

## Poster Presentations

**P-001–042: October 20 (Wednesday) 18:15–19:15**

**P-001 Dynamic kinetic resolution of amino acids using four Ni(II) chiral Schiff bases**

Arina Nakano<sup>1</sup>, Keita Nagaoka<sup>1</sup>, Jianlin Han<sup>2</sup>, Tsubasa Sakamoto<sup>3</sup>, Hiroki Moriwaki<sup>3</sup>, Hidenori Abe<sup>3</sup>, Kunisuke Izawa<sup>3</sup>, Vadim A. Soloshonok<sup>4</sup>, Hiroyuki Konno<sup>1</sup> (<sup>1</sup>Graduate School of Science and Engineering, Yamagata University, <sup>2</sup>College of Chemical Engineering, Nanjing Forestry University, <sup>3</sup>Hamari Chemicals Ltd., <sup>4</sup>Department of Organic Chemistry I, Faculty of Chemistry, University of the Basque Country UPV/EHU)

**P-002 Study for chemical synthesis of nanobody**

Kazuki Ichihashi, Yuya Asahina, Hironobu Hojo (Institute for Protein Research)

**P-003 Modular synthesis of disulfide cross-linked HIV-1 protease analogue using 4-fluorophenyl 3-nitro-2-pyridinesulfenate (Npys-OPh(pF))**

Yan Cui<sup>1</sup>, Akihiro Taguchi<sup>1</sup>, Hayate Shida<sup>1</sup>, Kiyotaka Kobayashi<sup>1</sup>, Sho Konno<sup>1</sup>, Kentaro Takayama<sup>1,2</sup>, Atsuhiko Taniguchi<sup>1</sup>, Yoshio Hayashi<sup>1</sup> (<sup>1</sup>Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Department of Environmental Biochemistry, Kyoto Pharmaceutical University)

**P-004 On-resin redox catalysts utilizing selenopeptides**

Kasumi Abe, Masaki Kuroda, Michio Iwaoka (Tokai University)

**P-005 Development of phosphine ligands with helical peptide for enantioselective [3+2]cycloaddition reactions**

Ryoma Nishioka<sup>1</sup>, Tomohiro Umeno<sup>1</sup>, Mitsunobu Doi<sup>2</sup>, Takuma Kato<sup>2</sup>, Atsushi Ueda<sup>1</sup>, Makoto Oba<sup>3</sup>, Masakazu Tanaka<sup>1</sup> (<sup>1</sup>Graduate School of Biomedical Sciences, Nagasaki University, <sup>2</sup>Osaka Medical and Pharmaceutical University, <sup>3</sup>Kyoto Prefectural University of Medicine)

**P-006 Effect of cis-trans transformation of benzanilide derivatives on peptide conformation**

Asami Ichinose, Yuko Otani, Tomohiko Ohwada (Graduate School of Pharmaceutical Sciences, The University of Tokyo)

**P-007 Synthesis and structural characterization of  $\beta$ -turn mimics containing (Z)-chloroalkene dipeptide isosteres**

Yuki Kodama, Kohei Sato, Nobuyuki Mase, Tetsuo Narumi (Graduate School of Science and Technology, Shizuoka University)

**P-008 Diastereoselective synthesis of a highly functionalized (Z)-chloroalkene dipeptide isostere of Leu-Dap dipeptide**

Daichi Toyama<sup>1</sup>, Yuki Kodama<sup>2</sup>, Junko Fujimoto<sup>3</sup>, Kohei Sato<sup>1,2,3</sup>, Nobuyuki Mase<sup>1,2,3</sup>, Kentaro Takayama<sup>4</sup>, Tetsuo Narumi<sup>1,2,3</sup> (<sup>1</sup>Graduate School of Integrated Science and Technology, Shizuoka University, <sup>2</sup>Graduate School of Science and Technology, Shizuoka University, <sup>3</sup>Faculty of engineering, Shizuoka University, <sup>4</sup>Kyoto Pharmaceutical University)

**P-009 Synthetic study toward the chemical synthesis of closed structure mimics of K63-linked ubiquitin dimer with 1,2,3-triazole-tethered ubiquitin linkage region**

Reon Takeuchi, Kohei Sato, Nobuyuki Mase, Tetsuo Narumi (Graduate School of Science and

Technology, Shizuoka University)

**P-010 K48/K63 branched ubiquitin chain: chemical synthesis and interactome analysis**

Yoshinori Taguchi<sup>1</sup>, Takuya Tomita<sup>2</sup>, Fumiaki Ohtake<sup>3</sup>, Kohei Sato<sup>1</sup>, Nobuyuki Mase<sup>1</sup>, Yasushi Saeki<sup>2</sup>, Tetsuo Narumi<sup>1</sup> (<sup>1</sup>Department of Engineering, Graduate School of Integrated Science and Technology, Shizuoka University, <sup>2</sup>Laboratory of Protein Metabolism, Tokyo Metropolitan Institute of Medical Science, <sup>3</sup>Institute for Advanced Life Sciences, Hoshi University)

**P-011 Identification of G4-binding peptide molecules from the RGG3 domain of translocated in liposarcoma/fused in sarcoma**

Sayuri Takeo<sup>1</sup>, Maiko Tabata<sup>2</sup>, Yuki Kodama<sup>3</sup>, Kohei Sato<sup>1,3</sup>, Nobuyuki Mase<sup>1,3</sup>, Takanori Oyoshi<sup>2,3</sup>, Tetsuo Narumi<sup>1,3</sup> (<sup>1</sup>Department of Engineering, Graduate School of Integrated Science and Technology, Shizuoka University, <sup>2</sup>Department of Science, Graduate School of Integrated Science and Technology, Shizuoka University, <sup>3</sup>Graduate School of Science and Technology, Shizuoka University)

**P-012 Total synthesis of microphorusamide A and B, antibacterial cyclic peptides**

Yuto Katayama, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

**P-013 Synthesis of  $\beta$ -hydroxy amino acids constituting hyeptin, an antimicrobial cyclodepsipeptide**

Kazuki Hashizume, Tsubasa Itoh, Takahiro Aimi, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

**P-014 *In vitro* selection of prenylated macrocyclic peptides using a cyanobactin biosynthesis enzyme**

Sumika Inoue, Rika Okuma, Yuki Goto, Hiroaki Suga (Department of Chemistry, Graduate School of Science, The University of Tokyo)

**P-015 Physiological roles of mitocryptide-3 and its derivatives in mitochondrial damage associated molecular patterns**

Yosinori Sugimoto, Hiroki Morikawa, Takayuki Marutani, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

**P-016 Synthesis of fucosylated glycopeptide by a novel protection scheme of sugar alcohols**

Tatsuya Ando<sup>1,2</sup>, Yuya Asahina<sup>1</sup>, Hironobu Hojo<sup>1</sup> (<sup>1</sup>Institute for Protein Research, Osaka University, <sup>2</sup>Graduate School of Science, Osaka University)

**P-017 Trityl type solubilizing tag including trimethyllysine for preparing hydrophobic peptides**

Shun Masuda, Shugo Tsuda, Taku Yoshiya (Peptide Institute, Inc.)

**P-018 A reversible method for the detection of amines groups during solid-phase peptide synthesis**

Tomohiro Umeno, Kazuteru Usui, Satoru Karasawa (Faculty of Pharmaceutical Sciences, Showa Pharmaceutical University)

**P-019 Development of one-pot synthesis of cyclic disulfide peptide using water-soluble Npys derivative**

Megumi Sakata<sup>1</sup>, Akihiro Taguchi<sup>1</sup>, Saeka Kuraishi<sup>1</sup>, Sho Konno<sup>1</sup>, Kentaro Takayama<sup>1,2</sup>, Atsuhiko Taniguchi<sup>1</sup>, Yoshio Hayashi<sup>1</sup> (<sup>1</sup>School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Kyoto Pharmaceutical University)

**P-020 Synthesis of peptide selenoester through diketopiperazine formation for efficient peptide ligation**

Masaya Hashimoto, Koki Nakatsu, Gosuke Hayashi, Hiroshi Murakami (Graduate School of Engineering, Nagoya University)

- P-021 Synthesis of dual-mono ubiquitinated PAF15 for elucidation of maintenance methylation mechanism**  
Yuya Takahashi<sup>1</sup>, Satomi Kori<sup>2</sup>, Kyohei Arita<sup>2</sup>, Gosuke Hayashi<sup>1</sup>, Hiroshi Murakami<sup>1</sup> (<sup>1</sup>Nagoya University, <sup>2</sup>Yokohama City University)
- P-022 One-pot disulfide-driven cyclic peptide synthesis of oxytocin using 4-fluorophenyl 3-nitro-2-pyridinesulfenate (Npys-OPh(pF))**  
Hayate Shida<sup>1</sup>, Akihiro Taguchi<sup>1</sup>, Kiyotaka Kobayashi<sup>1</sup>, Yan Cui<sup>1</sup>, Sho Konno<sup>1</sup>, Kentaro Takayama<sup>1,2</sup>, Atsuhiko Taniguchi<sup>1</sup>, Yoshio Hayashi<sup>1</sup> (<sup>1</sup>School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Department of Environmental Biochemistry, Division of Biological Sciences, Kyoto Pharmaceutical University)
- P-023 Expanded late-stage solubilization of peptide hydrazide applicable to subsequent ligation**  
Shoko Tanaka<sup>1</sup>, Kohei Sato<sup>1,2</sup>, Tetsuo Narumi<sup>1,2,3</sup>, Nobuyuki Mase<sup>1,2,3</sup> (<sup>1</sup>Graduate School of Science and Technology, Shizuoka University, <sup>2</sup>Graduate School of Integrated Science and Technology, Shizuoka University, <sup>3</sup>Research Institute of Green Science and Technology, Shizuoka University)
- P-024 Residue-specific modification reaction using *S*-acetamidomethyl cysteine sulfoxide, Cys(Acm)(O)**  
Kaito Anzaki<sup>1</sup>, Kento Ohkawachi<sup>1</sup>, Daishiro Kobayashi<sup>1</sup>, Ryuji Kyan<sup>2</sup>, Masaya Denda<sup>1</sup>, Akira Shigenaga<sup>2</sup>, Akira Otaka<sup>1</sup> (<sup>1</sup>Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University, <sup>2</sup>Faculty of Pharmacy and Pharmaceutical Sciences, Fukuyama University)
- P-025 Overexpression of a human antimicrobial peptide LL-37 and its orthologs using novel calmodulin fusion system**  
Mitsuki Shibagaki<sup>1</sup>, Waka Ueda<sup>1</sup>, Kohei Kano<sup>2</sup>, Hao Gu<sup>2</sup>, Tomoyasu Aizawa<sup>1,2,3</sup> (<sup>1</sup>School of Science, Hokkaido University, <sup>2</sup>Graduate School of Science, Hokkaido University, <sup>3</sup>Faculty of Advanced Life Science, Hokkaido University)
- P-026 Oligo(*N*-methylalanine) as a molecular scaffold for designing protein ligands**  
Marin Yokomine<sup>1</sup>, Daisuke Kuroda<sup>1</sup>, Takumi Ueda<sup>2</sup>, Koh Takeuchi<sup>3</sup>, Kouhei Tsumoto<sup>1,4</sup>, Jumpei Morimoto<sup>1</sup>, Shinsuke Sando<sup>1</sup> (<sup>1</sup>Graduate School of Engineering, The University of Tokyo, <sup>2</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo, <sup>3</sup>Cellular and Molecular Biotechnology Research Institute, National Institute of Advanced Industrial Science and Technology, <sup>4</sup>Institute of Medical Science, The University of Tokyo)
- P-027 Construction of  $\beta$ -barreled peptide nanopores by cell-free expression**  
Shoko Fujita, Miyu Fukuda, Ikuro Mizoguchi, Ryuji Kawano (Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)
- P-028 Synthesis of macrocycles by peptide catalyst with a nitrogen-containing cyclic  $\alpha,\alpha$ -disubstituted  $\alpha$ -amino acid**  
Yuto Yamaberi<sup>1</sup>, Tomohiro Umeno<sup>1</sup>, Atsushi Ueda<sup>1</sup>, Makoto Oba<sup>2</sup>, Masakazu Tanaka<sup>1</sup> (<sup>1</sup>Graduate School of Biomedical Sciences, Nagasaki University, <sup>2</sup>Graduate School of Medicine, Kyoto Prefectural University of Medicine)
- P-029 Single-molecule detection of polypeptides using monodisperse  $\beta$ -barrel nanopore**  
Ikuro Mizoguchi<sup>1</sup>, Masataka Usami<sup>1</sup>, Keisuke Shimizu<sup>1</sup>, Taichi Isozaki<sup>2</sup>, Yoshio Hamada<sup>2</sup>, Kenji

Usui<sup>2</sup>, Ryuji Kawano<sup>1</sup> (<sup>1</sup>Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology, <sup>2</sup>Faculty of Frontiers of Innovative Research in Science and Technology, Konan University)

**P-030 Signaling mechanisms for mitocryptids derived from mitochondrial transit sequences in neutrophilic cells**

Koji Ohura, Takayuki Marutani, Ryota Tanemura, Takumi Sasaki, Shinichiro Tamura, Kenta Nakashima, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology, Nagahama, Shiga)

**P-031 Interaction of mitocryptide-2 and its derivatives with formyl peptide receptor 2 for the neutrophilic activation**

Hiroki Hirai, Takayuki Marutani, Kodai Nishino, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

**P-032 Development of helical antimicrobial peptides containing non-proteinogenic amino acids**

Motoharu Hirano<sup>1,2</sup>, Chihiro Saito<sup>3</sup>, Ryuji Kawano<sup>3</sup>, Takashi Misawa<sup>2</sup>, Yosuke Demizu<sup>1,2</sup> (<sup>1</sup>Graduate School of Medical Life Science, Yokohama City University, <sup>2</sup> National Institute of Health Sciences, <sup>3</sup>Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)

**P-033 Analysis of oligomerized bioactive peptides for eukaryotic and prokaryotic cells**

Yuna Nunokawa, Shuya Sakaguchi, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

**P-034 Utility verification of screening method of membrane-permeable cyclic peptides**

Yusuke Inoue, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

**P-035 *Withdrawal***

**P-036 Peptide length optimization of lysine-specific demethylase 1 inhibitors**

Masaki Asakawa<sup>1</sup>, Taeko Kakizawa<sup>1</sup>, Takayoshi Suzuki<sup>2</sup> (<sup>1</sup>Graduate School of Materials and Life Sciences, Kanto Gakuin University, <sup>2</sup>The Institute of Scientific and Industrial Research, Osaka University)

**P-037 PURE system-based mRNA display evolution of unnatural cyclic peptides via genetic code expansion for allergic disease treatment**

Daisuke Fujii<sup>1,2</sup>, Yuta Shiojima<sup>1,3</sup>, Takumi Yokoyama<sup>1,2</sup>, Takehiro Ando<sup>1,4</sup>, Mizuki Yamamoto<sup>1,4</sup>, Takashi Kawakami<sup>1,5,6</sup> (<sup>1</sup>University of Yamanashi, <sup>2</sup>Department of Life and Environmental Sciences, Integrated Graduate School of Medicine, Engineering and Agricultural Sciences, <sup>3</sup>Department of Biotechnology, Faculty of Life and Environmental Sciences, <sup>4</sup>Department of Integrated Applied Life Science, Integrated Graduate School of Medicine, Engineering, and Agricultural Sciences, <sup>5</sup>Faculty of Life and Environmental Sciences, Graduate Faculty of Interdisciplinary Research, <sup>6</sup>JST, PRESTO)

**P-038 Construction of cyclic peptide library containing aryl fluorosulfate warhead on T7 phage**

Riku Katsuki, Yudai Tabuchi, Masumi Taki (The university of electro-communication)

**P-039 Physiological significance of different receptor selectivities between FPR2 and FPR1 for mitocryptide-2 and its derivatives depending on their molecular forms**

Tomoyuki Miyaji, Takayuki Marutani, Kodai Nishino, Yoshito Takamuro, Takenori Yamada, Hiroki

Morikawa, Tatsuya Hattori, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

**P-040 Activation mechanisms of neutrophils stimulated by mitochondrial transit signal sequences including mitocryptide-3**

Ryota Tanemura, Takayuki Marutani, Koji Ohura, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)

**P-041 Peptide stapling improves the sustainability of a peptide-based degraders against estrogen receptors**

Hidetomo Yokoo<sup>1,2</sup>, Nobumichi Ohoka<sup>2</sup>, Takahito Ito<sup>2</sup>, Makoto Oba<sup>1</sup>, Takao Inoue<sup>2</sup>, Mikihiko Naito<sup>3</sup>, Yosuke Demizu<sup>2</sup> (<sup>1</sup>Kyoto Prefectural University of Medicine, <sup>2</sup>National Institute of Health Sciences, <sup>3</sup>The University of Tokyo)

**P-042 CEACAM3 splicing is altered by PPM1D inhibition in HL-60 cells**

Tatsuya Kodama, Shoma Kura, Fuki Kudoh, Kei Kawamura, Kazuyasu Sakaguchi, Rui Kamada (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

**P-043–084: October 21 (Thursday) 17:20–18:20**

**P-043 Evaluation of the peptide derived from the N- and C-terminal regions of kinase domain for allosteric control of receptor tyrosine kinase cMet**

Yuki Tanaka<sup>1</sup>, Takayoshi Kinoshita<sup>1</sup>, Kunio Matsumoto<sup>2</sup> (<sup>1</sup>Graduate School of Science, Osaka Prefecture University, <sup>2</sup>Cancer Research Institute, Kanazawa University)

**P-044 Synthesis of biotin-labeled probes of a cyclic pentapeptide PF1171B for identification of its target molecules**

Taiga Oda, Minoru Inagaki, Yuichi Masuda (Graduate School of Bioresources, Mie University)

**P-045 Development of a novel in vitro screening system for backbone macrocyclic peptides**

Koki Shinbara, Ryo Takatsuji, Takayuki Katoh, Hiroaki Suga (Department of Chemistry, Graduate School of Science, The University of Tokyo)

**P-046 Screening of drug candidates from cyclic  $\beta$ -amino acid-containing helical peptide library**

Marina Kawai<sup>1</sup>, Takayuki Katoh<sup>1</sup>, Toru Sengoku<sup>2</sup>, Hiroaki Suga<sup>1</sup> (<sup>1</sup>Department of Chemistry, Graduate School of Science, The University of Tokyo, <sup>2</sup>Department of Biochemistry, Graduate School of Medicine, Yokohama City University)

**P-047 Fluorescent silica nanoparticles modified with cell-penetrating peptides toward a drug delivery carrier**

Daiki Kawahara, Ukyo Matsuura, Ryota Kawawaki, Takayuki Miki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of Technology)

**P-048 Photothermal therapeutic effects of polyhistidine peptide-modified gold nanoparticles**

Kosuke Hori, Tsuyoshi Kawano, Takashi Iwasaki (Graduate School of Sustainability Science, Tottori University)

- P-049 Effect of microwave irradiation on cellular uptake using arginine-rich peptide**  
Momo Hirata<sup>1</sup>, Yonejiro Arimoto<sup>2</sup>, Ryuji Osawa<sup>3</sup>, Nobuhiro Nakanishi<sup>4</sup>, Kenji Usui<sup>1</sup> (<sup>1</sup>Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, <sup>2</sup>Minato Medical Science Co. Ltd., <sup>3</sup>Seikoh Giken Co. Ltd., <sup>4</sup>DSP Research, Inc.)
- P-050** *Withdrawal*
- P-051 Development of amphiphilic YK peptide tags for bottom-up construction of liquid-liquid phase separation**  
Hiroki Takahashi, Takayuki Miki, Taichi Nakai, Masahiro Hashimoto, Hisakazu Mihara (School of Life Science and Technology, Tokyo Institute of Technology)
- P-052 Construction of photoreactive group-modified phage libraries and selection against hDM2**  
Keigo Namii, Takayuki Miki, Hisakazu Mihara (School of Life Science and Technology, Tokyo Institute of Technology)
- P-053 Polymer binding peptide as a molecular tool for cell imaging**  
Chihiro Inaba<sup>1</sup>, Toshiki Sawada<sup>1</sup>, Tetsuya Kadonosono<sup>2</sup>, Takeshi Serizawa<sup>1</sup> (<sup>1</sup>School of Materials and Chemical Technology, Tokyo Institute of Technology, <sup>2</sup>School of Life Science and Technology, Tokyo Institute of Technology)
- P-054 Development of therapeutic antibody-modified nanobubbles using Fc-binding peptide and their anti-cancer effects with therapeutic antibody**  
Yusuke Yano<sup>1</sup>, Kenshin Haruta<sup>1</sup>, Nobuhito Hamano<sup>1</sup>, Yamato Kikkawa<sup>1</sup>, Yoko Endo-Takahashi<sup>1</sup>, Motoyoshi Nomizu<sup>1</sup>, Ryo Suzuki<sup>2</sup>, Kazuo Maruyama<sup>2</sup>, Yoichi Negishi<sup>1</sup> (<sup>1</sup>School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>School of Pharmacy, Teikyo University)
- P-055 A non-transgenic plant genome editing method using cell-penetrating peptides: polyhistidine peptides**  
Yoshino Tanaka<sup>1</sup>, Yoshihiko Nanasato<sup>2</sup>, Kousei Omura<sup>1</sup>, Tsuyoshi Kawano<sup>1</sup>, Keita Endoh<sup>3</sup>, Takashi Iwasaki<sup>1</sup> (<sup>1</sup>Department of Agriculture, Graduate School of Sustainability Science, Tottori University, <sup>2</sup>Forest Bio-Research Center, Forestry and Forest Products Research Institute, <sup>3</sup>Forest Tree Breeding Center, Forestry and Forest Products Research Institute)
- P-056 Synthesis and property of water-soluble cyclic peptides modified with two pyrenyl groups**  
Sora Sakura, Yuhi Maekawa, Mizuki Kitamatsu (Kindai University)
- P-057 Identification of RGD-containing sequences that promote induced pluripotent stem cell adhesion**  
Toru Onda, Yuji Yamada, Ayami Hagiuda, Keisuke Hamada, Yamato Kikkawa, Motoyoshi Nomizu (School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, Hachioji)
- P-058 Integration of phthalocyanine into self-assembling peptides nanostructures**  
Sohma Hizawa, Takayouki Miki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of Technology)
- P-059 Construction of circularly permuted soybean peroxidase**  
Taisei Iwabuchi, Tsuyoshi Takahashi (Graduate School of Science and Technology, Gunma University)
- P-060 Development of temperature-responsive peptides by EDTA-mediated multimerization of short (FPGVG)<sub>n</sub> chains**

Naoki Tanaka<sup>1</sup>, Keitaro Suyama<sup>2</sup>, Keisuke Tomohara<sup>2</sup>, Iori Maeda<sup>3</sup>, Takeru Nose<sup>1,2</sup> (<sup>1</sup>Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, <sup>2</sup>Faculty of Arts and Science, Kyushu University, <sup>3</sup>Department of Physics and Information Technology, Kyushu Institute of Technology)

**P-061 Creation of artificial E3s with specific E2-binding capabilities by amino acid replacements**

Ayumi Fukuda, Kazuhide Miyamoto (Pharmaceutical Sciences, Sanyo-Onoda City University)

**P-062 Regulatory mechanism of larval diapause by *C. elegans* neuropeptide, FLP-6, in intestine**

Masahiro Ono<sup>1</sup>, Yohei Matsunaga<sup>2</sup>, Tomohiro Bito<sup>1</sup>, Takashi Iwasaki<sup>1</sup>, Tsuyoshi Kawano<sup>1</sup> (<sup>1</sup>Department of Bioresources Science, The United Graduate School of Agriculture, Tottori University, <sup>2</sup>SRL)

**P-063 Regulatory mechanism of larval development by a *C. elegans* neuropeptide, FLP-3**

Masayo Nose<sup>1</sup>, Natsumi Kageyama<sup>1</sup>, Yohei Matsunaga<sup>2</sup>, Takashi Iwasaki<sup>1</sup>, Tsuyoshi Kawano<sup>1</sup> (<sup>1</sup>Department of Agricultural Science, Graduate School of Sustainability Science, Tottori University, <sup>2</sup>SRL)

**P-064 Development of antibody-mimetic small proteins targeting tumor-associated phosphatase PPM1D**

Megumi Ikeura<sup>1</sup>, Hiroto Tashiro<sup>1</sup>, Junki Shinada<sup>1</sup>, Kazuhiro Furukawa<sup>2</sup>, Yoshiro Chuman<sup>1</sup> (<sup>1</sup>Laboratory of Biological Chemistry, Graduate School of Science and Technology, Niigata University, <sup>2</sup>Cell Regulation Laboratory in Biochemistry, Graduate School of Science and Technology, Niigata University)

**P-065 Identification of inhibitors for disease-related phosphatase Scp1 using antibody-like adnectin**

Junki Shinada<sup>1</sup>, Kazuki Yamazaki<sup>1</sup>, Megumi Ikeura<sup>1</sup>, Kazuhiro Furukawa<sup>2</sup>, Yoshiro Chuman<sup>1</sup> (<sup>1</sup>Laboratory of Biological Chemistry, Graduate School of Science and technology, Niigata University, <sup>2</sup>Cell Regulation Laboratory in Biochemistry, Graduate School of Science and technology, Niigata University)

**P-066 Neuropeptide gene expression in the fetal mouse brain exposed to an endocrine-disrupting chemical**

Mari Hosose<sup>1</sup>, Kyota Shirane<sup>1</sup>, Tomoka Ishibashi<sup>1</sup>, Kotone Ito<sup>1</sup>, Koki Tagawa<sup>1</sup>, Ayami Matsushima<sup>1,2</sup> (<sup>1</sup>Department of Chemistry, Graduate School of Science, Kyushu University, <sup>2</sup>Department of Chemistry, Faculty of Science, Kyushu University)

**P-067 Synthesis of novel cyclic peptides for inclusion of polypeptides and characterization of their inclusion ability**

Taichi Kurita<sup>1</sup>, Joan Gimenez-Dejoz<sup>2</sup>, Seiya Fujita<sup>1</sup>, Hiroataka Uji<sup>1</sup>, Keiji Numata<sup>1,2</sup> (<sup>1</sup>Graduate School of Engineering, Kyoto University, <sup>2</sup>RIKEN Center for Sustainable Resource Science)

**P-068 Anti-nucleation peptide screened from a phage displayed peptide library**

Sora Okamoto<sup>1</sup>, Seijiro Matsuki<sup>1</sup>, Yoshio Katakura<sup>1,2</sup>, Yoshiaki Hirano<sup>1,2</sup> (<sup>1</sup>Faculty of Chemistry, Materials and Bioengineering, Kansai University, <sup>2</sup>Organization for Research and Development of Innovative Science and Technology, Kansai University)

**P-069 De novo discovery of macrocyclic peptide ligands containing *N*-alkyl amino acids**

Naoya Kawakami, Toby Passioura, Naohiro Terasaka, Hiroaki Suga (Department of Chemistry, Graduate School of Science, The University of Tokyo)

**P-070 Density functional theory study of the mechanism of amide bond formation of amino acid-derived**

**active esters**

Junko Fujimoto<sup>1</sup>, Kohei Sato<sup>1,2</sup>, Nobuyuki Mase<sup>1,2</sup>, Tetsuo Narumi<sup>1,2</sup> (<sup>1</sup>Faculty of Engineering, Shizuoka University, <sup>2</sup>Department of Engineering, Graduate School of Integrated Science and Technology)

**P-071 Ser/Thr phosphatase PPM1D regulates neutrophil-differentiation and subset polarization**

Shoma Kura, Tatsuya Kodama, Fuki Kudoh, Kazuyasu Sakaguchi, Rui Kamada (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

**P-072 Optimization of HPLC columns in peptide analysis with ColumnViewer software and optimization of separation with OffLine software**

Masaaki Suzuki, Yuko Aoki, Shigenori Sonoki, Kazuhide Konishi (Chromsword Japan Co., Ltd.)

**P-073 Regulation of amyloid fibrillation by high-power terahertz waves**

Takayasu Kawasaki<sup>1</sup>, Yuusuke Yamaguchi<sup>2</sup>, Hideaki Kitahara<sup>2</sup>, Akinori Irizawa<sup>3</sup>, Masahiko Tani<sup>2</sup> (<sup>1</sup>Accelerator Laboratory, High Energy Accelerator Research Organization, <sup>2</sup>Research Center for Development of Far-Infrared Region, University of Fukui, <sup>3</sup>The Institute of Scientific and Industrial Research, Osaka University)

**P-074 Withdrawal**

**P-075 Photoreaction-induced SDS-resistant PrPSc/res oligomer formation**

Kenta Teruya, Toshiya Ishikawa, Sara Iwabuchi, Miki Watanabe-Matsui, Katsumi Doh-ura (Tohoku University, Graduate School of Medicine)

**P-076 PreQ<sub>1</sub> facilitates DNA strand invasion by PNA**

Shun-suke Moriya<sup>1</sup>, Yuki Yoneta<sup>1</sup>, Keiko Kuwata<sup>2</sup>, Yasutada Imamura<sup>3</sup>, Yosuke Demizu<sup>4</sup>, Masaaki Kurihara<sup>5</sup>, Atsushi Kittaka<sup>1</sup>, Toru Sugiyama<sup>1</sup> (<sup>1</sup>Faculty of Pharma-Sciences, Teikyo University, <sup>2</sup>Institute of Transformative Bio-Molecules (WPI-ITbM), Nagoya University, <sup>3</sup>School of Advanced Engineering, Kogakuin University, <sup>4</sup>Division of Organic Chemistry, National Institute of Health Sciences, <sup>5</sup>Department of Pharmaceutical Sciences, International University of Health and Welfare)

**P-077 Broad substrate tolerance of an engineered aryl acid adenylation domains with an enlarged substrate binding site**

Fumihiro Ishikawa, Maya Nohara, Natsuki Miyano, Kana Kinoshita, Hinano Kitayama, Katsuki Takashima, Genzoh Tanabe (Faculty of Pharmacy, Kindai University)

**P-078 Cloning and enzyme activation of a saliva protease derived from *Nephila Clavata***

Misaki Nishimura<sup>1</sup>, Ayumi Ogata<sup>1</sup>, Teruki Hagiwara<sup>1</sup>, Mitsuhiro Miyazawa<sup>2</sup>, Shigeru Shimamoto<sup>1</sup>, Yuji Hidaka<sup>1</sup> (<sup>1</sup>Graduate School of Science and Engineering Research, Kindai University, <sup>2</sup>Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

**P-079 Maturation of the disulfide-coupled folding of prouroguanylin in molecular evolution**

Koki Mizoe, Ryota Shinto, Masaya Goto, Kota Fujiwara, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

**P-080 Preparation of mutant proteins of the cystatin-related epididymal spermatogenic protein**

Sayuri Murata, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

**P-081 Structural analyses of a linker region of the pathogenic amyloid precursor protein**



Yusaku Hanagaki<sup>1</sup>, Shingo Kanemura<sup>1</sup>, Masaki Okumura<sup>1</sup>, Hiroshi Yamaguchi<sup>1</sup>, Shigeru Shimamoto<sup>1</sup>, Yuji Hidaka<sup>1</sup> (<sup>1</sup>Graduate School of Science and Engineering Research, Kindai University, <sup>2</sup>School of Science and Technology, Kwansai Gakuin University, <sup>3</sup>Frontier Research Institute for Interdisciplinary Sciences)

**P-082 Disulfide-coupled folding of *de novo* designed eel prouroguanylin protein**

Ryota Shinto, Koki Mizoe, Masaya Goto, Norie Nakajima, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)

**P-083 Mutational analyses of the enzymatic activities of a *Bombyx mori* cocoonase**

Ayumi Ogata<sup>1</sup>, Misaki Nishimura<sup>1</sup>, Nana Sakata<sup>1</sup>, Mitsuhiro Miyazawa<sup>2</sup>, Shigeru Shimamoto<sup>1</sup>, Yuji Hidaka<sup>1</sup> (<sup>1</sup>Graduate School of Science and Engineering Research, Kindai University, <sup>2</sup>Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

**P-084 Synthesis of immobilized gold nanoparticles with catalytic activity using resin conjugated with gold mineralizing peptide**

Shuhei Yoshida, Takaaki Tsuruoka, Kenji Usui (Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University)

**P-085–125: October 22 (Friday) 11:20–12:20**

**P-085 Remineralization potential of bioactive glass and foldamer-based peptides on enamel**

Enrique Ezra Zuniga Heredia<sup>1</sup>, Fernando Arteaga Arteaga<sup>2,3</sup>, Masaya Sawamura<sup>2</sup>, Masahiro Iijima<sup>1</sup> (<sup>1</sup>Division of Orthodontics and Dentofacial Orthopedics, Health Sciences University of Hokkaido, <sup>2</sup>School of Sciences, Hokkaido University, <sup>3</sup>Institute for the Advancement of Higher Education, Hokkaido University)

**P-086 Amine-selective reaction of 2*H*-azirine for synthesis of peptidemimetics**

Hiroto Takahashi<sup>1</sup>, Makoto Roppongi<sup>2</sup>, Shingo Tamesue<sup>1</sup>, and Toru Oba<sup>1</sup> (<sup>1</sup>Department of Material and Environmental Chemistry, Graduate School of Engineering, Utsunomiya University, <sup>2</sup>Advanced Instrumental Analysis Department, Utsunomiya University)

**P-087 Functional analysis of cell-aggregate inducing peptide**

Ikumi Amimoto<sup>1</sup>, Rino Watanabe<sup>1</sup>, Yoshiaki Hirano<sup>1,2</sup> (<sup>1</sup>Faculty of Chemistry, Materials and Bioengineering, Kansai University, <sup>2</sup>Organization for Research and Development of Innovative Science and Technology, Kansai University)

**P-088 Artificially designed  $\alpha$ -helical peptide nanofibers showing liquid-crystal like thermal behavior**

Minami Kurokawa<sup>1</sup>, Mika Hirose<sup>2</sup>, Akihiro Kawamoto<sup>2</sup>, Atsuo Tamura<sup>1</sup> (<sup>1</sup>Grad. Sch. Sci., Univ. Kobe., <sup>2</sup>IPR, Osaka Univ.)

**P-089 Development of temperature-responsive short-chain peptide analogues based on elastin-like peptide FPGVG**

Keitaro Suyama<sup>1</sup>, Shogo Sumiyoshi<sup>2</sup>, Naoki Tanaka<sup>2</sup>, Takumi Ando<sup>2</sup>, Akihiko Nagata<sup>3</sup>, Keisuke Tomohara<sup>1</sup>, Suguru Taniguchi<sup>4</sup>, Iori Maeda<sup>4</sup>, Takeru Nose<sup>1,2</sup> (<sup>1</sup>Faculty of Arts and Science, Kyushu University, <sup>2</sup>Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, <sup>3</sup>Department of Chemistry, Faculty of Science, Kyushu University, <sup>4</sup>Department of Physics and

Information Technology, Kyushu Institute of Technology)

**P-090 Synthesis of two pyrene-modified peptide nucleic acid probes and detection of DNA and by the probes**

Koki Ishii, Sakura Tsuchitani, Miyu Toyama, Mizuki Kitamatsu (Graduate School of Science and Engineering, Kindai University)

**P-091 Peptide conjugated microspheres newly designed from hepatitis E virus ORF2 capsid protein to improve their reactivity against sera from wild boars**

Hiroyuki Oku<sup>1</sup>, Kaito Takeda<sup>1</sup>, Yuya Tatsumi<sup>2</sup>, Yuko Oku<sup>2</sup> (<sup>1</sup>Graduate School of Science & Engineering, Gunma University, <sup>2</sup>Aoi-Tori Family Clinic)

**P-092 Nanotube formation of amphiphilic polypeptide having hydrophobic helix composed of repeated Leu-Aib sequence**

Abosheasha Mohammed<sup>1,2</sup>, Toru Itagaki<sup>1</sup>, Yoshihiro Ito<sup>1,2,3</sup>, Motoki Ueda<sup>1,3</sup> (<sup>1</sup>RIKEN Cluster for Pioneering Research, <sup>2</sup>Tokyo Metropolitan University, <sup>3</sup>RIKEN Center for Emergent Matter Science)

**P-093 Fluorescent PPI-visualization for the inhibitory activity of helix-loop-helix peptides against p53-HDM2 interaction**

Daisuke Fujiwara, Kazunori Zikihara, Ryohei Konda, Shunsuke Inaura, Hidekazu Kitada, Masataka Michigami, Ikuhiko Nakase, Ikuo Fujii (Department of Biological Science, Graduate School of Science, Osaka Prefecture University)

**P-094 A FRET-based assay system for protein kinase C ligand screening using 1,2-diacylglycerol-lactone derivative**

Kohei Tsuji, Takahiro Ishii, Takuya Kobayakawa, Nami Ohashi, Wataru Nomura, Hirokazu Tamamura (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University (TMDU))

**P-095 De novo designed A $\beta$ 14-23 peptidomimetics combat amyloidogenic stress induced cellular toxicity and stiffness**

Debasis Ghosh, Mouli Konar, Sourav Samanta, Thimmaiah Govindaraju (Bioorganic Chemistry Laboratory, New Chemistry Unit and School of Advanced Materials (SAMat), Jawaharlal Nehru Centre for Advanced Scientific Research)

**P-096 Effects of replacing the Glu residues of Pep-1 peptide with hydrophobic amino acids**

Takuma Kato, Hiroaki Numa, Mihoko Nakamachi, Akiko Asano, Mitsunobu Doi (Faculty of Pharmacy, Osaka Medical and Pharmaceutical University)

**P-097 A discovery of novel bioactive peptides from rice protein controlling ghrelin release**

Kentaro Kaneko<sup>1</sup>, Yuki Tokuyama<sup>1</sup>, Eriko Taniguchi<sup>1</sup>, Shimon Abe<sup>1</sup>, Junya Nakato<sup>1</sup>, Hiroshi Iwakura<sup>2</sup>, Masaru Sato<sup>3</sup>, Atsushi Kurabayashi<sup>3</sup>, Hideyuki Suzuki<sup>3</sup>, Akira Ito<sup>4</sup>, Yuki Higuchi<sup>4</sup>, Ryoko Nakayama<sup>4</sup>, Kimiko Uchiyama<sup>4</sup>, Hajime Takahashi<sup>4</sup>, Kousaku Ohinata<sup>1</sup> (<sup>1</sup>Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University, <sup>2</sup>First Department of Medicine, Wakayama Medical University, <sup>3</sup>Department of Applied Genomics, Kazusa DNA Research Institutes, <sup>4</sup>Rice Research Institute, Kameda Seika CO., LTD.)

**P-098 The docking simulation of the 23-mer inhibitory peptide to myostatin**

Tomo Asari<sup>1</sup>, Hiroaki Ikeyama<sup>1</sup>, Akihiro Taguchi<sup>1</sup>, Atsuhiko Taniguchi<sup>1</sup>, Yoshio Hayashi<sup>1</sup>, Kentaro Takayama<sup>1,2</sup> (<sup>1</sup>Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences,

<sup>2</sup>Department of Environmental Biochemistry, Kyoto Pharmaceutical University)

- P-099 Fragment-matching survey for amyloid-core region of amyloid- $\beta$  (1-42)**  
Hisayuki Morii, Masayuki Nara (Department of Chemistry, College of Liberal Arts and Sciences, Tokyo Medical and Dental University)
- P-100 Peptide library synthesis and enzymatic digestion for future drug design**  
Reo Yamada, Norimasa Takasu, Masaki Midorikawa, Ren Fujii, Taeko Kakizawa (College of Science and Engineering, Kanto Gakuin University)
- P-101 Conjugates of MAP(Aib) and cRGD through disulfide linkages as siRNA carriers**  
Shun-ichi Wada, Makoto Kusuyama, Junsuke Hayashi, Hidehito Urata (Department of Bioorganic Chemistry, Faculty of Pharmacy, Osaka Medical and Pharmaceutical University)
- P-102 Substituted indolizidinone peptidomimetic modulators of the prostaglandin-F2 $\alpha$  receptor**  
Ramakotiah Mulamreddy, Christiane Quiniou, Xin Hou, Sylvian Chemtob, William D. Lubell (University of Montreal)
- P-103 Hybrid molecules of CD4 mimic and HIV-1 gp41-related peptides as fusion inhibitors**  
Rongyi Wang<sup>1</sup>, Kohei Tsuji<sup>1</sup>, Yishan Liu<sup>1</sup>, Takuya Kobayakawa<sup>1</sup>, Shigeyoshi Harada<sup>2</sup>, Hirokazu Tamamura<sup>1</sup> (<sup>1</sup>Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, <sup>2</sup>AIDS Research Center, National Institute of Infectious Diseases)
- P-104 Investigation of the antimicrobial activity, cell viability and emolytic activity of *N*-fatty acylated mytilalin A6 (3-23)-OH derivatives**  
Keiko Okimura, Tatsuo Takahashi, Atsuya Sawada, Chinami Katsui, Tamako Shiratori, Risa Sugita, Sayuri Suzuki, Tohru Daikoku (Faculty of Pharmaceutical Sciences, Hokuriku University)
- P-105 Synthesis of oxytocin analogues focused on the hydrophobic structures and their positive allosteric modulator effect on  $\mu$  opioid receptor**  
Takaaki Mizuguchi<sup>1</sup>, Risa Yamauchi<sup>1</sup>, Haruka Ono<sup>1,2</sup>, Miku Inagaki<sup>1,3</sup>, Ami Yamazaki<sup>1</sup>, Kennosuke Itoh<sup>1</sup>, Kanako Miyano<sup>2,3</sup>, Miki Nonaka<sup>3</sup>, Yasuhito Uezono<sup>3</sup>, Hideaki Fujii<sup>1</sup> (<sup>1</sup>Laboratory of Medicinal Chemistry, School of Pharmacy, Kitasato University, <sup>2</sup>Division of Cancer Pathophysiology, National Cancer Center Research Institute, <sup>3</sup>Department of Pain Control Research, The Jikei University School of Medicine)
- P-106 Combination study of partial structures in Phe-Tyr derivatives for antibacterial activity against *Stenotrophomonas maltophilia***  
Koushi Hidaka<sup>1</sup>, Yuko Tsuda<sup>2</sup>, Mizuki Sekiya<sup>3</sup>, Yasumitsu Sakamoto<sup>3</sup>, Saori Roppongi<sup>4</sup>, Akihiko Nakamura<sup>5</sup>, Yoshiyuki Suzuki<sup>5</sup>, Wataru Ogasawara<sup>5</sup>, Nobutada Tanaka<sup>6</sup> (<sup>1</sup>Graduate School of Health Sciences, Kobe University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Kobe Gakuin University, <sup>3</sup>School of Pharmacy, Iwate Medical University, <sup>4</sup>School of Medicine, Iwate Medical University, <sup>5</sup>Department of Science of Technology Innovation, Nagaoka University of Technology, <sup>6</sup>School of Pharmacy, Kitasato University)
- P-107 Fluorescently labeled Heat-stable enterotoxin to detect cancer cells**  
Masaya Goto, Shinya Yoshino, Ryota Shinto, Koki Mizoe, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)
- P-108 ATR-FTIR study of synthetic peptide analogs of the calcium-binding site III of rabbit skeletal**

**muscle troponin C: Effects of amino-acid replacement**

Masayuki Nara<sup>1</sup>, Hisayuki Morii<sup>1</sup>, Akira Sakamoto<sup>2</sup>, Takuya Miyakawa<sup>3</sup>, Masaru Tanokura<sup>3</sup> (<sup>1</sup>College of Liberal Arts and Sciences, Tokyo Medical and Dental University, <sup>2</sup>College of Science and Engineering, Aoyama Gakuin University, <sup>3</sup>Graduate School of Agricultural and Life Sciences, University of Tokyo)

**P-109 Preparation of cyclic peptide by the use of CPE peptide**

Toru Kawakami, Eri Sasakura, Yohei Miyanoiri, Hironobu Hojo (Institute for Protein Research, Osaka University)

**P-110 Aqueous microwave-assisted solid phase peptide synthesis using Boc strategy II**

Keiko Hojo<sup>1,2</sup>, Suzuko Fujiwara<sup>1</sup>, Hoshito Inai<sup>1</sup>, Yuki Manabe<sup>1</sup>, Koushi Hidaka<sup>3</sup>, Yuko Tsuda<sup>1,2</sup> (<sup>1</sup>Faculty of Pharmaceutical Sciences, Kobe Gakuin University, <sup>2</sup>Cooperative Research Center of Life, Kobe Gakuin University, <sup>3</sup>Graduate School of Health Sciences, Kobe University)

**P-111 Structural characterization of relaxin-like gonad-stimulating peptide from the starfish *Astropecten scoparius***

Hidekazu Katayama<sup>1</sup>, Masatoshi Mita<sup>2</sup> (<sup>1</sup>Tokai University, <sup>2</sup>Showa University School of Medicine)

**P-112 Total chemical synthesis of coronavirus-binding antibody through organopalladium chemistry**

Eichi Ozawa, Gosuke Hayashi, Hiroshi Murakami (Nagoya University Graduate School of Engineering)

**P-113 Synthesis of a peptide-based drug carrier with endosome-disruptive activity**

Shogo Hirota<sup>1</sup>, Takahito Imai<sup>1</sup>, Masayuki Yamasaki<sup>2</sup>, Kin-ya Tomizaki<sup>1</sup> (<sup>1</sup>Department of Materials Chemistry, Ryukoku University, <sup>2</sup>Department of Food Science and Human Nutrition, Ryukoku University)

**P-114 Synthesis of collagen model peptides with a phosphate group and a cell recognition site, and characterization**

Garyu Hori, Kin-ya Tomizaki (Ryukoku University, Materials Chemistry)

**P-115 Structural stability of collagen model peptides containing carboxyl groups**

Naoki Takemura, Kin-ya Tomizaki (Ryukoku University, Materials Chemistry)

**P-116 Selective gold ion reduction with an anthracene derivative**

Shungo Teramura<sup>1</sup>, Masahiro Asano<sup>2</sup>, Kin-ya Tomizaki<sup>1</sup> (<sup>1</sup>Department of Materials Chemistry, Ryukoku University, <sup>2</sup>Course of Environmental Ecological Engineering, Ryukoku University)

**P-117 Synthesis of collagen model peptide with titanium and cell recognition sequences**

Shun Tanaka, Kin-ya Tomizaki (Ryukoku University Graduate School)

**P-118 Synthesis of analogs of a mitochondria targeting signal peptide from aldehyde dehydrogenase and effects on cellular uptakes**

Kei Takayama<sup>1</sup>, Masayuki Yamasaki<sup>2</sup>, Kin-ya Tomizaki<sup>1</sup> (Department of Materials Chemistry, Ryukoku University, <sup>2</sup>Department of Food Science and Human Nutrition, Ryukoku University)

**P-119 Synthesis of a mitochondrial targeting signal peptide and gold nanorods toward photothermal therapy**

Shoya Nakamura, Takahito Imai, Kin-ya Tomizaki (Ryukoku University Materials Chemistry)

**P-120 Synthesis of nano-sized ribbon-shaped gold crystals using a peptide containing a nuclear**

**localization signal as a template**

Kazutishi Ishida, Kin-ya Tomizaki (Ryukoku University)

**P-121 Synthetic study of the selenocysteine-substituted epidermal growth factor**

Toshiki Takei, Nobuaki Okumura, Hironobu Hojo, Toshifumi Takao (Institute for Protein Research, Osaka University)

**P-122 Almiramide peptide structure anti-leishmanial activity relationship**

Anh Minh Thao Nguyen<sup>1</sup>, Noélie Douanne<sup>2,3</sup>, Claudia Duquette<sup>2,3</sup>, Audrey Corbeil<sup>2,3</sup>, Emanuella F. Fajardo<sup>4</sup>, Martin Olivier<sup>4</sup>, Christopher Fernandez Prada<sup>2,3</sup>, William D. Lubell<sup>1</sup> (<sup>1</sup>Department of Chemistry, Université de Montréal, Montréal, QC, <sup>2</sup>Department of Pathology and Microbiology, Faculty of Veterinary Medicine, Université de Montréal, QC, <sup>3</sup>The Research Group on Infectious Diseases in Production Animals (GREMIP), Faculty of Veterinary Medicine, Université de Montréal, <sup>4</sup>Research Institute of the McGill University Health Center, Montréal, QC)

**P-123 Synthetic strategies to unnatural prolines for constraining peptide backbone and side chain geometry**

Nassim Maarouf, Ramakotaiiah Mulamreddy, William D. Lubell (Département de Chimie, Université de Montréal)

**P-124 Peptidomimetic approach to allosteric modulators of the interleukin 1 receptor for delaying birth and improving neonatal outcomes**

Charity D. Yongo-Luwawa<sup>1</sup>, Sylvain Chemtob<sup>2</sup>, William D. Lubell<sup>1</sup> (<sup>1</sup>Department of Chemistry, University of Montréal, <sup>2</sup>Departments of Pediatrics, Pharmacology and Physiology, and Ophthalmology, University of Montréal)

**P-125 Development of conformationally restricted negamycin derivatives for potent readthrough activity**

Noriko Omura<sup>1</sup>, Akihiro Taguchi<sup>1</sup>, Keisuke Hamada<sup>1</sup>, Tomoki Kuwahara<sup>2</sup>, Mizuki Watanabe<sup>2</sup>, Masanori Nakakuki<sup>3</sup>, Sho Konno<sup>1</sup>, Kentaro Takayama<sup>1</sup>, Atsuhiko Taniguchi<sup>1</sup>, Toshifumi Nomura<sup>4,5</sup>, Satoshi Shuto<sup>2</sup>, Yoshio Hayashi<sup>1</sup> (<sup>1</sup>Department of Medicinal Chemistry, Tokyo University of Pharmacy and Life Sciences, <sup>2</sup>Faculty of Pharmaceutical Sciences, Hokkaido University, <sup>3</sup>Development Research, Mochida Pharmaceutical Co., Ltd., <sup>4</sup>Department of Dermatology, Hokkaido University Graduate School of Medicine, <sup>5</sup>Department of Dermatology, Faculty of Medicine, University of Tsukuba)