won LEE, Do Heui KIM	Seoul National University
P2057	In-situ DRIFTS analysis of Sb promoted vanadia-titania catalysts	<u>Alexander NELLESEN</u> , Andreas SCHAEFER, Anna MARTINELLI, Per-Anders CARLSSON	Chalmers University of Technology
P2058	Facile synthesis of Ag nanoparticles on Thiol decorated carbon by ascorbic acid	<u>Jinho HYUN</u> , Jong Gyeong KIM, Chanho PAK	Gwangju Institute of Science and Technology
P2059	Application of Fe <sub>3</sub> O <sub>4</sub> -based magnetic adsorbent for determination of trace heavy metals in water samples by solid phase extraction	<u>Takayuki FUJIHARA</u> , Mai FURUKAWA, Hideyuki KATSUMATA, Ikki TATEISHI, Satoshi KANECO	Mie University
P2060	Enhanced catalytic performance of spinel-type Cu-Mn oxides for benzene oxidation under microwave irradiation	<u>Siyu DING</u> , Hajime HOJO, Hisahiro EINAGA	Kyushu University
P2061	The effect of SO <sub>2</sub> on the catalytic properties of Pd/CeO <sub>2</sub>	<u>Saki SHIGENOBU</u> , Hajime HOJO, Hisahiro EINAGA	Kyushu University
P2062	Optimization of photocatalyst CuO/Sn <sub>3</sub> O <sub>4</sub> performance for the decolorization of rhodamine B in water	<u>Ayata OHNISHI</u> , Mai FURUKAWA, Ikki TATEISHI, Hideyuki KATSUMATA, Satoshi KANECO	Mie University
P2063	Development of zeolite-encapsulated Ni nanoparticles: application in the automobile tailpipe hydrocarbon trap	<u>Ryosuke ABIRU</u> , Hidekazu GOTO, Kentaro KIMURA, Hiroyasu FUJITSUKA, Teruoki TAGO	Tokyo Institute of Technology
P2064	Characteristic of graphene-modified indium cadmium sulfide photocatalyst for water splitting hydrogen production	Yi-Hui LI, <u>Zhuan-Ping DONG</u> , Yu-Ching WENG	Feng Chia University
P2065	Oxidative carbonylation of <i>N</i> -protected indole by Rh <sup>III</sup> -zeolites	<u>Sam-Van MINNEBRUGGEN</u> , Carlos MARQUEZ, Besir KRASNIQI, Jannick VERCAMMEN, Niels VAN VELTHOVEN, Kwinten JANSSENS, Benoit DE SOETE, Aram BUGAEV, Dirk E. DE VOS	KU Leuven
P2066	Catalysis of bulky yet flexible NHC coordinated cyclometalated palladium complexes	<u>Isami NAKAJIMA</u> , Yuta OKUDA, Tetsuya YAMAMOTO	Tokyo Denki University
P2067	Ruthenium catalysts for enantioselective transfer hydrogenation of ketones	<u>Alexey ZAZYBIN</u> , Murat AYDEMIR, Khadichakhan RAFIKOVA, Sholpan ISLAM, Yerasyl KAMSHYGER, Cezmi KAYAN, Nermin MERIC, Ugur ISIK, Yelizaveta Belyankova, Anuar DAULETBAKOV, Ayana ALPIYEVA	Kazakh-British Technical University / Satbayev University
P2068	MIC-coordinated palladium complex catalyzed 1,2-addition of arylboronates to aldehydes	<u>Naoki ARAI</u> , Yuto KUZIRAI, Tetsuya YAMAMOTO	Tokyo Denki University
P2069	[Pd(4-R <sub>3</sub> Si-IPr)(allyl)Cl]: a highly effective catalytic system for the C-N and C-C couplings	<u>Miftah FARIED</u> , Yuto SEO, Wahyu S. PUTRO, Vladimir Y. LEE, Tomoteru MIZUSAKI, Yukio TAKAGI, Yoong-Kee CHOE, Kazuhiro MATSUMOTO, Jun-Chul CHOI, Norihisa FUKAYA	National Institute of Advanced Industrial Science and Technology
P2070	Synthesis of unsaturated dicarboxylic acid from CO <sub>2</sub> and pyruvate with malate dehydrogenase and fumarate hydratase	<u>Mika TAKEUCHI</u> , Masanobu HIGASHI, Yutaka AMAO	Osaka City University
P2071	Microkinetics and mechanism of electrocatalytic CO <sub>2</sub> reduction into CO over molecular complexes loaded gas-diffusion electrodes	<u>Xiaofei LU</u> , Busra DERELI, Tetsuya SHINAGAWA, Luigi CAVALLO, Kazuhiro TAKANABE	The University of Tokyo
P2072	Brownmillerite-type Ca <sub>2</sub> Fe <sub>0.75</sub> Co <sub>1.25</sub> O <sub>5</sub> as a high durable catalyst for oxygen evolution reaction in neutral conditions	<u>Hiroyuki OKADA</u> , Etsushi TSUJI, Satoshi SUGANUMA, Naonobu KATADA	Tottori University
P2073	Synthesis of NiCo <sub>2</sub> O <sub>4</sub> microcapsules by spray pyrolysis method for efficient bifunctional air electrocatalysts of zinc-air rechargeable batteries	<u>Sun KIM</u> , Yuiko INOISHI, Jun Tae SONG, Atsushi TAKAGAKI, Tatsumi ISHIHARA	Kyushu University
P2074	Electrocatalytic reduction of carbon dioxide catalyzed by SnO <sub>2</sub> partially substituted with various metal elements in an aqueous solution	<u>Kaede OHWAN</u> , Etsushi TSUJI, Satoshi SUGANUMA, Naonobu KATADA	Tottori University

P2075	Screening ternary Pt-based catalysts for oxygen reduction reaction by scanning electrochemical microscopy	Xin-Ren WENG, <u>Wei-Ming CHEN</u> , Yu-Ching WENG	Feng Chia University
P2076	Electrospinning of Au nanoparticles/carbon nanofibers for acetaminophen sensor	Zhao-Nan WANG, <u>Ting-Yu YANG</u> , Yu-Ching WENG	Feng Chia University
P2077	Optimization of Pd-based catalyst for formic acid oxidation	<u>Chieh-Lin CHIANG</u> , Yu-Ching WENG	Feng Chia University
P2078	Electrolytic characteristics of ammonia oxidation using RuNi/Ti and RuCu/Ti electrodes	Yu-Jen SHIH, <u>Seto Sugianto Prabowo RAHARDJO</u>	National Sun Yat-sen University
P2079	Synthesis of CH <sub>4</sub> from CO <sub>2</sub> and H <sub>2</sub> O with combination of phosphate-based electrolyzer and ruthenium catalysts at intermediate temperature	<u>Jun KUBOTA</u> , Takaya OKUMURA, Rika HAYASHI	Fukuoka University
P2080	Cu/graphene-based catalyst electrode for electrochemical reduction of carbon dioxide in methanol	<u>Yuji SAKA</u> , Mai FURUKAWA, Ikki TATEISHI, Hideyuki KATUMATA, Satoshi KANECO	Mie University
P2081	Computational prediction of support activation by the electron scavenger effect	<u>Yoyo HINUMA</u> , Takashi TOYAO, Nobutsugu HAMAMOTO, Shinya MINE, Zen MAENO, Takashi KAMACHI, Ken-ichi SHIMIZU	National Institute of Advanced Industrial Science and Technology / Tokyo Institute of Technology
P2082	Elucidation of material properties on CO <sub>2</sub> captures by applying an electric field	<u>Koki SAEGUSA</u> , Kenshin CHISHIMA, Hiroshi SAMPEI, Kazuharu ITO, Kota MURAKAMI, Yasushi SEKINE	Waseda University
P2083	Governing factors on surface hydrogen over heterocation-doped CeO <sub>2</sub>	<u>Hiroshi SAMPEI</u> , Kota MURAKAMI, Atsushi ISHIKAWA, Takuma HIGO, Hideaki TSUNEKI, Hiromi NAKAI, Yasushi SEKINE	Waseda University
P2084	Rational design of carbon materials for hydrogen storage: a DFT study	<u>Ying-Cheng CHEN</u> , Amita SIHAG, Hsin-Yi Tiffany CHEN	National Tsing Hua University
P2085	Effect of the surface morphology of alkaline-earth metal oxides on the oxidative coupling of methane	<u>Nobutsugu HAMAMOTO</u> , Takakazu KAWAHARA, Ryoto HAGIWARA, Kohei MATSUO, Kodai MATSUKAWA, Yoyo HINUMA, Takashi TOYAO, Ken-ichi SHIMIZU, Takashi KAMACHI	Fukuoka Institute of Technology
P2086	DFT study of surface structure of solid solution catalyst Zn <sub>x</sub> Zr <sub>1-x</sub> O <sub>2-x</sub> for CO <sub>2</sub> -to-methanol hydrogenation	<u>Mitsuhiro YOSHIDA</u> , Tatsuya JOUTSUKA, Shohei TADA	Ibaraki University
P2087	Effects of A-site composition of perovskite (Sr <sub>1-x</sub> Ba <sub>x</sub> ZrO <sub>3</sub> ) oxides on H atom adsorption, migration, and ammonia synthesis	Kenshin CHISHIMA, Koki SAEGUSA, Yuta TANAKA, Kota MURAKAMI, Sae DOI, Kazuharu ITO, Yuta MIZUTANI, Sasuga HAYASHI, Takuma HIGO, Hideaki TSUNEKI, Hiromi NAKAI, Yasushi SEKINE	Waseda University
P2088	Multiscale simulation from density functional theory to chemical engineering modeling: application to the oxidative coupling of methane	<u>Atsushi ISHIKAWA</u> , Yoshitaka TATEYAMA	National Institute for Materials Science
P2089	Molecular dynamics analysis on the preparation process of carbon electrode materials with the reaction force field	<u>Yusei ASHIZAWA</u> , Katsuhiro WAKAMATSU, Teppei OGURA	Kwansei Gakuin University
P2090	Fast catalyst screening method using a universal neural network potential	<u>Yoshihiro YAYAMA</u> , Takuya UGAJIN, Taku WATANABE	ENEOS Corporation
P2091	Technology for controlling active sites of industrial supported metal catalysts	<u>Kazuki NAKAJIMA</u> , Yusuke MATSUMOTO	JGC Catalysts and Chemicals Ltd.
P2092	Ammonium nitrate and N <sub>2</sub> O formation over Cu-CHA in NH <sub>3</sub> -SCR system: Pore-confinement versus acidity effect	<u>Joonsoo HAN</u> , Aiyong WANG, Ghodsieh I. TOUTIZAD, Hanna HARELIND, Magnus SKOGLUNDH, Derek CREASER, Louise OLSSON	Chalmers University of Technology
P2093	Synthesis of 2,5-furandicarboxylic acid from glucose	<u>Mitsunori FURUYA</u> , Takayuki AOSHIMA, Kiyotaka NAKAJIMA	Mitsubishi Chemical Corporation
P2094	Development of ZrO <sub>2</sub> -supported rhenium-germanium catalyst for the direct hydrogenation of carboxylic acids to alcohols	<u>Yuta INAMI</u> , Takeshi MATSUO, Ryuichi SHIMOGAWA, Takayuki AOSHIMA	Mitsubishi Chemical Corporation
P2095	Conversion of lignocellulosic biomass to chemicals using supported metal catalysts in high-temperature water	<u>Aritomo YAMAGUCHI</u> , Naoki MIMURA, Norihito HIYOSHI, Osamu SATO	National Institute of Advanced Industrial Science and Technology
P2096	Control of acidity and pore structure in amorphous silica-alumina materials	<u>Yuki MIWA</u> , Yuka SETO, Chizu INAKI, Tomohiro MITSUI	JGC Catalysts and Chemicals Ltd.
P2097	Reforming full range commercial naphtha over modified hierarchical zeolites	<u>Aniz Chennampilly UMMER</u> , Muhammad Naseem AKHTAR, Essa ALNAIMI, Lianhui DING, Hassan SAEED ALASIRI	King Fahd University of Petroleum and Minerals
P2098	Synthesis of vinyl ether pendant polymers by group transfer polymerization	<u>Munehiro HASEGAWA</u> , Hiroki FUKUDOME, Motosuke IMADA	Nippon Shokubai Co., Ltd.
P2099	Porous membrane catalysts introduced into a multi-layer plasma reactor for ammonia synthesis	<u>Mao KOIKE</u> , Eiichiro YOSHIO, Hironobu OHKITA, Takanori MIZUSHIMA	Toyohashi University of Technology
P2100	Catalyst grading system for the improvement of LGO HDS performance via CAE technique	<u>Takayuki KUROGI</u> , Mayumi ETOU, Rei HAMADA, Shingo SAKAI	JGC Catalysts and Chemicals Ltd.

July 27, Wednesday, 19:00-20:00, Live discussion (Online)

P3001	Effects of surface proton coverage over support on catalytic ammonia synthesis in an electric field	Sae DOI, Yuta TANAKA, Kota MURAKAMI, Kazuharu ITO, Yuta MIZUTANI, Koki SAEGUSA, Takuma HIGO, Hideaki TSUNEKI, Yasushi SEKINE	Waseda University
P3002	Quantum yield enhancement in photocatalytic HCOOH decomposition under periodic illumination	Sie-Shing WONG, Hua AN, Ning YAN	Tianjin University / National University of Singapore
P3003	Humin decomposition by $\gamma$ -irradiation – a promising strategy for catalyst regeneration	Natalia S. MEDINA, Benjamin KATRYNIOK, Jean-Sébastien GIRARDON, Isabelle HABLOT, Philippe GUILBAUD, Laurent VENAULT, Stéphanie CORNET, Vincent PACARY	University of Lille
P3004	Non-oxidative conversion of methane to acetonitrile over solid-state-pyrolysis made GaN-based catalysts	Korawich TRANGWACHIRACHAI, Chin-Han CHEN, Ai-Lin HUANG, Yu-Chuan LIN	National Cheng Kung University
P3005	Addressing challenges in sealing of scalable multifiber module for O <sub>2</sub> enrichment using LSCF membranes	Shunottara-Milind JOGDAND, Prachiti R BEDADUR, Ravi AGRAWAL, Arun TORRIS, Ulhas K. KHARUL, R. Nandini DEVI	CSIR-National Chemical Laboratory, Pune
P3006	Low-temperature electric field-enhanced carbon dioxide sorption on eutectic mixture-promoted magnesium oxide	Monica-Louise-Tekiko TRIVIÑO, Yasushi SEKINE, Jeong Gil SEO	Hanyang University
P3007	Effect of co-feeding hydrogen sulfide on dehydrogenation of C <sub>4</sub> , C <sub>5</sub> alkane over transition metal-based catalysts	Arisa KUROSAKI, Chikamasa YOKOYAMA, Ryo WATANABE, Yuichi MIYAGI, Syota KAYAGI, Nobuyasu OHSHIO, Choji FUKUHARA	Shizuoka University
P3008	Esterification of oleic acid to methyl oleate using methoxy-functionalized alginate capsules loaded with a solid acid catalyst under light irradiation	Takuro EBISAWA, Kouki AKIYAMA, Airi TOYOSHIMA, Yuta TANIGUCHI, Takeshi FURUSAWA	Utsunomiya University
P3009	Low-frequency vibration-induced catalytic reaction	Taiki UNO, Tomoki MATUYAMA, Jun HIRAYAMA, Soichi KIKKAWA, Chihiro TATEISHI, Fumiaki AMANO, Seiji YAMAZOE	Tokyo Metropolitan University
P3010	Controlling metal-polymer interaction through polymer functionality for selective and stable partial hydrogenation	Kyunglim HYUN, Minkee CHOI	Korea Advanced Institute of Science and Technology
P3011	Breaking the inverse relationship of catalytic activity-selectivity in acetylene partial hydrogenation using dynamic metal-polymer interactions	Younghwan PARK, Minkee CHOI	Korea Advanced Institute of Science and Technology
P3012	CO <sub>2</sub> valorization to hydrocarbons using promoted bi-functional catalyst	Ahmad ALREFAEI, Ayyaz MUHAMMAD, Isidoro MORALES, Hussam BAHLOULI, Arshid ALI	KASUT / Saudi Aramco / Delft University of Technology
P3013	Activity and sulfur resistance of SiO <sub>2</sub> -supported Pd-Pt bimetallic catalysts for partial hydrogenation of soybean oil-derived FAME	Artita-Na RUNGSI, Apanee LUENGNARUEMITCHAI, Shih-Yuan CHEN, Nuwong CHOLLACOOP, Takehisa MOCHIZUKI, Yuji YOSHIMURA	Chulalongkorn University
P3014	Electron-enriched single-atom Pt in Pb-Ca-decorated PtGa intermetallics as a selective and stable catalyst for propane dehydrogenation	Yuki NAKAYA, Ken-ichi SHIMIZU, Shinya FURUKAWA	Hokkaido University
P3015	Surface modification of Au/SiO <sub>2</sub> using layered double hydroxides (LDH) and effect on CO oxidation	Kaho OKAYAMA, Akihiro NAKAYAMA, Toru MURAYAMA, Norihito SAKAGUCHI, Tetsuya SHIMADA, Shinsuke TAKAGI, Tamao ISHIDA	Tokyo Metropolitan University
P3016	Au <sub>25</sub> cluster catalyst on double metal hydroxide: atomically precise synthesis and oxidation catalysis	Shinya MASUDA, Shinjiro TAKANO, Seiji YAMAZOE, Tatsuya TSUKUDA	The University of Tokyo
P3017	Controlled removal of thiolate ligands from Au <sub>25</sub> (SR) <sub>18</sub> clusters on carbon support	Kosuke SAKAMOTO, Shinya MASUDA, Shinjiro TAKANO, Tatsuya TSUKUDA	The University of Tokyo
P3018	Advanced carbons as heat-conductive frames in fixed-bed catalysis of exothermal reactions	Vladimir-Z MORDKOVICH, Liliya V SINEVA, Kirill O GRYAZNOV, Ekaterina Yu ASALIEVA, Igor G. SOLOMONIK	Technological Institute for Superhard and Novel Carbon Materials
P3019	Metal nanoparticle catalyst dispersed on mesoporous carbon for catalytic C-C bond formations	Yibing CAI, Takeshi MATSUMOTO, Shunsuke YAMADA, Shuhei YASUDA, Junko N. KONDO, Toshiyuki YOKOI	Tokyo Institute of Technology
P3020	Rational design of highly efficient Ti active sites in hierarchical titanium silicalite-1 (TS1) for fatty acid methyl esters (FAMES) epoxidation	Sorasak KLINYOD, Tawan SOOKNOI, Chularat WATTANAKIT	Vidyasirimedhi Institute of Science and Technology
P3021	Facile synthesis of ZSM5-NS@NiAl-LDHs composites for furfural hydrogenation to furfuryl alcohol	Narasiri MAINEAWKLANG, Saros SALAKHUM, Peerapol PORNSSETMETAKUL, Anittha PRASERTSAB, Chadatip RODAUM, Chularat WATTANAKIT	Vidyasirimedhi Institute of Science and Technology
P3022	High-density amine modification of silica surface for solid CO <sub>2</sub> sorbent	Miori KATAOKA, Soichi KIKKAWA, Seiji YAMAZOE	Tokyo Metropolitan University

P3023	Catalytic hydrogenation of styrene over copper(I)-based mixed metal oxides	<u>Chitomo NAGATA</u> , Soich KIKKAWA, Seiji YAMAZOE	Tokyo Metropolitan University
P3024	Thin film catalysts of Co <sub>2</sub> FeGe and Co <sub>2</sub> FeGa Heusler alloys for selective hydrogenation of alkynes	<u>Takayuki KOJIMA</u> , Shinpei FUJII, Emilie GAUDRY, Satoshi KAMEOKA	Shinshu University
P3025	Low-temperature synthesis of britholite-(La) fluorosilicate via co-precipitation method	<u>Thanyarat PHUTTHAPHONGLOET</u> , Yuta UETAKE, Naoyoshi NUNOTANI, Nobuhito IMANAKA, Hidehiro SAKURAI	Osaka University
P3026	Synthesis of high-entropy alloy nanoparticles by the assist of hydrogen spillover as a robust catalyst for CO <sub>2</sub> hydrogenation	<u>Naoki HASHIMOTO</u> , Kohsuke MORI, Naoto KAMIUCHI, Hideto YOSHIDA, Hisayoshi KOBAYASHI, Hiromi YAMASHITA	Osaka University
P3027	Oxide encapsulated metal catalysts: Sinter and poison resistance and post-synthesis modification studies	<u>R. Nandini DEVI</u> , Sourik MONDAL, Chinnu THARA, Deepali KONDHEKAR	CSIR- National Chemical Laboratory
P3028	<i>Moved to oral presentation (OD113)</i>		
P3029	Cu/SiO <sub>2</sub> catalyst prepared with organic additive-assisted impregnation for vapor-phase dehydrogenation of 1-decanol	<u>Shuya HOSAKA</u> , Yasuhiro YAMADA, Satoshi SATO	Chiba University
P3030	Deposition of highly dispersed gold nanoparticles onto metal phosphates by deposition-precipitation with aqueous ammonia	<u>Hidenori NISHIO</u> , Hiroki MIURA, Testuya SHISHIDO	Tokyo Metropolitan University
P3031	Polyoxometalates supported single Rh catalysts for hydroformylation	<u>Shixiang FENG</u> , Xinbin MA, Ning YAN	Joint School of National University of Singapore and Tianjin University
P3032	Low-density polyethylene cracking over defect-rich Beta zeolite	<u>Shinya KOKURYU</u> , Koji MIYAKE, Yoshiaki UCHIDA, Atsushi MIZUSAWA, Tadashi KUBO, Norikazu NISHIYAMA	Osaka University
P3033	Dehydroaromatization of ethane over Mg and Zn doped ZSM-5	<u>Tomoka SUMI</u> , Koji MIYAKE, Yoshiaki UCHIDA, Norikazu NISHIYAMA	Osaka University
P3034	Deposition of gold clusters on Ni-Ti mixed metal oxide/SiO <sub>2</sub> having abundant oxygen vacancies and its catalytic performance for CO oxidation	<u>Ayu TAKAHASHI</u> , Akihiro NAKAYAMA, Toru MURAYAMA, Norihito SAKAGUCHI, Tetsuya SHIMADA, Shinsuke TAKAGI, Tamao ISHIDA	Tokyo Metropolitan University
P3035	Development of zeolite-encapsulated Ag catalyst with excellent hydrothermal stability	<u>Hidekazu GOTO</u> , Teruoki TAGO, Kentaro KIMURA, Ryo ABIRU, Misaki ENDO, Mayuko SUWA	Tokyo Institute of Technology
P3036	Encapsulated copper nanoparticles in porous silica for CO oxidation and deactivation study	<u>Deepali S. KONDHEKAR</u> , Chinnu THARA, Nandini DEVI	CSIR-National Chemical Laboratory
P3037	Bifunctional catalysis of supported gold nanoparticles modified with metal oxide clusters	<u>Shoji FUKUDA</u> , Soichi KIKKAWA, Ryo TAKAHATA, Kosuke SUZUKI, Kazuya YAMAGUCHI, Toshiharu TERANISHI, Seiji YAMAZOE	Tokyo Metropolitan University
P3038	Synthesis of Co and P doped carbon derived from triethyl phosphite-deposited LDH and its electrocatalytic performance on hydrogen evolution reaction	<u>Yasuhiro SHU</u> , Koki SASAKI, Koji MIYAKE, Yoshiaki UCHIDA, Norikazu NISHIYAMA	Osaka University
P3039	Development of zeolite-encapsulated Pt catalyst with excellent sintering resistance and molecular sieving ability	<u>Misaki ENDOH</u> , Ye JIANAN, Kentaro KIMURA, Hiroyasu FUJITSUKA, Teruoki TAGO	Tokyo Institute of Technology
P3040	Influence of the potassium introduction method on activity in ammonia synthesis of cobalt molybdenum nitrides deposited on gamma-alumina	<u>Artur JURKOWSKI</u> , Agnieszka WOJCIECHOWSKA, Aleksander ALBRECHT, Pawel ADAMSKI, Dariusz MOSZYNSKI	West Pomeranian University of Technology
P3041	Highly selective RWGSs reaction over Co-Fe clusters supported on N-doped graphitic carbon	Ana I. PRIMO, Lu PENG, Bogdan JURCA, <u>Vasile I. PARVULESCU</u> , Hermengildo GARCIA	Universitat Politècnica de València
P3042	First observation of surface protonics on SrZrO <sub>3</sub> under H <sub>2</sub> atmosphere via electrochemical impedance spectroscopy measurement	<u>Taku MATSUDA</u> , Yudai HISAI, Kota MURAKAMI, Shuhei OGO, Truls NORBY, Yasushi SEKINE	Waseda University
P3043	Colloidal bimetallic Pt <sub>1-x</sub> Ag <sub>x</sub> and Pt <sub>1-x</sub> Ag <sub>x</sub> /CeO <sub>2</sub> catalysts: Study of metal-metal and metal-support interactions	<u>Tamara-S. KHARLAMOVA</u> , Valery A. SVETLICHNYI, Grigory V. MAMONTOV	Tomsk State University
P3044	In situ XAFS study for humidity dependence of water formation reaction of Pd/Al <sub>2</sub> O <sub>3</sub> and Pd/TiO <sub>2</sub>	<u>Takuro AOTANI</u> , Daiju MATSUMURA, Hirohisa TANAKA, Tatsuya AIDA, Kosuke NAKAMURA, Tadasuke YAMAMOTO, Kohei INAGAWA, Sogo IWATA, Sayaka MASAKI	Kwansei Gakuin University
P3045	Synthesis of supported Au@Pd core@shell nanoparticles with thin Pd shell thickness and their stability in catalysis	<u>Yanyue FENG</u> , Andreas SCHAEFER, Mengqiao DI, Hanna HÄRELIND, Mattias BAUER, Per-Anders CARLSSON	Chalmers University of Technology
P3046	<i>Moved to oral presentation (OD315)</i>		
P3047	Preparation of Pd nanoparticles supported metal oxide using polymer brushes as a template	<u>Akira MIYANO</u> , Kakeru NINOMIYA, Kazutaka KAMITANI, Kazuo KATO, Maiko NISHIBORI	Kyushu University
P3048	New low-temperature methanol synthesis from CO <sub>2</sub> -containing syngas via self-catalysis of methanol and Cu/ZnO catalysts	<u>Fei CHEN</u> , Guohui YANG, Noritatsu TSUBAKI	University of Toyama

P3049	Support effect on the activity of low-temperature methane steam reforming in an electric field	Ayaka MOTOMURA, Maki TORIMOTO, Shuhei OGO, Yudai HISAI, Naoya NAKANO, Ayako TAKAHASHI, Quanbao MA, Jeong Gil SEO, Hideaki TSUNEKI, Truls NORBY, Yasushi SEKINE	Waseda University
P3050	Developing Cu-MOR@SiO <sub>2</sub> core-shell catalyst microcapsules for two-stage ethanol direct synthesis from DME and syngas	Chengwei WANG, Ruiqin YANG, Peng LU, Noritatsu TSUBAKI	University of Toyama
P3051	Catalytic oligomerization of isobutyl alcohol to jet fuels over dealuminated zeolite Beta	Xiaoyu GUO, Guohui YANG, Noritatsu TSUBAKI	University of Toyama
P3052	Effects of alumina support and size of Pt nanoparticles on toluene hydrogenation activity	Kazumasa MURATA, Junya ONODA, Yuta YAMAMOTO, Akira ODA, Junya OHYAMA, <u>Atsushi SATSUMA</u>	Nagoya University
P3053	Direct methane reforming – study of preparation method of Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O catalyst –	Koichiro IWAMA, Noriyasu OKAZAKI	Kitami Institute of Technology
P3054	Development of Ni catalysts supported on high-surface-area BaTiO <sub>3</sub> -based material for ammonia decomposition	Haruki ISHIDA, Hiroki MUROYAMA, Naoto KAMIUCHI, Toshiaki MATSUI, Koichi EGUCHI	Kyoto University
P3055	Photothermal dry reforming of methane over silica-supported nickel catalysts under visible and near-infrared light irradiation	Junya TSUBAKIMOTO, Daichi TAKAMI, Akira YAMAMOTO, Hisao YOSHIDA	Kyoto University
P3056	Methane direct reforming reaction using biomethane	Sho FUKUSHIMA, Noriyasu OKAZAKI	Kitami Institute of Technology
P3057	Direct methane reforming -Effect of coexisting H <sub>2</sub> O and CO <sub>2</sub> -	Rei SATOH, Noriyasu OKAZAKI	Kitami Institute of Technology
P3058	The effects of mordenite zeolite catalyst synthesis conditions on dimethyl ether carbonylation	Jiaqi FAN, Jie YAO, Guohui YANG, Noritatsu TSUBAKI	University of Toyama
P3059	Effects of metal cation doping in CeO <sub>2</sub> support on catalytic methane steam reforming at low temperature in an electric field	Kaho NAGAKAWA, Ayako TAKAHASHI, Reona INAGAKI, Maki TORIMOTO, Yudai HISAI, Taku MATSUDA, Quanbao MA, Jeong Gil SEO, Takuma HIGO, Hideaki TSUNEKI, Shuhei OGO, Truls NORBY, Yasushi SEKINE	Waseda University
P3060	Alkaline earth metal cation doping on LaAlO <sub>3</sub> perovskite catalysts for low-temperature oxidative coupling of methane in an electric field	Harunobu TEDZUKA, Yuna TAKENO, Shuhei OGO, Kota MURAKAMI, Takuma HIGO, Hideaki TSUNEKI, Jeong Gil SEO, Yasushi SEKINE	Waseda University
P3061	Direct conversion of syngas to branched C <sub>4</sub> hydrocarbons via Fischer-Tropsch synthesis	Yingluo HE, Guohui YANG, Noritatsu TSUBAKI	University of Toyama
P3062	Directly conversion of syngas to aromatics over hybrid catalysts	Baizhang ZHANG, Guohui YANG, Noritatsu TSUBAKI	University of Toyama
P3063	Catalysts formulation for the direct conversion of crude oil to chemicals	Tuiana-Bairovna SHOINKHOROVA, Mohammed ALABDULLAH, Alla DIKHTIARENKO, Alberto RODRIGUEZ-GOMEZ, Jullian VITTENET, Ola S. ALI, Isidoro MORALES-OSORIO, Wei XU, Jorge GASCON	King Abdullah University of Science and Technology
P3064	Isolated Ga hydrides in zeolites as selective and coke-resistant active sites for ethane dehydrogenation	Mengwen HUANG, Shunsaku YASUMURA, Zen MAENO, Takashi TOYAO, Ken-ichi SHIMIZU	Hokkaido University
P3065	Development of a new <i>in situ</i> UV-vis reflection spectroscopy system for the formic acid dehydrogenation	Risheng LI, Hajime KAWANAMI, Tetsuya KODAIRA	University of Tsukuba / National Institute of Advanced Industrial Science and Technology
P3066	Highly selective oxidative coupling of methane over un-molten K <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> catalyst: the role of peroxide species revealed by in situ characterization	Duanxing LI, Shintaro YOSHIDA, Bhavin SIRITANARATKUL, Angel T. GARCIA-ESPARZA, Dimosthenis SOKARAS, Hirohito OGASAWARA, Kazuhiro TAKANABE	The University of Tokyo
P3067	Catalytic synthesis of cello-oligosaccharides by carbon catalyzed hydrolysis of cellulose	Abhijit SHROTRI, Pengru CHEN, Atsushi FUKUOKA	Hokkaido University
P3068	Photocatalyst sheets employing oxysulfides for Z-scheme water splitting at ambient pressure	Swarnava NANDY, Shanshan CHEN, Huihui LI, Takashi HISATOMI, Tsuyoshi TAKATA, Kazunari DOMEN	Shinshu University
P3069	Direct conversion of CO <sub>2</sub> to aromatics over K-Zn-Fe/ZSM-5 catalysts via Fischer-Tropsch synthesis pathway	Jiaming LIANG, Guohui YANG, Noritatsu TSUBAKI	University of Toyama
P3070	Liquid-phase synthesis of new hydrocarbon biodiesel fuel (HiBD) from waste cooking oil	Hikaru SHIMADA, Tetsuya HIRAKAWA, Kenji ASAMI, Haruki TANI, Yayoi MURAKAMI, Kaoru FUJIMOTO	The University of Kitakyushu
P3071	Hydrogen storage and release characteristics of light cycle oil over platinum catalyst for LOHC systems	Jinho OH, Hyejeong PARK, Thanh-Binh NGUYEN, Jung Kyoo LEE	Dong-A University
P3072	Low-temperature hydrogenation of CO <sub>2</sub> to methanol over supported gold catalysts	Takumi NAKAGAWA, Hiroki MIURA, Tetsuya SHISHIDO	Tokyo Metropolitan University
P3073	Controlling diphenyl ether hydrogenolysis selectivity by tuning Pt-support and H-donors under mild conditions	Chen ZHU, Hajime HOJO, Hisahiro EINAGA	Kyushu University

P3074	Indium as stability enhancer for Ni-based catalysts in acetic acid steam reforming	Xuan Trung NGUYEN, Soroosh SAEEDI, Nicola SCOTTI, Filippo BOSSOLA, Claudio EVANGELISTI, Vladimiro DAL SANTO	CNR-Istituto di Scienze e Tecnologie Chimiche - Giulio Natta
P3075	Gas diffusion electrode evaluation using half-cell set up for high temperature polymer electrolyte membrane fuel cell	Hyeon-Seung JUNG, Dong Hee KIM, Chanho PAK	Gwangju Institute of Science and Technology
P3076	Fabrication of Sn/graphene/carbon electrode for the electrochemical reduction of carbon dioxide in methanol	Kenta KIKUCHI, Mai FURUKAWA, Ikki TATEISHI, Hideyuki KATSUMATA, Satoshi KANEKO	Mie University
P3077	Catalytic study on ammonia synthesis over mesoporous carbon supported ruthenium catalysts	Chia-Min YANG, Wei-Chih HSIAO, Shih-Yuan CHEN	National Tsing Hua University
P3078	Hf-isomorphously substituted Beta nanocrystals for tandem catalytic conversion of glucose to hydroxymethylfurfural (HMF)	Wanmai SRISUWANNO, Kachaporn SAENLUANG, Anittha PRASERTSAB, Saros SALAKHUM, Pinit KIDKHUNTHOD, Supawadee NAMUANGRUK, Chularat WATTANAKIT	Vidyasirimedhi Institute of Science and Technology
P3079	Controlling the selectivity of O <sub>2</sub> /HClO production from seawater under solar-light irradiation over visible-light responsible photoelectrode	Sayuri OKUNAKA, Yugo MISEKI, Kazuhiro SAYAMA	National Institute of Advanced Industrial Science and Technology
P3080	Partial oxidation of methane with hydrogen peroxide using iron complexes encapsulated into zeolite	Maho SHIMADA, Shuhei YAMAGUCHI, Hidenori YAHIRO	Ehime University
P3081	Direct hydroxylation of benzene with hydrogen peroxide using Fe complexes encapsulated into mesoporous zeolite	Yuito ISHIDA, Hitomu KOGA, Syuhei YAMAGUCHI, Hidenori YAHIRO	Ehime University
P3082	Optimization of Pt/TiO <sub>2</sub> and Cu/CeO <sub>2</sub> catalysts for ammonia synthesis from NO using H <sub>2</sub> or CO-H <sub>2</sub> O reductant	Chandan-Subhash CHAUDHARI, Keisuke KOBAYASHI, Yuichi MANAKA, Tetsuya NANBA	National Institute of Advanced Industrial Science and Technology
P3083	Development of zeolite supported Cu-ZnO catalysts for methanol synthesis by CO <sub>2</sub> hydrogenation	Ryokuto KANOMATA, Hiroyasu FUJITSUKA, Kentaro KIMURA, Raquel SIMANCAS, Shuhei YASUDA, Takeshi MATSUMOTO, Toru WAKIHARA, Toshiyuki YOKOI, Teruoki TAGO	Tokyo Institute of Technology
P3084	Pseudo-grafted precursor for the selective formation of bis-grafted surface species	Yusuke ISHIZAKA, Kazuhiro MATSUMOTO, Kazuhiko SATO, Jun-Chul CHOI	National Institute of Advanced Industrial Science and Technology
P3085	Facile synthesis of nanoporous Sn-Substituted ZSM-48 for glucose isomerization	Kachaporn SAENLUANG, Wanmai SRISUWANNO, Saros SALAKHUM, Chadatip RODAUM, Pannida DUGKHUNTOD, Chularat WATTANAKIT	Vidyasirimedhi Institute of Science and Technology (VISTEC)
P3086	Fabrication of novel MnO <sub>2</sub> nanostructures decorated with tin nanoparticles for high performance visible light driven photocatalyst	Kaviyarasu KASINATHAN, S. PANIMALAR, R. UTHRAKUMAR, C. INMOZHI, M. MAAZA	University of South Africa
P3087	Utilization of CO <sub>2</sub> – Methanol production	Rudolf WESSELS, Erik-Jan RAS, Jeroen VAN DEN REIJEN	Avantium Chemicals B.V.