

# Poster Session

(May 19 (Mon), 16:50-20:00; 16:50–18:10: Short Oral Presentation  
18:10–19:05: Odd number, 19:05–20:00: Even number)

\*Short oral presenter, †Poster award candidate

- P1\*†** Chemical and photo-induced crosslinking of 2'-deoxythioguanosine-functionalized oligo DNA duplex  
Jamila Abbas OSMAN<sup>1,2</sup>, Kazumitsu ONIZUKA<sup>1,2</sup>, Yuuhei YAMANO<sup>1,2</sup>, Fumi NAGATSUGI<sup>1,2</sup>  
*<sup>1</sup>Graduate School of Science, Tohoku University, <sup>2</sup>Institute of Multidisciplinary Research for Advanced Materials, Tohoku University*
- P2\*†** Multivalent gold nanoparticle probes with hydrophobic tagging for protein degradation and target validation  
Moh Adrian Barra AKBAR<sup>1</sup>, Riko SUEKI<sup>1</sup>, Xing BENGANG<sup>2</sup>, Kaori SAKURAI<sup>1</sup>  
*<sup>1</sup>Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology, <sup>2</sup>Division of Chemistry and Biological Chemistry, School of Physical and Mathematical Sciences, Nanyang Technological University*
- P3\*** Continuous Flow combined with Greener Activation Methods for Different Applications  
Catherine GOMEZ (VOITURIEZ), Gauthier HALLOT, Marc PORT  
*National Conservatory of Arts and Crafts*
- P4\*** DirectInject-LC: Real-time Analysis by HPLC for Reaction Monitoring  
Yusuke SATO, Junliang LIU, Lars YUNKER, Shad GRUNERT, Paloma PRIETO, Jason HEIN  
*Telescope Innovations*
- P5\*†** Quantification of Endogenous Thiols Using a Ratiometric Raman Probe  
Meichen WANG, Hiroyuki YAMAKOSHI, Keisuke KOGA, Shinji KAJIMOTO, Yuse KURIYAMA, Yusuke SASANO, Yoshiharu IWABUCHI, Takakazu NAKABAYASHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P6\*†** Stereoselective Thia-Michael Addition of 1,3- and 1,2-Benzenedithiols to a Biomass Compound and its Application to Polymerization  
Francesco Maria RABONI<sup>1</sup>, Alessandro PELLIS<sup>1</sup>, Takayuki DOI<sup>2</sup>, Atsushi TAHARA<sup>2,3</sup>  
*<sup>1</sup>Dipartimento di Chimica e Chimica Industriale, Università degli Studi di Genova, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>3</sup>Frontier Research Institute for Interdisciplinary Sciences (FRIS), Tohoku University*

- P7\*** Pharmacological Activities of Redox-Active Benzo(a)phenoxazines  
Masataka IHARA<sup>1</sup>, Takahiko TANIGUCHI<sup>2</sup>, Hirofumi UEDA<sup>1</sup>, Hidetoshi TOKUYAMA<sup>1</sup>  
<sup>1</sup>*Tohoku University*, <sup>2</sup>*TOWA PHARMACEUTICAL CO. LTD*
- P8\*** Development of  $\beta$ -Selective C-Glucosylation: Synthesis and Immunological Evaluation of Linkage-Edited  $\beta$ -C-Glucosylceramide Analogs  
Makoto YORITATE<sup>1</sup>, Suzuka CHIBA<sup>1</sup>, Wakana KUSUHARA<sup>2</sup>, Taishi MIURA<sup>1</sup>, Kazushi MAEDA<sup>1</sup>, Haruto TAKAMURA<sup>1</sup>, Hiroaki MATOBA<sup>1</sup>, Eri ISHIKAWA<sup>2</sup>, Sho YAMASAKI<sup>2</sup>, Go HIRAI<sup>1</sup>  
<sup>1</sup>*Graduate School of Pharmaceutical Science, Kyushu University*, <sup>2</sup>*Molecular Immunology, Research Institute for Microbial Diseases, Immunology Frontier Research Center (IFReC)*
- P9\*‡** Selective synthesis of 1,3-substituted cuneanes and evaluation of its applicability as bioisostere of *m*-substituted benzenes  
Kan FUJIWARA<sup>1</sup>, Shota NAGASAWA<sup>1</sup>, Ryusei MAEYAMA<sup>2</sup>, Ryosuke SEGAWA<sup>1</sup>, Noriyasu HIRASAWA<sup>1</sup>, Takatsugu HIROKAWA<sup>3</sup>, Yoshiharu IWABUCHI<sup>1</sup>  
<sup>1</sup>*Graduate School of Pharmaceutical Sciences, Tohoku University*, <sup>2</sup>*Faculty of Pharmaceutical Sciences, Tohoku University*, <sup>3</sup>*Institute of Medicine, University of Tsukuba*
- P10\*** Development of epigenetic modulators to regulate histone methylation  
Fumika YAKUSHIJI  
*Nagasaki University, Institute of Biomedical Sciences*
- P11\*‡** Development of PROTACs Targeting BRD4; Efficient Optimization via 1,3-Butadiyne-Based strategies  
Ryo WATANABE, Hiroyuki YAMAKOSHI, Ryosuke SEGAWA, Ryosuke ISHIHARA, Reo TACHIBANA, Noriyasu HIRASAWA, Yoshiharu IWABUCHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P12\*‡** Synthesis of Difluoromethylated Tertiary Benzenesulfonamides towards Carbonic Anhydrase inhibition  
Matéo DA FONSECA<sup>1</sup>, Dylan FERREIRA<sup>1</sup>, Delphine PICHON-BARRÉ<sup>1</sup>, Claudiu T. SUPURAN<sup>2</sup>, Sébastien THIBAudeau<sup>1</sup>  
<sup>1</sup>*IC2MP, CNRS-Université de Poitiers*, <sup>2</sup>*University of Florence*
- P13\*** Targeted Protein Degradation in Mitochondria  
Sho NAKAMURA, Wakana YAMADA, Shusuke TOMOSHIGE, Minoru ISHIKAWA  
*Graduate School of Life Sciences, Tohoku University*

- P14\*** Copper-Chelating Probes Associated with Molecular Networks for the Discovery of New Polyacetylenic Natural Products  
Xavier FRANCK<sup>1</sup>, Victor FLON<sup>1</sup>, Coralie PAVESI<sup>2</sup>, Soizic PRADO<sup>2</sup>  
<sup>1</sup>*CARMeN Institute, Rouen-Normandy University*, <sup>2</sup>*Museum National d'Histoire Naturelle, Paris*
- P15** Construction of Middle-Molecule Chemical Library Based on the Ring-Reconstruction Strategy of Cyclic Natural Products  
Takehiro NISHIMURA<sup>1</sup>, Kosuke SHIGA<sup>2</sup>, Yuki SATO<sup>2</sup>, Fumiaki KOBAYASHI<sup>1</sup>, Haruhisa KIKUCHI<sup>1</sup>  
<sup>1</sup>*Faculty of Pharmacy, Keio University*, <sup>2</sup>*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P16** Theoretical analysis of structural and electronic characteristics of naturally occurring multipotent polyene macrolactams  
Naoki KANO<sup>H</sup>, Junko FUJIMOTO  
*School of Pharmacy and Pharmaceutical Sciences, and Institute of Medicinal Chemistry, Hoshi University*
- P17\*‡** Synthesis of DNA-Tagged Polyketide–Peptide Hybrid Macrocycles Utilizing Biosynthetic Supply of Fungal Macrolides  
Soya KOREMURA<sup>1</sup>, Akihiro SUGAWARA<sup>2</sup>, Yohei MORISHITA<sup>1</sup>, Taro OZAKI<sup>1</sup>, Teigo ASAI<sup>1</sup>  
<sup>1</sup>*Graduate School of Pharmaceutical Sciences, Tohoku University*, <sup>2</sup>*Ōmura Satoshi Memorial Institute and Graduate School of Infection Control Sciences, Kitasato University*
- P18** Synthesis of the Proposed Structure of Urupocidin A  
Takuya TSUKAMOTO, Keisuke TAKAHASHI, Kyoka SOMEYA, Taichi KUSAKABE, Keisuke KATO  
*Faculty of Pharmaceutical Sciences, Toho University*
- P19** Synthetic Studies on Pyrroindomycin Aglycone  
Tomohiro TSUTSUMI, Keita KOMINE, Hayato FUKUDA, Jun ISHIHARA  
*Graduate School of Biochemical Sciences, Nagasaki University*
- P20\*‡** Unified Total Synthesis of Highly Functionalized Clovane-type Terpenoids  
Daigo NINOMIYA, Shota NAGASAWA, Yoshiharu IWABUCHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*

- P21** Studies toward the total synthesis of natalamycin A  
Momoko SUZUKI, Yohta MIZUNO, Youhei OIKAWA, Kenichi KOBAYASHI  
*Graduate School of Pharmaceutical Sciences, Health Sciences University of Hokkaido*
- P22\*†** Synthetic Studies on Emetine  
Hassan Ihsan Abdulkareem AL-HILFI, Yusuke UEDA, Hirofumi UEDA, Hidetoshi TOKUYAMA  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P23\*** Stereodivergent synthesis of a common *trans*-decalin cores and total synthesis of hypophyllins and abietanes  
Shogo FUJIKI<sup>1,2</sup>, Samantha BARLOCK<sup>1,2</sup>, Kayla LANDERS<sup>1,2</sup>, Peter C. RYFFEL<sup>2</sup>, Alex SHVED<sup>2</sup>, David SARLAH<sup>1,2</sup>  
<sup>1</sup>*Department of Chemistry, Rice University*, <sup>2</sup>*Department of Chemistry, University of Illinois at Urbana–Champaign*
- P24\*** Gold(I)-Catalysis: New Asymmetric Methodologies and Applications in Total Synthesis of Natural Products  
 Weiping ZHOU, Gia Hao HUYNH, Ya-Qing HUANG, Arnaud VOITURIEZ  
*Institut de Chimie des Substances Naturelles (ICSN), CNRS, Université Paris-Saclay*
- P25\*** Electroreductive Nickel-Catalyzed Intramolecular Hydrosilylation of Alkenes and Alkynes  
 Mathias REBOLI, Muriel DURANDETTI  
*CARMeN Institut, UMR CNRS 6064, Rouen Normandy University*
- P26\*** 3-Alkyl-1,2,4-triazines as Heterocyclic Platforms for Organocatalytic Enantioselective Benzylic C-H Functionalization  
 Anthony LAPRAY<sup>1</sup>, Marie-Aude HIEBEL<sup>2</sup>, Sylvain OUDEYER<sup>1</sup>, Franck SUZENET<sup>2</sup>, Jean-Francois BRIÈRE<sup>1</sup>  
<sup>1</sup>*Institute CARMeN*, <sup>2</sup>*ICOA*
- P27\*** Electrochemical SOMOphilic alkynylation of alkyl boronates in batch and continuous flow  
Laetitia CHAUSSET-BOISSARIE, Muriel DURANDETTI, Laura CHEVET  
*CARMEN UMR CNRS 6064*
- P28\*** Asymmetric Fluorocyclization of Fluoroalkenes under Phase-Transfer Catalysis  
Hiromichi EGAMI, Tomoya MAYUMI, Chino IGARASHI, Yoshitaka HAMASHIMA  
*School of Pharmaceutical Sciences, University of Shizuoka*

- P29\*†** Harnessing Stereodefined, Multisubstituted Alkynyl Enolates for Pd-Catalyzed Enantioselective Allylation  
Shuma SASAKI, Jun KIKUCHI, Naohiko YOSHIKAI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P30\*** Organocatalyzed Isomerization of Prochiral 1,3-Cyclohexanediones into Nonalactones by Enantioselective Ring Expansion  
Michael DE PAOLIS, Antoine D'ALEMAN, Oscar GAYRAUD, Catherine FRESSIGNÉ, Emilie PETIT, Laetitia BAILLY, Jacques MADDALUNO  
*CARMeN Univ Rouen Normandie*
- P31\*** Organic Superbase Catalysis for Concerted S<sub>N</sub>Ar Reactions of Fluoroarenes  
 Kazutoshi HAYASHI<sup>1</sup>, Ozora SASAMOTO<sup>1</sup>, Riku HIRASAWA<sup>1</sup>, Toshinobu KORENAGA<sup>2</sup>, Yoshinori KONDO<sup>1</sup>, Masanori SHIGENO<sup>1,3</sup>  
<sup>1</sup>*Graduate School of Pharmaceutical Science, Tohoku University*, <sup>2</sup>*Faculty of Science and Engineering, Iwate University*, <sup>3</sup>*JST, PRESTO*
- P32** Brønsted Acid-Catalyzed Dehydroxylative Transformation of Benzylic Alcohols Using Polyfluorinated Alcohols as Solvents  
 Kosho MAKINO<sup>1,2</sup>, Shunsuke SUEKI<sup>1,2</sup>, Masahiro ANADA<sup>1,2</sup>  
<sup>1</sup>*Faculty of Pharmacy, Musashino University*, <sup>2</sup>*Institute of Pharmaceutical Sciences, Musashino University*
- P33** Rhodium(I)-Catalyzed Isomerization/Hydroacylation Cascade Reaction through Dynamic Kinetic Resolution  
Yoshihiro OONISHI, Kentaro ABE, Shuichi MASUSAKI, Nagisa NEGISHI, Yoshihiro SATO *Faculty of Pharmaceutical Sciences, Hokkaido University*
- P34\*†** Sulfide-based Catalytic Indirect Reductive Quenching Method for Chlorotrifluoromethylation and Oxyalkylation of Alkenes  
Kakeru MATSUKUMA, Masanori TAYU, Takumi OGINO, Yuriko YASHIRO, Tomohisa YAMAGUCHI, Sayaka OHRUI, Nozomi SAITO  
*Meiji Pharmaceutical University*
- P35\*** Synthesis of 3,1-Benzoxazin-4-ones via Gold-Catalyzed Annulation of Anthranilic Acids and Alkynes  
Masahiro ABE, Mai TAKANO, Akiho MIZUKAMI, Tetsutaro KIMACHI, Kiyofumi INAMOTO  
*School of Pharmacy and Pharmaceutical Sciences, Mukogawa Women's University*

- P36\*** Photoinduced Reductive [4+2] Cycloaddition of Nitroarenes  
Toshitaka OKAMURA<sup>1,2</sup>, Taiki KANEKO<sup>2</sup>, Rin ITO<sup>2</sup>, Takaaki SATO<sup>2</sup>  
<sup>1</sup>*Graduate School of Sciences and Technology for Innovation, Yamaguchi University,*  
<sup>2</sup>*Department of Applied Chemistry, Faculty of Science and Technology, Keio University*
- P37\*** Phosphoramidates of Camphorsultam: Versatile Building Blocks for the Synthesis of *P*-Chiral Phosphorous (V) Compounds  
Yasutomo YAMAMOTO<sup>1</sup>, Yurika KAMBARA<sup>1</sup>, Ayase MATSUMOTO<sup>1</sup>, Sakura NAKAI<sup>1</sup>, Tomoe ISHIURA<sup>1</sup>, Hideyasu CHINA<sup>1</sup>, Kenji WATANABE<sup>1</sup>, Akari MIYAWAKI<sup>1</sup>, Junpei MATSUOKA<sup>2</sup>  
<sup>1</sup>*Faculty of Pharmaceutical Sciences, Doshisha Women's College of Liberal Arts,* <sup>2</sup>*School of Pharmaceutical Sciences, Kindai University*
- P38\*†** One-Pot Synthesis of Substituted Azepines by Gold/Magnesium Orthogonal-Relay Catalysis  
Shuto KOSUGE<sup>1,2</sup>, Yoshihiro KIRAKU<sup>1</sup>, Kiyoshi TSUGE<sup>3</sup>, Kenji SUGIMOTO<sup>1,4</sup>, Yuji MATSUYA<sup>1</sup>  
<sup>1</sup>*Faculty of Pharm. Sci., Univ. of Toyama,* <sup>2</sup>*Grad. Sch. Pharm. Sci., Tohoku Univ.,*  
<sup>3</sup>*Faculty of Sci., Univ. of Toyama,* <sup>4</sup>*Grad. Sch. Life and Environmental Sci., Kyoto Pref. Univ.*
- P39\*†** Aerobic Oxidative Peptide Synthesis Using Nitroxyl Radical/Copper Cooperative Catalysis  
Shuhei AKUTSU, Yusuke SASANO, Shota NAGASAWA, Yoshiharu IWABUCHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P40\*** *N*-Methyl Aminophosphonium Salts as Dual-Purpose Reagents for Amidation of Carboxylic Acids  
Aki KOHYAMA, Natsuru HIRAGURI, Kakeru YONEYAMA, Kiyosei TAKASU  
*Graduate School of Pharmaceutical Sciences, Kyoto University*
- P41** Reactions of 2,3-bis(silyl)cyclopropanol with electrophiles via metal homoenolates  
Reo YUMOTO, Sayaka OHRUI, Masanori TAYU, Nozomi SAITO  
*Meiji Pharmaceutical University*
- P42\*†** Enantioselective formal synthesis of fumimycin via asymmetric oxidative amination of benzofuranone  
Tatsuto SHIMIZU, Yusuke SASANO, Yoshiharu IWABUCHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*

- P43\*<sup>‡</sup>** Aryne Insertion into Benziodoxole: Direct Assembly of Seven-Membered Cyclic Diaryliodonium Salts  
Shungo KAMIOKA, Shunya MOROHASHI, Kazuya KANEMOTO, Naohiko YOSHIKAI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P44** Linear-Selective Dimerization of Styrene Derivatives using Iridium Catalysts bearing Sterically Hindered Ligands  
Atsushi TAHARA<sup>1,2</sup>, Raku UENO<sup>2</sup>, Kanta FUKAGAWA<sup>2</sup>, Takayuki DOI<sup>2</sup>  
<sup>1</sup>*Frontier Research Institute for Interdisciplinary Sciences, Tohoku University,*  
<sup>2</sup>*Graduate School of Pharmaceutical Sciences, Tohoku University,*
- P45\*<sup>‡</sup>** Ln(OTf)<sub>3</sub>-catalyzed C3-selective aminolysis of *cis*-3,4-epoxy amines and 2,3-*N*-alkyl-aziridinyl alcohols  
Yuse KURIYAMA, Yusuke SASANO, Yoshiharu IWABUCHI  
*Graduate School of Pharmaceutical Sciences, Tohoku University*
- P46** Computational Molecular Refinement to Enhance Enantioselectivity by Reinforcing Molecular Interactions  
Masahiro TERADA, Taishi NAKANISHI  
*Department of Chemistry, Tohoku University*