
Poster Program

Poster Program

July 14 (Tue)

Oral Presentation 13:25-14:50 (Main Hall) ◆ Oral Presenter
Discussion 14:50-15:50 (Annex Hall)

- 1P-01 ◆ **Highly Practical New Methylenation Reagent for Aldehydes and Ketones**
Kaori Ando*, Takahisa Kobayashi, Nariaki Uchida (Gifu University, Japan)
- 1P-02 **Novel oxidation process for alcohols and sulfur compounds by sodium hypochlorite pentahydrate($\text{NaOCl}\cdot 5\text{H}_2\text{O}$) crystals**
Tomohide Okada* (Nippon Light Metal, Japan), Masayuki Kirihara (Shizuoka Institute of Science and Technology, Japan), Yoshikazu Kimura (Iharanikkei Chemical Industry, Japan)
- 1P-03 **Enantioselective Synthesis of Optically Active Sultams Using *N*-Heteroarenesulfonyl Cinchona Alkaloid Amide Catalyst.**
Ayaka Toda*, Masahide Sano, Shuichi Nakamura (Graduate School of Engineering, Nagoya Institute of Technology, Japan)
- 1P-04 **HasA Asymmetric Oxidation Catalysis from pea (*SanCat-R*)**
Hiroyuki Nagaoka* (Sanyo Foods, R & D, Japan)
- 1P-05 **Development of A Highly Active Iron Catalyst for Transesterification**
Rikiya Horikawa*, Chika Fujimoto, Ryo Yazaki, Takashi Ohshima (Kyushu University, Japan)
- 1P-06 ◆ **Enantioselective and Aerobic Oxidative Coupling of 2-Naphthol Derivatives Using Chiral Dinuclear Vanadium Complex in Water**
Makoto Sako*, Shinobu Takizawa, Yasushi Yoshida, Hiroaki Sasai (Osaka University, Japan)
- 1P-07 ◆ **Regio- and stereoselective synthesis of scaffolds for differentially all-carbon tetrasubstituted olefins**
Masataka Ide*, Tetsuo Iwasawa (Ryukoku University, Japan)
- 1P-08 ◆ **Process Research in NMR Tube**
Atsushi Akao*, Yumi Asai, Takashi Hasebe (Eisai Product Creation Systems, Japan)
- 1P-09 **Disiloxane Synthesis Based on Silicon-Hydrogen Bond Activation Using Platinum Group Metal on Carbon in Water and Heavy Water**
Yoshinari Sawama, Masahiro Masuda*, Ryosuke Nakatani, Shumma Nishimura, Kyoshiro Shibata, Tsuyoshi Yamada, Yasunari Monguchi, Hironao Sajiki (Gifu Pharmaceutical University, Japan)
- 1P-10 **Palladium on carbon-catalyzed and chemoselective oxidation of aromatic acetals**
Yoshinari Sawama, Naoki Yasukawa*, Shota Asai, Yasunari Monguchi, Hironao Sajiki (Gifu Pharmaceutical University, Japan)
- 1P-11 **Palladium-catalyzed synthesis of enol ethers by the direct alkoxylation of acrylic acids**
Koki Kunishima*, Tomohiro Hattori, Tohru Takahashi, Yuko Shishido, Yoshinari Sawama, Yasunari Monguchi, Hironao Sajiki (Gifu Pharmaceutical University, Japan)

- 1P-12 Nickel-Catalyzed Deuteration of Phenol Derivatives with Novel NHC Ligands**
Shota Kujirada*, Masami Kuriyama, Osamu Onomura
(Graduate School of Biomedical Sciences, Nagasaki University, Japan)
- 1P-13 Selective deprotection of silyl ethers with SO₃H silica gel in the presence of acid-sensitive protecting group**
Hideaki Fujii*, Miki Kuwada, Saki Tajiri, Misaki Kanda, Mari Yanai,
Kennosuke Itoh (Kitasato University, Japan), Mitsuhiro Kamimura
(FUJI SILYSIA CHEMICAL, Japan)
- 1P-14 Tautomerization of 5-Alkylidene-2-Oxazolidinone to 2-Oxazolone by Use of an N-Heterocyclic Carbene Catalyst**
Ken-ichi Fujita*, Hiroyuki Yasuda (National Institute of Advanced Industrial Science and Technology, Japan), Junichi Sato (Ibaraki University, Japan)
- 1P-15 Ethoxylation of *p*-Fluoronitrobenzene Using Phase-Transfer Catalysts by Microreactor Technology.**
Hajime Mori*, Akane Tsuchitani, Megumi Mori, Yoshie Tanaka
(Industrial Technology Center of Wakayama Prefecture, Japan)
- 1P-16 Study on Selective Synthesis of 1-Ethoxy-2,4-dinitrobenzene Under Phase-Transfer Conditions by Microreactor Technology**
Akane Tsuchitani*, Hajime Mori, Megumi Mori, Yoshie Tanaka
(Industrial Technology Center of Wakayama Prefecture, Japan)
- 1P-17 Considerations for the Validation of Quantitative NMR**
Takako Suematsu*(JEOL RESONANCE Inc., Japan), Shinji Nakao, Toru Miura,
Shinya Takaoka, Yuko Yamada (Wako Pure Chemical Industries, Ltd., Japan)
- 1P-18 Sodium Borohydride Reduction: A Sustainable PAT System for Safe Operation**
Yuki Hara*(Mettler-Toledo K.K., Japan), Dr. John O'Reilly, Frank Neville,
Brian Coffey, Martin Cronin, Maria Lennonhe, Barry Reid, Andy McInerney
(Roche Pharmaceuticals, Cork Ireland)
- 1P-19 EasySampler™ 1210: Unattended, Representative Sampling**
Ryoichi Sugimoto*, Hiroki Takai, Yoshifumi Fujisawa, Yuki Hara
(Mettler-Toledo K.K., Japan)
- 1P-20 Development of a Practical and Scalable Synthesis of TRPA1 Receptor Activator, ASP7663**
Koji Kobayashi*, Ryoki Orii, Toshiyuki Sugimori, Takumi Takahashi, Atsushi Oohigashi,
Minoru Okada (Process Chemistry Labs., Process Research, Astellas Pharma Inc., Japan)
- 1P-21 Ligand-free Suzuki-Miyaura reaction of chloroarenes catalyzed by anion exchange resin-supported palladium**
Tomohiro Ichikawa*, Moeko Netsu, Tomohiro Hattori, Yoshinari Sawama,
Yasunari Monguchi, Hironao Sajiki (Gifu Pharmaceutical University, Japan),
Tomoteru Mizusaki (N.E. Chemcat Corporation, Japan)
- 1P-22 Enantioselective Three-Component Synthesis of Propargylamines Accompanied by the Dehydration in Water**
Yoshichika Hara*, Mutsuyo Ohara, Shuichi Nakamura (Nagoya Institute of Technology, Japan)

- 1P-23 Novel ESIPT fluorescent dyes with adjustable optical properties**
Kew-Yu Chen*, Hsing-Yang Tsai (Feng Chia University, Taiwan)
- 1P-24 Protecting Group-Free Catalytic Synthesis of Sialic Acids**
Xiaofeng Wei*, Yohei Shimizu (The University of Tokyo, Japan), Motomu Kanai (The University of Tokyo; ERATO, Japan Science and Technology Agency, Kanai Life Science Catalysis Project, Japan)
- 1P-25 Palladium-Catalyzed Three-Component Reaction of 3-(Pinacolatoboryl)allyl Acetates, Aldehydes, and Organoboranes**
Yoshikazu Horino*, Ataru Aimono, Hitoshi Abe (University of Toyama, Japan)
- 1P-26 Continuous multi-step synthesis of a benzofuran analogue under hidden brønsted acid catalysis using a microwave flow system**
Keiji Nakayama, Kazutoshi Ukai, Toshiyuki Tomoo, Yoshitaka Nakamura* (DAIICHI SANKYO CO., LTD., Japan)
- 1P-27 Highly sensitive analytical method development for mutagenic impurities with the similar structures among them**
Nobuhiro Oba*, Mari Kayamori, Kazuki Shigemori, Meiko Tanaka, Miwako Asada, Kanako Kondo, Hiroaki Kataoka, Takashi Nihei, Jumpei Fujiyoshi, Tetsuhiro Yamamoto, Makoto Noguchi (Chemical Development Laboratories, CMC center, Takeda Pharmaceutical Company, Ltd., Japan)
- 1P-28 Palladium-Catalyzed Three-Component Reaction of 3-(Tributylstannyl)allyl Acetates, Aldehydes, and Organoboranes: A New Entry to Stereoselective Synthesis of (*E*)-*anti*-Homoallylic Alcohols**
Yoshikazu Horino, Miki Sugata*, Hitoshi Abe (University of Toyama, Japan)
- 1P-29 Palladium-Catalyzed Multi-Component Reaction of 3-(Tributylstannyl)propargyl Acetates, Aldehydes, and Organoboranes**
Yoshikazu Horino, Ataru Aimono*, Hitoshi Abe (University of Toyama, Japan)
- 1P-30 Efficient Gas-related Photo Reactions Using Micro- and Nanobubble Strategy Under Atmospheric Pressure**
Yuki Nishina*, Kohei Sato, Tetsuo Narumi, Naoharu Watanabe, Nobuyuki Mase (Shizuoka University, Japan)
- 1P-31 Identification of Superior Organocatalysts Through High-Throughput Fluorescence-Based Screening**
Tsuguya Masuda*, Kohei Sato, Tetsuo Narumi, Naoharu Watanabe, Nobuyuki Mase (Shizuoka University, Japan)
- 1P-32 Hydrolysis of Diazonium Salts Using Two-phase (CPME and Water)**
Toshihide Taniguchi*, Mitsutaka Imoto, Motonori Takeda (Seika Corporation, Japan), Takeo Nakai, Masatoshi Mihara, Toshiyuki Iwai, Takatoshi Ito, Takumi Mizuno (Osaka Municipal technical Research Institute, Japan), Akihiro Nomoto, Akiya Ogawa (Osaka Prefecture University, Japan)
- 1P-33 One-pot Transformation of Aliphatic Carboxylic Acids into *N*-Alkylsuccinimides**
Yuta Nakai*, Katsuhiko Moriyama, Hideo Togo (Graduate School of Science, Chiba Univ., Japan)

- 1P-34 Homogeneous Ruthenium-Catalyzed Hydrogenation Using a Continuous Flow Reactor**
Naota Yokoyama*, Kiyoto Hori, Hideki Nara, Mitsuhiko Fujiwhara
(Takasago International Corporation, Japan)
- 1P-35 ◆ Improvements in a Practical and Scalable Synthesis of Selective ALK Kinase Inhibitor ASP3026, Utilizing Readily Available Cyanuric Chloride as a Starting Material**
Kazuyoshi Obitsu*, Shun Hirasawa, Kazuhiro Takeguchi, Koji Kobayashi,
Takahiro Akiba, Yuji Takahama, Ryoki Orii, Takumi Takahashi, Shigeru Ieda,
Minoru Okada (Astellas Pharma Inc., Japan)
- 1P-36 ◆ Root Cause Analysis of Uncontrollable Polymorph–Inhibition of a Trace Amount of Impurity in Selective ALK Inhibitor ASP3026–**
Yuji Takahama*, Kazuhiro Takeguchi, Kazuyoshi Obitsu, Norihiro Ueda,
Ryoki Orii, Atsushi Ohigashi, Shigeru Ieda, Minoru Okada (Astellas Pharma Inc., Japan)
- 1P-37 New Conceptual Diaryliodonium Salts for Metal-Free Arylation of Carboxylic Acids Giving Aryl Esters**
Toshifumi Dohi*, Kohei Sumida, Asami Kato, Kazuki Samura, Koji Morimoto,
Yasuyuki Kita (Ritsumeikan University, Japan)
- 1P-38 Chromatographic Separation of Stereoisomer Compounds**
Mari Hara Yasuda*, Shingo Andou, Masao Tamura (Mitsubishi Chemical
Corporation, Japan), Tatsuma Fukumoto, Keiichi Uchibayashi (API Corporation,
Japan), Zachary S. Breitbach, Daniel W. Armstrong (AZYP LLC, USA)
- 1P-39 Performance Assessment of Cyclopentyl Methyl Ether (CPME): Application to Grignard Reactions**
Keisuke Shibukawa*, Araki Masuyama, Shoji Kobayashi
(Osaka Institute of Technology, Japan)
- 1P-40 Efficient Synthesis of Chiral Diaminonitriles Using Chiral Bis(imidazoline)-Pd Catalysts**
Masaru Kondo*, Tomoki Nishi, Shuichi Nakamura (Nagoya Institute of Technology, Japan)
- 1P-41 Conformational Studies of Symmetric Diesters**
Satomi Niwayama*(Muroran Institute of Technology, Japan, Texas Tech
University, USA), Mai Kato, Yukiko Yamaguchi (Muroran Institute of Technology,
Japan), Hanjoung Cho (Texas Tech University, USA)
- 1P-42 Development of an Optimized Synthetic and Purification Process of S-2367 (Velneperit), a Novel Neuropeptide Y (NPY) Y5 Receptor Antagonist**
Shinichi Oda*, Kumiko Manaka, Kiyoshi Kakiya, Yasuyuki Hozumi, Yuki Fukui,
Sohei Omura, Makoto Kurashita, Masanori Nishiwaki, Yoshiyuki Takeuchi and
Hideyuki Kitamura (Shionogi & Co., Ltd, Japan)
- 1P-43 Convenient and regioselective synthesis of biaryl compounds by heterogeneously catalyzed aerobic oxidative coupling**
Kenji Matsumoto*, Mitsuru Shindo (Institute for Materials Chemistry and
Engineering, Kyushu University, Japan), Shohei Tachikawa, Shigenobu Fujimoto
(Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Japan)

- 1P-44 Application of Asymmetric Transfer Hydrogenation and H₂-Hydrogenation Catalyzed by Oxo-tethered Ruthenium(II) Complex**
Taichiro Touge*, Yamato Yuki, Hideo Shimizu, Hideki Nara, Mitsuhiko Fujiwhara (Takasago International Corporation, Japan)
- 1P-45 Process Intensification for the Continuous Flow Hydrogenation of Ethyl Nicotinate**
Takashi Ouchi* (Takeda Pharmaceutical Company Limited, Japan),
Claudio Battilocchio, Steven V. Ley (University of Cambridge, UK)
- 1P-46 ◆ Total Synthesis of Prostaglandin E₁ Methyl Ester by Three One-pot Operations**
Yujiro Hayashi*, Shigenobu Umemiya (Tohoku University, Japan)
- 1P-47 Studies of the peptide crystal form and its process development for commercial production**
Ryosuke Kunitani*, Aiko Hasegawa, Yoshinori Murata (Shionogi & Co., Ltd., Japan)
- 1P-48 Total solution for the HPLC method development process by ChromSword software**
Kazuhide Konishi* , Sergey Galushko (ChromSword Japan Co., Ltd., Japan)
- 1P-49 Study on Preparation of 5-Trifluoromethylated Pyrimidine Derivatives**
Takumi Kagawa*, Daiki Shigehiro, Kosuke Kawada (Tosoh F-tech, Inc., Japan)
- 1P-50 Copper Complex Catalyzed Asymmetric Monosulfonylation of Glycerol**
Keisuke Miyamoto*, Masami Kuriyama, Osamu Onomura (Nagasaki University, Japan)
- 1P-51 Intramolecular coupling method for stereo- and regio-controlled procyanidin synthesis**
Akiko Saito (Osaka Electro-communication University, Japan),
Noriyuki Nakajima* (Toyama Prefectural University, Japan)
- 1P-52 A Novel Synthesis of α,α -Disubstituted α -Amino Acids by S_N2 Displacement at the Quaternary Carbon Center**
Kotaro Ishihara*, Hiromi Hamamoto, Masato Matsugi, Takayuki Shioiri (Faculty of Agriculture, Meijo University, Japan)
- 1P-53 Preparation of Unique Copper Complexes of Porphyrin and the Application to Photooxidation of Phenol Derivatives**
Yuko Takao*, Fukashi Matsumoto, Kazuyuki Moriwaki, Takumi Mizuno, Toshinobu Ohno (Osaka Municipal Technical Research Institute, Japan),
Jun-ichiro Setsune (Kobe University, Japan)
- 1P-54 New type of Silica Gel for Hydrophilic Interaction Chromatography (HILIC)**
Makoto Kawai*, Tomio Yamakoshi, Hirofumi Honda (Fuji Silysia Chemical Ltd., Japan)
- 1P-55 ◆ Development of highly active iridium catalysts for reductive amination of carbonyl compounds**
Kouichi Tanaka*, Kunihiko Tsutsumi, Kunihiko Murata, Masahito Watanabe (Kanto Chemical Co., Inc, Japan)
- 1P-56 Reclamation of squid pen for the production of chitosanase and dye biosorbent by *Bacillus cereus***
Tzu-Wen Liang*, Bo-Chang Lo, San-Lang Wang (Tamkang University, Taiwan)
- 1P-57 Ru-MACHO, 'Gentle' catalytic ester reduction and beyond**
Osamu Ogata*, Kiyoto Hori, Wataru Kuriyama, Kunimori Aoki, Hideki Nara (Takasago International Corporation, Japan)

- 1P-58** **Cancelled**
- 1P-59** **Practical Asymmetric Hydrogenation of Sterically Congested Aromatic Ketones with Polysubstituents on Aromatic Rings**
Takeaki Katayama*, Kunihiko Murata, Kunihiko Tsutsumi (KANTO CHEMICAL Co., Inc., Japan), Noriyoshi Arai, Takanori Nanba, Takeshi Ohkuma (Hokkaido University, Japan)
- 1P-60** **Cycle Time Reduction for an Intermediate Crystallization Step Using a New Image-Based PAT Technique**
Hiroki Takai*, Des O'Grady, Terry Redman (Mettler-Toledo, Japan)
- 1P-61** **Synthetic Studies toward (+)-CJ-12,950 for the Stereochemical Assignment**
Yoshihito Oguma*, Takumi Yamagishi, Nozomi Yamamoto, Sho Shinoda, Kenji Sugimoto, Daishiro Minato, Yuji Matsuya (University of Toyama, Japan)
- 1P-62** **Trifluoromethylation using Fluoroform through Catalytic Amount of Phosphazene Base**
Satoshi Okusu*, Kazuki Hirano, Etsuko Tokunaga, Norio Shibata (Nagoya Institute of Technology, Japan)
- 1P-63** **Lonza MRT / Flow Technology Applied to Innovative Chemistry**
Dominique M.Roberge , Stéphane Varray*(Lonza AG, Switzerland), Daisuke Tanaka (Lonza Japan Ltd., Japan)

July15 (Wed)

Oral Presentation 12:55-14:20 (Main Hall) ◆ Oral Presenter
Discussion 14:20-15:20 (Annex Hall)

- 2P-01 ◆ A robust and efficient process of the HCV protease inhibitor key intermediate**
Kohei Mori*, Narumi Kishimoto, Daisuke Moriyama, Akira Nishiyama,
Masaru Mitsuda (Kaneka Coporation, Japan)
- 2P-02 Nitroxyl Radical and Imide Dual Catalyzed NaOCl Oxidation of Alcohols and the Application to a Drug Candidate**
Naohiro Fukuda*, Tomomi Ikemoto (Takeda Pharmaceutical Company Limited, Japan)
- 2P-03 Synthetic Study for Aristolochic Acids and its Derivatives**
Toshihide Maki*, Satoshi Mizuta (Nagasaki University, Japan),
Paul Njihia Gichuhi (Technical University of Mombasa, Kenya),
Malik Suliman Mohamed (University of Khartoum, Sudan)
- 2P-04 Kinetic Resolution of Secondary Alcohols by Chiral Phosphoric Acid Catalyt**
Shingo Harada, Satoru Kuwano, Yousuke Yamaoka, Ken-ichi Yamada,
Kiyosei Takasu* (Kyoto University, Japan)
- 2P-05 Fermentation of squid pen for the production of tyrosinase inhibitors and insecticidal materials**
Chia-Hao Hsu*, San-Lang Wang (Tamkang University, Taiwan)
- 2P-06 Recyclable and Recoverable Magnetic Nanoparticle-Supported Iodoarene Catalysts for Oxidation of 4-Alkoxyphenols to Quinones**
Ikumi Shimokawa*, Hisanori Nambu, Tomoya Fujiwara, Takayuki Yakura
(Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Japan)
- 2P-07 Microbial reclamation of squid pen and shrimp shell**
San-Lang Wang*, Tzu-Wen Liang (Department of Chemistry/Life Science
Development Center, Tamkang University, Taiwan)
- 2P-08 Development of acid-catalyzed alkylating reagents based on triazine chemistry**
Naoko Hayakawa*, Kohei Yamada, Hikaru Fujita, Masanori Kitamura,
Munetaka Kunishima (Kanazawa University, Japan),
Kazuma Yoshimura (NARD CHEMICALS, LTD., Japan)
- 2P-09 One-Pot Transformation of Arenes into Aromatic Nitriles under Metal-Cyanide-Free Conditions**
Toshiyuki Tamura*, Katsuhiko Moriyama, Hideo Togo (Graduate School of
Science, Chiba University, Japan)
- 2P-10 Development of standard solutuions for qNMR**
Toru Miura*, Shinji Nakao, Yuko Yamada (Wako Pure Chemical Industries, Ltd., Japan),
Takashi Ohtsuki, Atsuko Tada, Maiko Tahara, Naoki Sugimoto (National Institute of Health
Science, Japan), Taichi Yamazaki, Takeshi Saito, Toshihide Ihara (National Metrology Institute of
Japan), Takako Suematsu (JEOL Resonance Inc., Japan), Takaaki Horinouchi, Ryo Koike
(Kao Corporation, Japan)

- 2P-11 Revisiting Acetyl Group Technology: Lipase-catalyzed Regioselective Transformation of Polyphenols**
Kazuki Yashiro*, Susanta Mandal, Shun Hanamura, Kengo Hanaya, Mitsuru Shoji, Takeshi Sugai (Keio University, Japan)
- 2P-12 Robust and Competitive Process Development of a Key Building Block for Anti-AIDS Drugs by Secondary Amine Catalyzed Enantio- and Diastereo-Selective Direct Cross Aldol Reaction**
Yumi Hayashi*, Toshiaki Aikawa, Hiroaki Okamoto, Yasuharu Shimasaki, Yosuke Tomioka, Takashi Miki, Masahiro Takeda, Tetsuya Ikemoto (Sumitomo Chemical Co., Ltd., Japan)
- 2P-13 Synthesis of the GHI Fragment of Gymnocin-B**
Shota Kato*, Yoshinori Hadano, Takeo Sakai, Yuji Mori (Faculty of Pharmacy, Meijo University, Japan)
- 2P-14 Addition Reactions to Isoquinolium Salts Catalyzed by Tetracyanocyclopentadienides**
Mai Hattori*, Akari Tada, Junpei Matsuoka, Takeo Sakai, Yuji Mori (Faculty of Pharmacy, Meijo University, Japan)
- 2P-15 ◆ Highly Efficient and Chemoselective Aerobic Oxidation of Alcohols Using AZADO-Copper Catalysis**
Shota Nagasawa*, Yusuke Sasano, Naoki Kogure, Masatoshi Shibuya, Yoshiharu Iwabuchi (Graduate School of Pharmaceutical Sciences, Tohoku University, Japan)
- 2P-16 Development of the Synthetic Process for the Naltrexamine Derivatives**
Masanori Murakami*, Takami Kanno, Tatsuya Fujita (Toray Industries, Inc., Japan)
- 2P-17 Metal-free C(3)-H arylation of coumarins promoted by catalytic amounts of 5,10,15,20-tetrakis(4-diethylaminophenyl)porphyrin**
Masahiro Kojima*, Kounosuke Oisaki, Motomu Kanai (The University of Tokyo, Japan)
- 2P-18 Development of a Practical & Scalable Synthesis of Cyclic Oligopeptide AS1895286-00**
Ryoki Orii*, Hiroyoshi Matsubara, Minoru Okada (Astellas Pharma Inc., Japan)
- 2P-19 Stereoselective Synthesis of *cis*- α,β -Unsaturated Sulfones Using New Peterson Reagents**
Tomohiro Wada*, Miho Okumura, Hiroshi Sumida, Kaori Ando (Gifu University, Japan)
- 2P-20 ◆ Stereoselective Intramolecular Cross-aldol and Desymmetrization of Aliphatic Dials Enabled by Axially Chiral Aniline-type Catalyst**
Tomonori Baba, Ramesh Yella*, Yuya Tanaka, Satoru Yamamoto, Takumi Furuta, Takeo Kawabata (Institute for Chemical Research, Kyoto University, Japan)
- 2P-21 Stereoselective Synthesis of *cis*- α,β -Unsaturated sulfonates Using New Peterson Reagents**
Kensuke Fujimoto*, Kaori Ando (Gifu University, Japan)
- 2P-22 Syntheses of (1-propynyl)arenes: One-Pot Dephosphorylation and Sonogashira Coupling of Phosphorylpropyne**
Akihiro Orita, Kenta Shinohara*, Takanori Nishida, Lifeng Peng, Ryosuke Wada, Junzo Otera (Okayama University of Science, Japan)
- 2P-23 Asymmetric Synthesis of 2-Substituted Dihydroquinolones by The Aza-Michael Reaction of *N*-Unprotected Amines**
Yuka Moriya*, Kodai Saito, Takahiko Akiyama (Gakushuin University, Japan)

- 2P-24 One-pot synthesis of β,β -disubstituted α,β -unsaturated carbonyl compounds using sequential Ti-aldol addition to ketones and elimination**
Yasuhiko Ashikari*, Makoto Nakajima, Masaharu Sugiura (Kumamoto University, Japan)
- 2P-25 Preparation of Optically Active Thioamides and Evaluation of Their Antibacterial Properties**
Yasutaka Shimotori*, Masayuki Hoshi, Ayana Aiki, Asami Morisawa
(Kitami Institute of Technology, Japan), Tetsuo Miyakoshi (Meiji University, Japan),
Taisei Kanamoto, Hideki Nakashima (St. Marianna University School of Medicine, Japan)
- 2P-26 Syntheses of 1,3,6,8-Tetra-substituted Pyrenes and Steric Effect of Substituents on Their Photoluminescence**
Akihiro Orita, Takanori Nishida*, Feng Xu, Kenta Shinohara, Issei Kasuga,
Junzo Otera (Okayama University of Science, Japan)
- 2P-27 Development of Novel Synthetic Methods of *N*,*Se*-Acetals by Highly Regioselective Hydroselenation of *N*-Vinyl Lactams**
Taichi Tamai*, Megumi Yoshikawa, Shinya Higashimae, Akiya Ogawa
(Osaka Prefecture University, Japan)
- 2P-28 A Novel Approach to the Characterization of Pharmaceutical Drugs Within Processes using Morphologically Directed Raman Spectroscopy**
Cathryn Langley*, Daisuke Sasakura, Aiko Hayauchi, Deborah Huck-Jones
(Malvern Instruments, Japan & UK)
- 2P-29 A Process Analytical Technology (PAT) Approach Using Online Mass Spectrometry to Evaluate Drying Process and Control Oxygen Generation**
Shoji Watanabe*, Atsushi Ueno, Takayuki Miyake (Sumitomo Dainippon Pharma Co., Ltd., Japan)
- 2P-30 Organocatalytic site-selective acylation of polyol natural products**
Masanori Yanagi*, Yoshihiro Ueda, Takumi Furuta, Takeo Kawabata
(Institute for Chemical Research, Kyoto University, Japan)
- 2P-31 An Investigation of Drug Crystallization Process by in-situ Particle Size Analysis using Mie Scattering Theory and Morphological Analysis.**
Fumiaki Sato*, Aiko Hayauchi, Cathryn Langley,
Daisuke Sasakura (Malvern Instruments, A division of Spectris Co., Ltd., Japan)
- 2P-32 Expeditious Parallel Syntheses of All (*E*)- and (*Z*)-Zimeridines and Tamoxifens Utilizing (*E*)-, (*Z*)-Stereocomplementary Synthesis of Multi-Substituted α,β -Unsaturated Esters**
Yuichiro Ashida, Yuka Sato, Atsushi Honda, Hidefumi Nakatsuji*, Yoo Tanabe
(Kwansei Gakuin University, Japan)
- 2P-33 Tertiary Amine Thiourea-Catalyzed Aldol Reaction of Aryl Methyl Ketones with Aryl Trifluoromethyl Ketones**
Léopold Mpaka Lutete*, Takashi Miyamoto, Tetsuya Ikemoto
(Sumitomo Chemical Co., Ltd., Japan)
- 2P-34 Sulfenylation of Aromatic Compounds with *N*-Sulfenylbenzimidazoles in the Presence of Alkylating Agents**
Masao Shimizu, Shinji Tanaka, Wataru Ando (National Institute of Advanced Industrial Science and Technology(AIST), Japan), Shin-ya Suzuki*, Norio Sakai(Tokyo University of Science, Japan)

- 2P-35 Synthesis of pyrrolo[1,2-*b*][1,2]benzothiazin-10-one**
Masao Shimizu, Shinji Tanaka, Wataru Ando (National Institute of Advanced Industrial Science and Technology (AIST), Japan), Kotaro Masuda*, Daisuke Kato, Norio Sakai (Tokyo University of Science, Japan)
- 2P-36 Selective Flow Synthesis of Methanofullerene Derivative PCBM Using Sulfur Ylide**
Takatoshi Ito*, Fukashi Matsumoto, Toshiyuki Iwai, Kazuyuki Moriwaki, Yuko Takao, Takumi Mizuno, Toshinobu Ohno (Osaka Municipal Technical Research Institute., Japan), Yuta Inoue, Tetsuo Iwasawa (Ryukoku University.,Japan)
- 2P-37 Continuous flow synthesis of methanofullerene PCBM**
Toshiyuki Iwai*, Fukashi Matsumoto, Kazuyuki Moriwaki, Yuko Takao, Takatoshi Ito, Takumi Mizuno, Toshinobu Ohno (Osaka Municipal Technical Research Institute, Japan), Junki Murata, Tetsuo Iwasawa (Ryukoku University, Japan)
- 2P-38 Synthesis of PHB-*b*-PLA Block Copolymer Useful as the Compatibilizer in PHB/PLA Blends**
Trong-Ming Don*, Kuo-Hua Liao, Yi-Hsun Liu (Tamkang University, Taiwan)
- 2P-39 Sulfenylation of Aromatic Compounds with *N*-Sulfenylbenzimidazoles in the Presence of Acid**
Masao Shimizu*, Shinji Tanaka, Wataru Ando (National Institute of Advanced Industrial Science and Technology, Japan), Miki Nakao, Shin-ya Suzuki, Norio Sakai (Tokyo University of Science, Japan)
- 2P-40 ◆ Single-pass flow reactions: only 20 seconds hydrogenation and Suzuki-Miyaura reaction**
Tomohiro Hattori*, Aya Tsubone, Takashi Ida, Yoshinari Sawama, Yasunari Monguchi, Hironao Sajiki (Gifu Pharmaceutical University, Japan)
- 2P-41 Thermal hazard and evolved gases analyses on an acrylic acid runaway polymerization**
Michiya Fujita*, Atsumi Miyake (Yokohama National University, Japan), Yoshiaki Iizuka (PHA consulting Co.,Ltd., Japan)
- 2P-42 Living Radical Polymerization of Styrene by ATRP Initiator Immobilized on Glass Surfaces**
Kohji Iwaida*, Shun Ichii, Yu Masui, Toshiyuki Kamei, Toyoshi Shimada (Dept. Chem. Eng., NNCT, Japan), Kazuyoshi Kanamori, Kazuki Nakanishi (Grad. Sch. Sci., Kyoto Univ., Japan)
- 2P-43 Tris(pentafluorophenyl)borane-Catalyzed Organofunctionalization of Various Materials with Hydrosilane Derivatives**
Shun Ichii, Kohji Iwaida, Yu Masui*, Toshiyuki Kamei, Toyoshi Shimada (Dept. Chem. Eng., NNCT, Japan), Kazuyoshi Kanamori, Kazuki Nakanishi (Grad. Sch. Sci., Kyoto Univ., Japan)
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