

## Poster Session III

September 30 (Mon), 10:30-12:00

### 【Inorganic/Analytical/Environmental Chemistry】

3P001 Air oxidation of cyclopentadienyl-supported diruthenium-sulfur complexes

○Marina Kanno, Shinji Inomata

3P002 Synthesis and structure of a cobalt-vanadium binuclear complex containing a bridged-edta ligand

○Yuta Takao, Tsugiko Takase, Shinji Inomata

3P003 Generation of silver nanoplate on a surface of silver oxalate crystal

○Shihoko Ojima, Takanari Togashi, Ibuki Sato, Katuhiko Kanaizuka, Masatomi Sakamoto, Masato Kurihara

3P004 Synthesis of water dispersible silver nanoparticles by the thermal decomposition of silver oxalate in homogeneous aqueous phase

○Kota Saito, Takanari Togashi, Ibuki Sato, Katsuhiko Kanaizuka, Masatomi Sakamoto, Masato Kurihara

3P005 Structure and Dielectric Properties of Protonated DABCO/[Ni(dmit)<sub>2</sub>]<sup>-</sup> Crystals

○Masaki Miyahara, Kazuya Kubo, Shin-ichiro Noro, Tomoyuki Akutagawa, Takayoshi Nakamura

3P006 Determination of anionic surfactants in environmental samples using sequential injection analysis with a microfluidic polymer chip with an embedded ion-selective electrode detector

○Takashi Masadome, Hiroaki Arai

3P007 The effect of process parameters on the size of ZnO nanoparticles synthesized by wet process

○Kousuke Sakusabe, Tomomichi Nishino

3P008 Crystal-Size-Dependent Guest Responsivity of Fe(II)M(II) Porous Coordination Polymers

○Akio Mishima, Ryo Ohtani, Tomomi Koshiyama, Susumu Kitagawa, Masaaki Ohba

3P009 Control of Water Oxidation Reaction by Lipophilic Ru Complex-Liposome Composites

○Koki Iwata, Tomoya Okamura, Tatsuru Hatae, Masaki Yoshida, shigeyuki Masaoka, Tomomi Koshiyama, Masaaki Ohba

3P010 Control of Pore Structures by Substitution of Pyridine Derivative Ligands in Porous Two-Dimensional Zinc(II) Complexes

○Kei Hasegawa, Shin-ichiro Noro, Kazuya Kubo, Takayoshi Nakamura

3P011 Insertion of single-molecule-magnets into Metal Organic Frameworks

○Shinichi Tomoguchi, Shinya Takaishi, Brain K Breedlove, Masahiro Yamashita

3P012 High catalytic performance of bcc Co-Fe alloy in the steam reforming of toluene with

hydrogen addition

○Tatsuhiko Kimura, Mitsuru Koike, Lei Wang, Yoshinao Nakagawa, Keiichi Tomishige

3P013 Role of the multi hydrogen-bonded organic-inorganic hybrid modules in formation of the supramolecular structures

○Shiori Yoshioka, Akira Fuyuhiko, Shinya Hayami, Satoshi Kawata

3P014 Characterization and Improvement of Biodiesel Fuel

Yumi Yamada, ○Akari Kanno, Tomoko Oyake, Hideyuki Tagaya

3P015 Synthesis and Properties of a Ruthenium(II) Complex Bearing a Xanthene-Based Silyl(thiolato) Chelate Ligand

○Takafumi Arai, Takashi Komuro, Hiromi Tobita

3P016 Reactivity of an ( $\eta^3$ - $\alpha$ -Silabenzyl)molybdenum Complex toward Alkenes: Effects of Alkene Substituents on the Products

○Yuto Kanno, Takashi Komuro, Hiromi Tobita

3P017 Hydrosilylation of Arylalkynes Catalyzed by Ruthenium-Phosphine Complexes Having a Bis(silyl) Chelate Ligand "Xantsil": Comparison of Their Catalytic Performance Depending on Phosphine Ligands

○Takeo Kitano, Nathalie Mager, Takashi Komuro, Hiromi Tobita

3P018 Reactions of a Tungsten-Germlyne Complex with Alcohols, Aldehydes, and  $\alpha,\beta$ -Unsaturated Carbonyl Compounds

○Tetsuya Fukuda, Hisako Hashimoto, Hiromi Tobita

3P019 Synthesis and Structure of an NHC-Stabilized Chlorogermlyne Complex and Chloride Abstraction from it

○Koya Inomata, Takahito Watanabe, Hiromi Tobita

3P020 Structure and magnetic properties of Hercynite synthesized by microwave irradiation

○Jun Fukushima, Yamato Hayashi, Hirotsugu Takizawa

3P021 Elimination of cesium by hydroponic plants

○Eiichi Kitazume, Jyunya Nakadate

3P022 Synthesis of an NHC-Stabilized Hydrido(hydroborylene)tungsten Complex and Its Reactivity toward Alkenes and Alkynes

○Zeping Hui, Takahito Watanabe, Hiromi Tobita

3P023 Reactions of a Hydrogen-Bridged Bis(silylene) Tungsten Complex with Several Organic Substrates

○Katsuto Komura, Hisako Hashimoto, Hiromi Tobita

3P024 Synthesis and Reactivity of Hydrido(silylene)ruthenium Complexes : Formation of Novel  $\eta^3$ -2-Aza-1-silaallyl Complexes in their Reactions with Arylnitriles

○Kimiaki Nishimura, Hisako Hashimoto, Hiromi Tobita

3P025 A molecular probe for recognizing the size of hydrophobic cavities based on near-infrared absorbing diradical–Pt<sup>II</sup> complexes

○Kousaku Tamura, Atsuko Masuya, Hitoshi Hoshino, Nobuhiko Iki

3P026 Cs<sup>+</sup>-Adsorption Capacities of Prussian-Blue Depend on Nanoparticle Size and Number of Defect Sites

○Sayori Akiba, Asako Otani, Yuji Hoshi, Manabu Ishizaki, Katsuhiko Kanaizuka, Masato Kurihara, Masatomi Sakamoto, Tohru Kawamoto, Hisashi Tanaka

3P027 Synthesis and Characterization of Ferrocene-Appended Tetraazanaphthalene

○Kyosuke Isoda, Harufumi Haga, Kazuo Endo, Makoto Tadokoro

3P028 Reactions of Iron Methyl Complexes with Hydroboranes: Unexpected Formation of Polynuclear Iron Hydride Complexes

○Hirotugu Takahashi, Takahito Watanabe, Hiromi Tobita

3P029 Single-cell comprehensive gene expression analysis during cell differentiation

○Ikuma Fujisawa, Yuanshu Zhou, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

3P030 LSI-based electrochemical chip device for high-speed and high-sensitivity bioimaging

○Yusuke Kanno, Kosuke Ino, Kumi Y. Inoue, Mustafa Şen, Ryota Kunikata, Atsushi Suda, Hitoshi Shiku, Tomokazu Matsue

3P031 Electrochemical detection of droplet array using a novel device with IDA electrodes

○Takehito Goto, Kosuke Ino, Yusuke Kanno, Hitoshi Shiku, Tomokazu Matsue

3P032 Selection of highly-differentiated cardiomyocyte from mouse embryonic stem cells based on non-invasive electrochemical measuring

○Toshiharu Arai, Hitoshi Shiku, Nana Aoki, Kosuke Ino, Tomokazu Matsue

3P033 MicroRNA expression analysis of HUVEC at single-cell level

○Kosuke Miyashita, Yuji Nashimoto, Yasufumi Takahashi, Kosuke Ino, Hitoshi Shiku, Tomokazu Matsue

3P034 Visual Colorimetry for Selenium(IV) by 3,3'-Diaminobenzidine on a Membrane Filter

○Yota Suzuki, Kimitoshi Sato, Kazuo Hirayama

3P035 Structure and characterization of the co-crystal constructed from hydrogen bonded mixed-valence complexes

○Atsushi Iioka, Koichiro Noguchi, You Suzuki, Tomoaki Sugaya, Kyosuke Isoda, Makoto Tadokoro

3P036 Dielectric Behavior of Rhenium Mixed-Valence Complexes Having Functionalities on Proton-Coupled Electron Transfer

○Makoto Yoshizawa, Tamotsu Furutachi, Kyosuke Isoda, Tomoyuki Akutagawa, Makoto Tadokoro

3P037 Water Molecular Clusters Confined to 1-D Nanoporous Channels Containing Polyoxometalate Building Blocks

○Kazuki Saito, Kyosuke Isoda, You Suzuki, Hiroshi Matsui, Makoto Tadokoro

3P038 Additive effect of secondary metals on Pd catalysts for liquid-phase total hydrogenation of furfural

○Kana Takada, Masazumi Tamura, Yoshinao Nakagawa, Keiichi Tomishige

3P039 Solid-and oil-separation in food processing wastewater using effect of micro-bubbles

○Shiho Tatehana, Susumu Takahashi

3P040 Optode for polyhexamethylene biguanide hydrochloride based on a lactone-form Rhodamine B Membrane

○Takashi Masadome, Hidekazu Ishikawa, Akane Funaki, Yuta Horikoshi

3P041 Quantitative analysis for ternary gases containing hydrogen using Raman spectroscopy

○Tomoya Kitayama, Yasushi Numata, Hiroyuki Tanaka

3P042 Quantitative analysis of solute in binary solution using Raman spectroscopy

○Ryutaro Suto, Yasushi Numata, Kenji Yamagishi, Hiroyuki Tanaka

3P043 Development of measuring method of molecular weight for oligosaccharide with Raman spectroscopy

○Takahiro Watanabe, Kyohei Kawasumi, Kenji Yamagishi, Yasushi Numata, Hiroyuki Tanaka

3P044 Hydrolysis of chitin to N-acetylglucosamine by microwave irradiation

○Soichiro Saito, Yasushi Numata, Hiroyuki Tanaka

3P045 Development of method for quantitative analysis of amino acid with Raman spectroscopy.

○Maria Otsuka, Kyohei Kawasumi, Kenji Yamagishi, Yasushi Numata, Hiroyuki Tanaka

3P240 Gold(III) removal by sorption and reduction using microorganisms

○Ichiro Maeda, Takehiko Tsuruta

## 【Physical Chemistry】

3P046 Comprehensive calculation of sum frequency generation spectroscopy including the bulk contribution from electric quadrupole

○Hiromi Sawai, Kazuya Shiratori, Tatsuya Ishiyama, Akihiro Morita

3P047 Molecular dynamics study of water transfer at supercooled sulfuric acid solution surface covered with butanol

○Suguru Sakaguchi, Akihiro Morita

3P048 Why is benzene soluble in water? - Role of the fluctuation of  $\pi$  electrons in aromatic solutes immersed in water. -

○Daiki Suzuoka, Shintaro Kimura, Hideaki Takahashi, Akihiro Morita

3P049 Free energy analyses for ATP hydrolysis using quantum mechanical /molecular mechanical simulations combined with a theory of solutions.

○Yuji Miki, Hideaki Takahashi, Akihiro Morita

3P050 Fabrication and characterization of self-organized two-dimensional diluted magnetic

semiconductors

○Kohei Kubota, Masanori Koshimizu, Hirotohi Saito, Keisuke Asai

3P051 Selective Vibrational Mode Excitation of Fullerene C<sub>60</sub> by Intense Near-Infrared Pulses

○Kaoru Yamazaki, Naoyuki Niitsu, Takashi Nakamura, Manabu Kanno, Hirohiko Kono

3P052 Excess electron binding motif in negatively charged clusters of secondary amides studied by photoelectron spectroscopy

○Takuto Shimamori, Asuka Fujii, Toshihiko Maeyama

3P053 Infrared spectroscopy and theoretical calculations on the acidic CH of the diethylether cation

○Tomoya Endo, Yoshiyuki Matsuda, Asuka Fujii

3P054 Elucidation of surface acidity of trimethylamine water solution by computational method

○Yusuke Tabe, Nobuaki Kikkawa, Hideaki Takahashi, Akihiro Morita

3P055 Development of SFG analyzing software CALNOS and application of surface of methanol/water mixture

○Takashi Ishihara, Tatsuya Ishiyama, Akihiro Morita

3P056 Microsecond dynamics of ubiquitin folding detected by single molecule fluorescence spectroscopy

○Masataka Saito, Hsin-Liang Chen, Rita P.-Y. Chen, Kiyoto Kamagata, Hiroyuki Oikawa, Satoshi Takahashi

3P058 Direct observation of the multiple sliding modes of a tumor suppressor p53.

○Agato Murata, Risa Kashima, Yuji Itoh, Takashi Tokino, Satoshi Takahashi, Kiyoto Kamagata

3P059 Temperature-jump induced light emission from water and organic solvents mixtures

○Shuichi Toyouchi, Shinji Kajimoto, Hiroshi Fukumura

3P060 Optical properties of Europium complex adsorbed on gold/silver/silica composite nanoparticles

○Tetsuro Oikawa, Kei Unoura, Hideki Nabika

3P061 Crystal structures of (fluorobenzylammonium)(dibenzo[18]crown-6)[Ni(dmit)<sub>2</sub>] salts

○Daigoro Endo, Kazuya Kubo, Shin-ichiro Noro, Takayoshi Nakamura

3P062 Evaluation of pH at an Alumina-Water Interface Using SFA Fluorescence Spectroscopy

○Masataka Kawashima, Yuko Saito, Kyeong A Inomata, Motohiro Kasuya, Kazue Kurihara

3P063 Laser-polarization dependence of multi-photon excitation of molecules with spherical symmetry

○Nobuyoshi Inada, Manabu Kanno, Hirohiko Kono,

3P064 Vibrational Spectroscopic Response at Water/Vapor and Ice/Vapor Interfaces : Effect of Charge Transfer

○Tatsuya Ishiyama, Hideaki Takahashi, Akihiro Morita

3P065 Interference of two shape resonances probed by rescattering photoelectron spectroscopy of

CO<sub>2</sub>

○Misaki Okunishi, R. Robert Lucchese, Toru Morishita, Kiyoshi Ueda

3P066 XFEL-induced deep inner-shell multi-photon multiple ionization and subsequent ultrafast charge migration in iodomethane and 5-iodouracil molecules

○Koji Motomura, Edwin Kukk, Shin-ichi Wada, Kiyonobu Nagaya, Hironobu Fukuzawa, Subhendu Mondal, Tetsuya Tachibana, Yuta Ito, Ryosuke Koga, Tsukassa Sakai, Kenji Matsunami, Artem Rudenko, Christophe Nicolas, XiaoJing Liu, Catalin Miron, Yizhu Zhang, Yuhai Jiang, Jianhui Chen, Anand Mailam, Dong Eon Kim, Kensuke Tono, Yuichi Inubushi, Takaki Hatsui, Makina Yabashi, Makoto Yao, Kiyoshi Ueda

3P067 Hydration structure of Li<sup>+</sup> studied by neutron diffraction with <sup>6</sup>Li/<sup>7</sup>Li isotopic substitution method

○Yasuo Kameda, Takuya Miyazaki, Yuko Amo, Takeshi Usuki

## 【Organic Chemistry】

3P068 Novel Glycosylation Based on Activation-First Strategy

○Nozomi Sato, Masaki Ishihara, Masato Noguchi, Shin-ichiro Shoda

3P069 A novel method for  $\alpha$ -selective glycosylation under reductive conditions using oligosaccharide donors

○Gefei Li, Masaki Ishihara, Masato Noguchi, Shin-ichiro Shoda

3P070 New Solvolytic Glycosylation Promoted by Nascent Lewis Acid

○Sachie Saito, Masato Noguchi, Shin-ichiro Shoda

3P071 Glycosylation of *N*-Acetylglucosamine under Reductive Conditions

○Marina Nagaki, Yuka Takagi, Masato Noguchi, Shin-ichiro Shoda

3P072 Synthesis of chitooligosaccharide derivatives using microreactor

○Takafumi Tsutsumi, Naoki Yoshida, Masato Noguchi, Atsushi Kobayashi, Shin-ichiro Shoda

3P074 Biotransformation utilized *Botrytis cinerea* - Reduction reactions of ketonic compounds -

○Takumi Kidachi, Masahiko Nagaki, Norimasa Ohya

3P075 Kinetic studies of *Micrococcus luteus* B-P26 undecaprenyl diphosphate synthase reaction using 3-desmethyl allylic substrate analogs

○Masafumi Kadosaki, Hana Sato, Takeshi Nakamura, Norimasa Ohya

3P076 Cloning, expression and characterization of *cis*-prenyltransferase from *Lactarius volemus*

○Takeshi Ieda, Takeshi Nakamura, Norimasa Ohya

3P077 Kinetic studies of IPP isomerase from *Ficus microcarpa*

○Arisa Masuda, Takeshi Nakamura, Norimasa Ohya

3P078 Enzyme-catalyzed resolution of  $\alpha$ -cyanohydrin derivatives

○Ryo Mashiko, Yuri Nakazawa, Miho Kusakari, Bunpei Hatano, Satoshi Murakami, Tatsuro Kijima

- 3P079 Synthesis and properties of the alkyl ferrocenes with cation binding ability  
○Xin Wang, Miho Kusakari, Bunpei Hatano, Satoshi Murakami, Tatsuro Kijima
- 3P080 Simulation Analysis of Chiral Recognition for Farnesyl Diphosphate Synthase from *Bacillus stearothermophilus*  
○Petrus Yesaya Samori, Yasutaka Yoshida, Yui Adachi, Miho Kusakari, Satoshi Murakami, Bunpei Hatano, Norimasa Ohya, Tatsuro Kijima
- 3P081 Functions as nitroreductase activity by azoreductase from *Geobacillus stearothermophilus*  
○Mei Suzuki, Toshihiko Ooi, Miho Kusakari, Bunpei Hatano, Satoshi Murakami, Tatsuro Kijima
- 3P082 ESR of Water Soluble Peroxyl Radical Generated from AIBN and Cyclodextrin  
○Yu Saito, Koshi Nakajima, Tatsuya Shiyama, Tateaki Ogata, Tatsuro Kijima
- 3P083 Enzyme-catalyzed resolution of optically active cyclohexylidene derivatives  
○Yasutaka Yoshida, Miho Kusakari, Bunpei Hatano, Satoshi Murakami, Tatsuro Kijima
- 3P084 Analysis of Reactivity of Geranylgeranyl Diphosphate Synthase with Substrate Analogs by Docking Simulation  
○Hana Sato, Takeshi Nakamura, Yukino Miyagi-Inoue, Norimasa Ohya
- 3P085 Catalytic activity of farnesyl diphosphate synthase from *Solidago altissima*  
○Chihiro Ishizawa, Takeshi Nakamura, Norimasa Ohya
- 3P086 Catalytic activity of geranylgeranyl diphosphate synthase from *Solidago altissima*  
○Risa Sasaki, Takeshi Nakamura, Norimasa Ohya
- 3P088 Analysis of bacterial community in a hot-composting process  
○Yusuke Nishimaki, Ryuichi Kobayashi, Koichi Kobayashi, Nobutaka Hirano, Mitsuru Haruki
- 3P089 Asymmetric Michael reaction of  $\beta$ -ketoesters catalyzed by alkali metal phenoxides of podand-type BINOL derivatives  
○Toyohiro Otani, Wataru Namatame, Yasufumi Tamai
- 3P090 Synthetic study of peptide aldehyde via thioacetal  
○Yoshihiro Sema, Hiroyuki Konno
- 3P091 Solid phase total synthesis of callipeltin M, linear octapeptide isolated from *Latrunculia* sp.  
○Mari Kikuchi, Hiroyuki Konno
- 3P092 Synthesis and structure activity relationship study of BK-1097 analogues for the antifungal agents  
○Kanakano Abumi, Yusuke Otsuki, Shigekazu Yano, Hiroyuki Konno
- 3P093 Synthesis of new electron-deficient NHC ligands  
○Hiromi Miyashita, Tetsuo Sato, Shuichi Oi
- 3P094 Synthesis and characterization of monovalent 9 group transition-metal ate complexes  
○Hiroki Yashiki, Hisae Takano, Daisuke Kanno, Tetsuo Sato, Shuichi Oi
- 3P095 Sulfenylation of electron-rich heteroaromatic compounds promoted by copper(II) chloride

- Kento Omura, Atsushi Funada, Tetsuo Sato, Shuichi Oi
- 3P096 Synthesis of platinum complexes coordinated with bidentate carbene ligands
- Motoki Kon, Ryo Nakabayashi, Tetsuo Sato, Shuichi Oi
- 3P097 Palladium-catalyzed allylic alkenylation of allylic alcohols with alkenes
- So Matsuyama, Tetsuo Sato, Shuichi Oi
- 3P098 Synthesis of Helicene-Based Phosphinite Ligands
- Tetsuya Tsujihara, Nao Nozaki, Asako Jonai, Yubi Sato, Minoru Hatanaka, Takeyuki Suzuki
- 3P099 Synthetic Study of Pentalenic Acid via Thermal Intramolecular Cycloaddition of 4-Alkenylfulvene
- Sho Inagaki, Shiori Takamura, Kohei Sato, Yoriko Asami, Minoru Hatanaka
- 3P100 Structure and properties of derivatives of sterically crowded triarylphosphines and arsines
- Shigeru Sasaki, Katsuhide Sutoh, Kiyotoshi Kato, Yukihiro Yamamoto, Masatoshi Izawa, Yusuke Shimizu, Masaaki Yoshifuji, Noboru Morita
- 3P101 Pd-catalyzed dehydrogenative cross-coupling of benzo[*b*]thiophenes with simple arenes using CuCl<sub>2</sub> and Cu(OAc)<sub>2</sub> as oxidants
- Kenji Funaki, Tetsuo Sato, Shuichi Oi
- 3P102 Palladium Catalyzed Three-Component Coupling of Ynamides
- Hideaki Wakamatsu, Yuichi Yoshimura, Rika Yanagisawa, Ayano Takahashi, Yoshihiro Natori, Hiroki Takahata
- 3P103 Selective production of cyclohexanol from guaiacol over Ru catalyst combined with MgO
- Momoko Ishikawa, Masazumi Tamura, Yoshinao Nakagawa, Keiichi Tomishige
- 3P104 Unsaturated alcohol synthesis from unsaturated aldehyde by selective hydrogenation over Ir-ReO<sub>x</sub>/SiO<sub>2</sub> catalyst
- Tokonami Kensuke, Tamura Masazumi, Nakagawa Yoshinao, Tomishige Keiichi
- 3P105 Synthesis of  $\alpha$ -hydroxyketone from vicinal alcohols by selective dehydrogenation over Ir-ReO<sub>x</sub>/SiO<sub>2</sub> catalyst
- Hiraku Sato, Masazumi Tamura, Yoshinao Nakagawa, Keiichi Tomishige
- 3P106 Structure and performance of Rh-In/C for the amination of various alcohols with aqueous ammonia
- Tsukasa Takanashi, Masazumi Tamura, Yoshinao Nakagawa, Keiichi Tomishige
- 3P107 Conversion of Sugar and Sugar Alcohols to *n*-Alkanes without C-C Cleavage Catalyzed by Ir-ReO<sub>x</sub>/SiO<sub>2</sub> with H-ZSM-5
- Daisuke Kanno, Kaiyou Chen, Masazumi Tamura, Zhenle Yuan, Yoshinao Nakagawa, Keiichi Tomishige
- 3P108 Nanoporous Metal-Catalyzed Hydrosilylation of Alkyne
- Yoshifumi Ishikawa, Yoshinori Yamamoto, Naoki Asao



3P109 Nanoporous Gold Catalyst for Cross-Dehydrogenative Coupling Reaction *via* C-H bond Activation

○Hon Eong Ho, Tienan Jin, Naoki Asao, Yoshinori Yamamoto

3P110 Copper-Catalyzed Amination of Hydrofullerenes *via* C-H Functionalization

○Weili Si, Shirong Lu, Naoki Asao, Yoshinori Yamamoto, Tienan Jin

3P111 Synthesis of Amidodienes by Copper-Catalyzed Skeletal Rearrangement of *O*-Propargylic Oximes

○Yasuhiro Ishida, Itaru Nakamura, Masahiro Terada

3P112 Development of Chiral Brønsted Acid Catalyzed Petasis-Ferrier-Type Rearrangement and Its Theoretical Study

○Kyohei Kanomata, Yasunori Toda, Yukihiro Shibata, Masahiro Yamanaka, Ilya Gridnev, Masahiro Terada

3P113 Development of Novel Helically Chiral Spiro P3 Phosphazene Superbase Catalyst

○Masafumi Oishi, Kengo Goto, Tadahiyo Takeda, Azusa Kondoh, Masahiro Terada

3P114 Synthesis of Spin-labeled Agricultural Chemical Analog

○Arata Watanabe, Tatsuro Kijima, Miho Kusakari, Satoshi Murakami, Shigeru Matsuba, Bunpei Hatano

3P115 Allylation of *N,N*-acetal Using Allylic Tin Reagent in Presence of Aluminum Chloride

○Xiaonan Sun, Tatsuro Kijima, Miho Kusakari, Satoshi Murakami, Shigeru Matsuba, Bunpei Hatano

3P116 Synthesis of TEIO Derivative and ESR Study

○Yosuke Saito, Tatsuro Kijima, Miho Kusakari, Satoshi Murakami, Shigeru Matsuba, Bunpei Hatano

3P117 Synthesis of an Oxo-Bridged Dinuclear Tungsten Complex *via* O-H Bond Activation of Water and Its Structure and Reactivity

○Hironobu Kono, Kwon Eunsang, Kozo Toyota, Hiroyuki Sakaba

3P118 Substituent and Solvent Effects on the Reactions of Acetylide-Silylene Tungsten Complexes with Acetone

○Keita Nakagawa, Kwon Eunsang, Kozo Toyota, Hiroyuki Sakaba

3P119 Coronatine derivatives for bioorganic studies on stomatal opening

○Ryo Tashita, Syusuke Egoshi, Minoru Ueda

3P120 Detection and Purification of Jasmonate Glucoside Target Protein

○Miyuki Shigenaga, Takahisa Genji, Yasuhiro Ishimaru, Minoru Ueda

3P121 Chemical biology of ouabagenin as a possible human endogenous ligand

○Haruka Oishi, Maiko Okada, Satoru Tamura, Minoru Ueda

3P122 Comprehensive analysis of potassium channels in *Samanea saman*

- Tayaka Oikawa, Yasuhiro Ishimaru, Shin Hamamoto, Nobuyuki Uozumi, Minoru Ueda  
3P123 Study on the Effects of Silyl Substituents of Diphenylprolinol Silyl Ethers in Organocatalyst-mediated Asymmetric Reactions
- Daichi Okamura, Tatsuya Yamazaki, Yasuto Ameda, Hiroaki Gotoh, Yujiro Hayashi  
3P124 Direct esterification and synthesis of oxazolines from aldehydes with pyridinium hydrobromide perbromide in water
- Shinsei Sayama  
3P125 Asymmetric Mannich Reaction of  $\alpha$ -Ketoimines Catalyzed by Organocatalyst
- Hiroki Shomura, Daisuke Sakamoto, Yujiro Hayashi  
3P126 Asymmetric Aldol Reaction of Alkynyl Aldehyde Catalyzed by Diarylprolinol
- Yuta Kanda, Masahiro Kojima, Yusuke Yasui, Itaru Sato, Yujiro Hayashi  
3P127 Asymmetric formal [3+2] cycloaddition reaction of succinaldehyde via diarylprolinol-mediated domino aldol/acetalization reaction for the construction of tetrahydrofuran
- Kentarō Nishino, Itaru Sato, Yujiro Hayashi  
3P128 Concise Total Synthesis of Prostaglandin E<sub>1</sub> Methyl Ester
- Shigenobu Umemiya, Yujiro Hayashi  
3P129 Synthesis of 2,3-Dihydro-1,2,4-thiadiazoles and 1,2,4-Oxathiazoles through Oxidative Cyclization of 1,3-Thiaza-1,3-butadienes
- Megumi Isogami, Kazuaki Shimada, Toshinobu Korenaga  
3P130 Synthesis of Macrocyclic Amidines through the Reaction of Alkanebisthioamides with a Silver Salt
- Shingo Takano, Kazuaki Shimada, Toshinobu Korenaga  
3P131 Low-temperature Rh-catalyzed Asymmetric 1,4-addition  
Toshinobu Korenaga, ○Aram Ko, Kazuaki Shimada
- 3P132 Pd-catalyzed Intramolecular Direct Arylation: Acceleration of the Reaction by Electron-poor BFPy Phosphine Ligand  
Toshinobu Korenaga, ○Noriki Suzuki, Kazuaki Shimada
- 3P239 One-Step Synthesis of  $\alpha,\beta$ -Unsaturated Carbodichalcogenoate Esters from Propargyl Ethers  
○Fumiya Ishikawa, Kazuaki Shimada, Toshinobu Korenaga
- 3P241 Design of Chiral Brønsted Acid Catalyst Derived from Optically Active Amino Binaphthyl  
○Jun Kikuchi, Norie Momiyama, Masahiro Terada

## 【Supercritical Fluid Technology】

- 3P133 Control of temperature responsivity of anion exchange property of thermosensitive polymer / mesoporous silica composite  
○Yasuto Sato, Ruriko Kimura, Hideki Watanabe, Kenji Murakami

- 3P134 Effect of mesoporous silica catalyst on reforming of bio-oil model compound  
○Sena Takahashi, Takahiro Oga, Nhu Y Khau Thi, Kenji Murakami
- 3P135 Preparation of PNIPAM/silica gel for column packing agent  
○Hideki Watanabe, Ruriko Kimura, Yasuto Sato, Kenji Murakami
- 3P136 Reforming of the bio-oil by carbon-based catalyst  
○Nhu Y Khau Thi, Sena Takahashi, Takahiro Oga, Kenji Murakami
- 3P137 Effects of hot compressed water on decomposition reactions at pressures up to 100 MPa  
○Tatsuya Fujii, Rumiko Hayashi, Shin-ichiro Kawasaki, Akira Suzuki, Yoshito Oshima
- 3P138 Measurement and prediction of phase equilibria at low-pressure polymerization process of poly(ethylene-co-vinyl acetate)  
○Takaaki Nakamura, Ayako Igarashi, Mizuki Murai, Yoshiyuki Sato, Hiroshi Inomata
- 3P139 Physicochemical Properties of Imidazolium-Based Ionic Liquid-Glyme Mixtures  
○Takuya Shimomura, Daisuke Kodama, Takashi Makino, Mitsuhiro Kanakubo, Seiji Tsuzuki
- 3P140 Effect of irradiation conditions on conversion of microwave-heating esterification  
○Masaki Kobayashi, Masahiro Tanji, Katsunori Sato, Kohei Fukukawa
- 3P141 Dehydration of fructose to HMF catalyzed by supported acidic ionic liquids in acetonitrile  
○Takashi Okano, Kun Qiao, Daisuke Tomida, Hisahiro Hagiwara, Chiaki Yokoyama
- 3P142 Expression of *cis*-prenyltransferase from *Lactarius volemus* by baculovirus-infected insect cells  
○Saki Yokota, Hitomi Mizumura, Takeshi Ieda, Takeshi Nakamura, Norimasa Ohya, Takeshi Gotoh
- 3P143 Efficient production of human angiotensin-converting enzyme 2 by Sf9 insect cells  
○Mai Miyawaki, Kenta Tsuchida, Saki Yokota, Saori Takahashi, Satoru Nirasawa, Takeshi Gotoh
- 3P144 Measurement of solubility of supercritical CO<sub>2</sub> in allyl-based ionic liquid with a magnetic suspension balance apparatus  
○Aya Kato, Yuya Hiraga, Yoshiyuki Sato, Taku Aida, Masaru Watanabe, Richard Lee Smith Jr.
- 3P145 Hydrothermal Treatment of Defatted Microalgae for Phosphorus and Nitrogen Recycle  
○Ryoma Maruta, Momoko Kato, Taku Michael Aida, Masaki Ota, Richard Lee Smith Jr.
- 3P146 Effect of temperature on hydrothermal treatment of waste wood charcoal  
○Yoshimasa Higashino, Masayuki Iguchi, Taku Michael Aida, Masaru Watanabe, Richard Lee Smith Jr.
- 3P147 Analysis of semi-clathrate hydrate formation kinetics in the presence of H<sub>2</sub> or CO<sub>2</sub> gas phases  
○Hiroyuki Komatsu, Masaki Ota, Masaru Watanabe, Yoshiyuki Sato, Richard Lee Smith Jr.
- 3P148 Application of PC-SAFT Model to Infinite Dilution Partition Coefficient of Aromatic Compounds in Ionic Liquid and Supercritical CO<sub>2</sub>  
○Yuya Hiraga, Aya Kato, Yoshiyuki Sato, Masaru Watanabe, Richard Lee Smith Jr.
- 3P149 CO<sub>2</sub> Absorption Properties of Glyme-Lithium Sulfonate Solutions

○Yasuhiro Endo, Hiroya Arai, Takuya Shimomura, Daisuke Kodama, Takashi Makino, Mitsuhiro Kanakubo

3P150 Supercritical carbon dioxide regeneration of activated carbon used at industrial process

○Tomohiro Ara, Ikuo Usiki, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

3P151 Development of an accurate prediction method for VOC adsorption equilibria under supercritical carbon dioxide conditions

○Ikuo Ushiki, Masaki Ota, Yoshiyuki Sato, Hiroshi Inomata

3P152 Viscosity measurement and prediction of liquid polymer + CO<sub>2</sub> mixtures

○Mizuki Murai, Yuya Maeta, Yoshiyuki Sato, Hiroshi Inomata

3P153 Phase equilibrium study for hydrothermal upgrading process of bitumen

○Yuki Matsui, Ryo Katayama, Masaki Ota, Yoshiyuki Sato, Masaru Watanabe, Hiroshi Inomata

3P154 Interaction between organic molecules and titanium dioxide surface in high temperature water

○Hyojin Jung, Nobuaki Aoki, Toshihiko Arita, Daisuke Hojo, Seiichi Takami, Tadafumi Adschiri

3P155 Mixing conditions and influence of synthesis temperature for the rational design of nanoparticles synthesis process

○Hikari Sasaki, Nobuaki Aoki, Toshihiko Arita, Daisuke Hojo, Seiichi Takami, Tadafumi Adschiri

3P156 Synthesis and catalytic application of polymermeric acidic ionic liquids in dehydration reaction

○Shintaro Noma, Kun Qiao, Daisuke Tomida, Hisahiro Hagiwara, Chiaki Yokoyama

3P157 Solubility behavior of GaN in supercritical ammonia with acidic mineralizer

○Mizuki Ito, Daisuke Tomida, Kun Qiao, Chiaki Yokoyama

3P158 GaN powder synthesis using Ga metal as a nutrient in supercritical ammonia

○Fukuma Sato, Quanxi Bao, Daisuke Tomida, Kun Qiao, Tohru Ishiguro, Shigefusa F. Chichibu, Chiaki Yokoyama

3P159 Supercritical hydrothermal synthesis of composite oxide nanoparticles

○Akira Yoko, Yoshito Oshima

3P160 Production of Phenolic Compounds from Lignin by High-temperature Liquid Water Treatment

○Kiyoko Sasaki, Mitsumasa Osada, Naofumi Kamimura, Eiji Masai

3P161 Evaluation of CO<sub>2</sub>/water/rock interactions for CO<sub>2</sub> geological sequestration

○Kaori Endo, Koyo Ryu, Takashi Fujii, Yuko Suto, Toshiyuki Hashida

3P162 Experimental of pressure dependence of gas permeability in rocks for development of CO<sub>2</sub> geological storage technology

○Koyo Ryu, Kaori Endo, Takashi Fujii, Toshiyuki Hashida

# 【Polymer Science and Technology】

3P163 Development and Application of Monodisperse Thermoresponsive PEG-Based Amphiphiles

○Syunichi Kawasaki, Takahiro Muraoka, Kazushi Kinbara

3P164 Liquid Crystalline Property of Cyclic Multi-Block Amphiphiles

○Tatsuya Shima, Takahiro Muraoka, Kiyoshi Kanie, Atsushi Muramatsu, Kazushi Kinbara

3P165 Development of a Photoresponsive Hybrid Protein

○Saori Miura, Takahiro Muraoka, Mihoko Ui, Kazushi Kinbara

3P166 Development of Membrane-Penetrating Functional Amphiphiles

○Kaori Umetsu, Takahiro Muraoka, Kazushi Kinbara

3P167 MMP and TIMP-like proteins act as fibril matrix of *Pteris penguin* byssus

○Masaru Aoki, Yuri Saeki, Koji Muramoto, Tomohisa Ogawa

3P168 Decomposition of formaldehyde by a phospholipid polymer film containing enzyme

○Shunsuke Suga, Naoki Tanaka, Shujiro Sakaki

3P169 A novel composite by copolymerization of protease and MPC

○Kodai Suzuki, Kazuhiko Ishihara, Shujiro Sakaki

3P170 Enzyme stabilization systems using MPC polymers

○Takuro Sugawara, Megumi Ito, Shujiro Sakaki

3P171 Synthesis of polylactic acid-modified silk protein

○Soichiro Hayasaka, Kanako Ishikawa, Masao Iijima

3P172 Synthesis and Interaction Behavior of Peptide Nucleic Acid (PRNA) –PNA-DNA Chimeras and Application to Cancer Cell Specific Expression Control of Genetic Information

○Ryohei Uematsu, Tatsuya Mizutani, Yasuyuki Araki, Seiji Sakamoto, Yohei Matsuyama, Asako Yamayoshi, Akira Murakami, Takehiko Wada

3P173 Novel Strategy of Supramolecular Asymmetric Photochirogenesis with Tailor-made Biopolymers as Chiral Reaction Media

Sakie Minato, Noboru Okugi, Seiji Sakamoto, Yasuyuki Araki, Yutaka Ikeda, Masaki Nishijima, Yukio Nagasaki, Yoshihisa Inoue, ○Takehiko Wada

3P174 Synthesis and Characterization of 6,6-Nylon-g-PNIPAM

○Rikiya Sato, Mio Ojima, Chika Miyahara

3P175 Use of an insect cell-free translation and translocation system for membrane proteins production

○Satoshi Soma, Toru Ezure, Kei Nanatani, Yoko Sato, Keishi Aizawa, Eiji Ando, Nobuyuki Uozumi

3P176 Development of Functional Amphiphiles Operative in Aqueous Media

○Takahiro Muraoka, Kazushi Kinbara

3P177 Construction of a photocontrol system of cAMP level based on the photoresponsive phosphodiesterase

○Mihoko Ui, Yasuhiro Arai, Makoto Murakami, Yasuyuki Araki, Takehiko Wada, Hiroto Takahashi, Kazushi Kinbara

3P178 Functionalization and application of photoactive yellow protein for a photoresponsive module

○Yusuke Miyauchi, Mihoko Ui, Makoto Murakami, Yasuyuki Araki, Takehiko Wada, Kazushi Kinbara

3P179 Development of PEG-Based Functional Molecules

○Hidetaka Honda, Takahiro Muraoka, Kazushi Kinbara

3P180 Synthesis and Applications of Hyperbranched Poly(glycidol)

○Rikiya Sato, Takahiro Hashimoto, Yoshie Matsumoto

3P181 Effective Chemo-enzymatic Synthesis of Glycoprotein via the Amadori Rearrangement

○Naoki Yoshida, Kensuke Sakai, Atsushi Kobayashi, Shin-ichiro Shoda

3P182 Design of A Caspase Sensing System Using Split-Luciferase and Split-Intein

○Seiji Sakamoto, Anna Hugo, Mika Terauchi, Yasuyuki Araki, Takehiko Wada

3P183 Studies on dynamics of G-Quadruplex structural changes from Na<sup>+</sup> to K<sup>+</sup> form by circular dichroism spectroscopy

○Yasuyuki Araki, Yoshiki Hamada, Makoto Murakami, Seiji Sakamoto, Takehiko Wada

3P184 STUDIES ON THE EFFECTS OF ARGININE RESIDUES INTRODUCTION TO PEPTIDE RIBONUCLEIC ACIDS (PRNA) ON THE COMPLEX STABILITIES WITH DNA/RNA AND CELL MEMBRANE PERMEABILITY

Ryohei Uematsu, Hiroka Sugai, Tatsuya Mizutani, Akira Nagami, Seiji, Sakamoto, Yasuyuki Araki, Ikuhiko Nakase, Shiroh Futaki, and Yoshihisa Inoue, ○Takehiko Wada

3P185 Development of polymeric nanoparticles for liver-specific ribavirin delivery

○Tsutomu Ishihara, Nobutaka Hirano, Yoshio Saito, Mitsuru Haruki, Shigeyuki Uno, Makoto Makishima

3P186 Functionlized PEGs as Effective Protein Manipulator

○Nabanita Sadhukhan, Takahiro Muraoka, Mihoko Ui, Kazushi Kinbara

## 【Materials Chemistry】

3P187 Coverage of soda-lime glass surface by exfoliated layered double hydroxide nanosheets

○Kai Takahashi, Sumio Aisawa, Hidetoshi Hirahara, Eiichi Narita

3P188 Syntesis and characterization of hollow nanosphere layered double hydroxide for drug delivery vehicles

○Ryota Kikuchi, Sumio Aisawa, Satoshi Takahashi, Hidetoshi Hirahara, Eiichi Narita

3P190 Fabrication of 3D Networked Porous Alumina Nanostructures by Anodization of Industrial

Pure Al Sheets

- Kyosuke Osaka, Song-Zhu Kure-Chu, Hitoshi Yashiro, Hiroyo Segawa, Kenji Wada, Satoru Inoue  
3P191 Synthesis of the silicon-containing additives to UV-NIL resin and investigation of their dry etching resistance
- Yuhei Tasaki, Syu Kaneko, Masaru Nakagawa, Hiroki Sato, Yusuke Honda, Nobukatsu Nemoto  
3P192 Systematically modified structures and physical properties of TCNQ salts using different size of dications
- Hiroyuki Kubota, Yukihiro Takahashi, Hiroyuki Hasegawa, Jun Harada, Tamotsu Inabe  
3P193 Formation of Cu<sub>2</sub>O nanocrystals on copper foils in *N*-isopropylacrylamide aqueous solution
- Akio Mochida, Kazunori Matsui  
3P194 Acid-base properties of organic-inorganic composite synthesized from HLaNb<sub>2</sub>O<sub>7</sub> and quaternary ammonium salt
- Kazuya Saito, Masataka Ogasawara, Sumio Kato  
3P195 Synthesis of [60]Fullerene Derivative with 1,3-Dipolar Cycloaddition as a Novel Structure for Bulk-Heterojunction Photovoltaic Cells
- Hisashi Tokutomi, Masaru Sekido  
3P196 Self-Organized Behavior of Electron-Accepting Liquid-Crystalline TANC Derivatives
- Tomonori Abe, Kyosuke Isoda, Makoto Tadokoro  
3P197 Interaction of Fluoroalkyl End-capped Oligomer/Polyaniline Nanocomposites with Silica Fine Particles Possessing Amino Groups
- Taiki Tsuzuki-ishi, Hideo Sawada  
3P198 Preparation and Thermal Stability and Photocatalytic Activity of Fluoroalkyl End-capped Vinyltrimethoxysilane Oligomer/anatase Titanium Oxide Nanocomposites-encapsulated Low Molecular Weight Aromatic Compounds
- Sujuan Guo, Hiroshi Kakehi, Yoshihiro Kato, Masashi Miura, Norifumi Isu, Hideo Sawada  
3P199 Preparation and Thermal Stability of Fluorinated Alcohols/Calcium Fluoride Nanocomposites by the Reactions of Fluorinated Alcohols with Calcium Salts
- Tomoya Saito, Yusei Tsushima, Katsuyuki Sato, Hideo Sawada  
3P200 Preparation and Thermal Stability of *N,N*-Dimethylacrylamide-Acrylonitrile Cooligomer/Silica Nanocomposites
- Masakazu Kabutomori, Keita Okuno, Masakazu Nishida, Haruhiko Fukaya, Yoshio Hayakawa, Hideo Sawada  
3P201 Preparation and Application of Fluoroalkyl End-capped Oligomers/Boric Acid Nanocomposites
- Takuto Shimamura, Saki Souma, Masato Yoshida, Hideo Sawada  
3P202 Preparation and Application to the Surface Modification of Fluoroalkyl End-capped

Vinyltrimethoxysilane Oligomer/Ionic Liquid Nanocomposites

○Yuri Oikawa, Tomoya Saito, Youhei Mizuguchi, Masashi Sugiya, Hideo Sawada

3P203 Prevention of Agglomeration between Pure Indium Particles Modified by Chemical Surface Treatment

○Hiroyoshi Kawasaki, Hiroshi Okada, Yoshihide Mawatari, Masato Yamamura, Hiroyuki Kage, Akihiko Tsuge, Koji Araki

3P204 Synthesis of nanometer-sized, monodisperse polymer particles in aqueous polymerization with addition of tiny amount of surfactants

○Motohiro Ishii, Haruyuki Ishii, Daisuke Nagao, Mikio Konno

3P205 One-pot synthesis of catalytic gold nanoparticle-mesoporous silica composite particles

○Ayumi Hirota, Haruyuki Ishii, Daisuke Nagao, Mikio Konno

3P206 Electric field induced self-assemblies of organic-inorganic composite particles with dumbbell shape

○Hayato Takahashi, Haruyuki Ishii, Daisuke Nagao, Mikio Konno

3P208 Computational Study on the Low Friction Mechanism of Si Doped DLC Films

○Shandan Bai, Yoshihiko Kobayashi, Seiichiro Sato, Yuji Higuchi, Nobuki Ozawa, Koshi Adachi, Jean-Michel Martin, Momoji Kubo

3P209 Preparation of uniform Ni-Fe alloy nanoparticles for the steam reforming of toluene as a model compound of tar

○Mitsuru Koike, Dalin Li, Yoshinao Nakagawa, Keiichi Tomishige

3P210 Synthesis of Silver Nanowires via Organic Salt by Ultrasound and Microwave Irradiation

○Kenta Sugawara, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P211 Fabrication and Characterization of TiN coating on various substrates by microwave irradiation

○Daichi Kitazume, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P212 Synthesis and photoluminescence properties of Mn<sup>4+</sup>-doped BaMg<sub>6</sub>Ti<sub>6</sub>O<sub>19</sub>

○Takuya Sasaki, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P213 Synthesis and characterization of new Li ion conductive Li-Sn-O compounds

○Yuya Nakatani, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P214 Ultrasound assisted synthesis and characterization of reduced Graphene Oxide for transparent conductive films

○Tomofumi Mochizuki, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P215 Characterization of SrFe<sub>12</sub>O<sub>19</sub> Synthesized by Microwave H-Field

○Hiroshi Goto, Jun Fukushima, Yamato Hayashi, Hirotsugu Takizawa

3P216 High-pressure synthesis and magnetocaloric effect of manganese intermetallic compounds

○Shinji Orimo, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa



3P217 Development of novel chromium coating method by sintering of chromium nanoparticles

○Takahiro Mori, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P218 Study of the synthetic conditions of the Sn<sup>2+</sup>-containing mixed oxide Sn<sub>2</sub>TiO<sub>4</sub> by microwave energy

○Nozomi Sato, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P219 Fabrication and OSC property of oriented delafossite-type CuFeO<sub>2</sub> grains by microwave irradiation

○Takumi Nakajima, Yamato Hayashi, Jun Fukushima, Hirotsugu Takizawa

3P220 Synthesis of Octahedral Pure Indium Particles

○Hiroyoshi Kawasaki, Hiroshi Okada, Naoya Murakami, Teruhisa Ohno, Akihiko Tsuge, Koji Araki

3P221 Properties of flat shaped Ni-Fe-Zn particles

○Masayuki Ishizuka, Ryouyusuke Nakamura, Takeshi Kawase, Ryou Kikuta, Yasunori Kunimitu

3P222 Cationic surfactant-templated synthesis and morphology control of mesoporous silica particles

○Shunsuke Kawai, Haruyuki Ishii, Daisuke Nagao, Mikio Konno

3P223 Fabrication of barium-titanate-loaded polymer nanocomposite films with high permittivity and transparency

○Nao Kamezawa, Haruyuki Ishii, Daisuke Nagao, Mikio Konno

## 【Electrochemistry】

3P224 Effects of Template Species in Tunnel Structure on Electrode Characteristics of  $\alpha$ -MnO<sub>2</sub> Nano-particle by Solution Method

Yoshihiro Kadoma, ○Hisashi Watanabe, Naoaki Kumagai, Koichi Ui

3P225 Influence of Natural Graphite Particle Size on Its Electrochemical Characteristics in TFSA Type Room-temperature Ionic Liquids

Koichi Ui, ○Tomohiro Karouji, Jun Towada, Yoshihiro Kadoma, Naoaki Kumagai

3P226 Fabrication of Binder-free Si Nanoparticle Negative Electrode for Lithium Secondary Batteries by Electrophoretic Deposition Method

Koichi Ui, ○Ryohei Saito, Yoshihiro Kadoma, Tomoyuki Kakigi, Soshi Kawamura, Toru Sukigara

3P227 Influence of Conductive Agent Types on Electrochemical Characteristics of SnO<sub>2</sub> Nanoparticle as Negative Electrode for Lithium Secondary Batteries

Koichi Ui, ○Yu Shibata, Yoshihiro Kadoma, Naoaki Kumagai, Minoru Mizuhata

3P228 Preparation of Fe-Sn Alloy Film as Negative Electrode for Lithium Secondary Batteries by Pulse Electrolysis

Koichi Ui, ○Yoshinori Kudo, Yoshihiro Kadoma

3P229 Quantum Chemical Molecular Dynamics Simulation on Degradation Process of Lithium-Ion

## Battery Cathode

○Kosuke Nakamura, Yuji Higuchi, Nobuki Ozawa, Momoji Kubo

3P230 First-Principles Study of Ethylene Glycol Oxidation on Transition Metal Surface for Alkaline Fuel Cell

○Shigeki Chieda, Yuji Higuchi, Nobuki Ozawa, Momoji Kubo

3P231 A Multi-Nanoparticle Molecular Dynamics Simulation of the Sintering Process in Porous Material

○Jingxiang Xu, Yuji Higuchi, Nobuki Ozawa, Kazuhisa Sato, Toshiyuki Hashida, Momoji Kubo

3P232 Surface modification of hot-dip galvanized steel with molybdate

○Ren Aoyama, Hitoshi Yashiro, Motoko Shibata

3P233 Surface properties of electrochemically nitrated stainless steel

○Yuki Yokosawa, Hitoshi Yashiro, Syouchiku Kure, Masanobu Kumagai, Seung-Teak Myung

3P234 Electrochemical analysis of molybdate in absorption chiller solutions.

○Shinji Kon, Hitoshi Yashiro, Hidenori Inabe, Kyouichi Sekiguchi, Takashi Hishinuma, Masahiko Itoh, Noriyuki Onaka

3P235 Influence of Electrodeposition Conditions on Electrochemical Characteristics of SnO<sub>2</sub> Nanoparticle as Negative Electrode for Lithium Secondary Batteries

Koichi Ui, ○Takao Komatsu, Yoshihiro Kadoma, Naoaki Kumagai, Minoru Mizuhata

3P236 Plasmon-assisted photocurrent generation from silver nanoparticle monolayers combined with ruthenium polypyridine complexes

○Azusa Kajikawa, Hiroki Kon, Manabu Ishizaki, Masatomi Sakamoto, Masato Kurihara, Katsuhiko Kanaizuka

3P237 Hydrothermally Prepared Lithium Titanate Nanoparticles as an Anode Material for Lithium-ion Battery

○Yusuke Tsujikawa, Kiyoshi Kanie, Takeshi Kimijima, Atsushi Muramatsu

3P238 A Carbon-Coated Film with Parallel and Straight Nanochannels as a Biofuel Cell Electrode

○Alberto Castro-Muñiz, Yasuto Hoshikawa, Hiroshi Komiyama, Wataru Nakayama, Takashi Kyotani, Tetsuji Itoh