

Poster Presentations

1P-001–1P-053: November 8 (Wednesday) 17:40–19:10

Odd numbers: 17:40–18:25, Even numbers: 18:25–19:10

1P-001 Tryptophan-selective peptide modification using S-acetamidemethyl protected cysteine sulfoxide under mild acidic condition and its application to peptide heterodimerization

Kobayashi Daisiro, Hayashi Junya, Hidaka Kota, Ohkawachi Kento, Komura Yutaka, Denda Masaya, Otaka Akira (Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University)

1P-002 N-terminal modified helical peptide catalyzed asymmetric aza-henry reaction

Kazuki Sato, Atsushi Ueda, Masakazu Tanaka (Graduate School of Biomedical Sciences, Nagasaki University)

1P-003 Structural analysis of the self-assembling dipeptide Gly-Phe

Ayaka Sako, Masaki Saito, Kazuo Eda, Atsuo Tamura (Graduate School of Science, Kobe University)

1P-004 Chemical modification at the N-terminus of aminoacyl-tRNA and its application to *in vitro* translation system

Hiroki Murakami¹, Naohiro Terasaka², Haruo Aikawa¹, Hiroaki Suga¹ (¹Graduate School of Science, The University of Tokyo, ²Earth-Life Science Institute, Tokyo Institute of Technology)

1P-005 Synthesis of ATP-mimetic non-canonical amino acids and their incorporation into the flexible *in vitro* translation system

Sara Haslboeck, Haruo Aikawa, Alexander Vinogradov, Hiroaki Suga (Graduate School of Science, Department of Chemistry, University of Tokyo)

1P-006 Synthesis and biological activity of cyclic RGD peptides with cysteinyl prolyl cysteine sequence

Akina Yamada, Toshiki Takei, Yukimasa Taniguchi, Kiyotoshi Sekiguchi, Toru Kawakami, Hironobu Hojo (Institute for Protein Research, Osaka University)

1P-007 Structural and functional regulation of peptides via tracelessly removable stapling

Yusuke Toki¹, Eichi Ozawa¹, Gosuke Hayashi¹, Hiroshi Murakami^{1,2} (¹Graduate School of Engineering, Nagoya University, ²Institute of Nano-Life-Systems, Nagoya University)

1P-008 Diselenide metathesis and the substitution of sulfur by selenium in small peptides

Ying He, Toshiki Takei, Hironobu Hojo (Institute for Protein Research, Osaka University)

1P-009 Penetration of a protein into liposomes by linking the membrane-permeable peptide tag “LBPR1”

Ryota Tsuchie, Yasuto Utsugi, Ryoya Okawa, Naoto Nemoto (Graduate School of Science & Engineering, Saitama University)

1P-010 Solid-phase synthesis of C-terminal diketopiperazine thioester peptide

Yuya Nakajima¹, Koki Nakatsu¹, Gosuke Hayashi¹, Hiroshi Murakami^{1,2} (¹Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, ²Institute of Nano-Life-Systems, Institutes of Innovation for Future Society, Nagoya University)

1P-011 Synthesis and chiral resolution of cis-2-(aminomethyl)cyclohexanecarboxylic acid via diastereomeric salt formation

Yoonsik Cheong, Sojung Kim, Heeyeon Kim, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

- 1P-012 Synthesis and conformational analysis of *cis*-3-aminopiperidine-4-carboxylic acid**
Yeongsin Kim, Soo Hyuk Choi (Department of Chemistry, Yonsei University)
- 1P-013 Identification of anti-HBV peptide inhibitors based on HBV core protein**
Kazutoshi Kawahara¹, Junko Fujimoto², Sayuri Takeo³, Kohei Sato^{1,2,3}, Kenji Nakashima⁴, Nobuyuki Mase^{1,2,3}, Tetsuro Suzuki⁴, Tetsuo Narumi^{1,2,3} (¹Department of Engineering, Graduate School of Integrated Science and Technology, Shizuoka University, ²Faculty of Engineering, Shizuoka University, ³Graduate School of Medical Photonics, Shizuoka University, ⁴Department of Microbiology and Immunology, Hamamatsu University School of Medicine)
- 1P-014 Identification of DL-amino acids containing threonine and isoleucine stereoisomers in peptides using an original chiral resolution labeling reagent**
Makoto Ozaki¹, Motoshi Shimotsuma¹, Takefumi Kuranaga², Hideaki Kakeya², Tsunehisa Hirose¹ (¹Purification Section, Nacalai Tesque Inc., ²Division of Medicinal Frontier Sciences, Graduate School of Pharmaceutical Sciences, Kyoto University)
- 1P-015 Cytotoxicities of membrane-impermeable polar peptides modified with a polycationic isopeptide entering cells (PIECE)**
Kohei Kaneda, Kaito Suzuki, Tomoya Ogura, Fumihito Hasebe, Chitose Maruyama, Yoshimitsu Hamano (Graduate School of Bioscience and Biotechnology, Fukui prefectural university)
- 1P-016 Total synthesis of antifungal cyclic hexapeptide ASP2397 and its derivatives**
Daisuke Sato¹, Izuru Kawamura¹, Tamaki Kato² (¹Graduate School of Engineering Science, Yokohama National University, ²Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology)
- 1P-017 Chemical synthesis of the insecticidal peptide AaIT5 identified from the venom of the scorpion *Androctonus australis***
Shoichi Sakai, Yoshiaki Nakagawa, Masahiro Miyashita (Graduate School of Agriculture, Kyoto University)
- 1P-018 Identification and chemical synthesis of an insecticidal peptide in the venom of the north african scorpion *Compsobuthus egyptiensis***
Masashi Wakayu¹, Ryusuke Nakamichi¹, Alhussin M.A. Megaly^{1,2}, Mohammed Abdel-Wahab², Yoshiaki Nakagawa¹, Masahiro Miyashita¹ (¹Graduate School of Agriculture, Kyoto University, ²Zoology Department, Faculty of Science, Al-Azhar University)
- 1P-019 Synthesis and evaluation of insecticidal activity of cystine-stabilized α/β motif peptides in the *Liocheles australasiae* venom**
Konoka Kumagai, Takumi Kishimoto, Naoya Mitani, Yoshiaki Nakagawa, Masahiro Miyashita (Graduate School of Agriculture, Kyoto University)
- 1P-020 Improvement of insulin synthesis by combination of O-acyl isopeptide method and one-pot/stepwise disulfide bond formation using S-protected cysteine sulfoxide**
Kota Hidaka, Daishiro Kobayashi, Junya Hayashi, Kento Ohkawachi, Masaya Denda, Akira Otaka (Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University)
- 1P-021 Synthesis of gram-negative bacteria specific brevicidine with a novel mechanism of action**
Ganbaatar Byambasuren, Hyosuk Yun, Chul Won Lee (Department of Chemistry, Chonnam National

University)

1P-022 Preparation methodology of N-glyoxylyl peptide utilizing lossen rearrangement

Junya Hayashi, Daishiro Kobayashi, Masaya Denda, Akira Otaka (Institute of Biomedical Sciences and Graduate School of Pharmaceutical Sciences, Tokushima University)

1P-023 Synthesis of di-tyrosine-containing peptides by oxidation of sulfenyl-tyrosine residue

Mika Ohira¹, Kento Ohkawachi¹, Kaito Anzaki¹, Sayaka Tani², Mina Hojo², Masaya Denda¹, Hitoshi Mizuguchi², Akira Otaka¹ (¹Institute of Health Biosciences and Graduate School of Pharmaceutical Sciences, Tokushima University, ²Department of Applied Chemistry, Tokushima University)

1P-024 Synthesis of N-substituted peptides with polar functional groups and an application for ligand design

Takaya Yamazaki, Marin Yokomine, Jumpei Morimoto, Shinsuke Sando (Graduate School of Engineering, The University of Tokyo)

1P-025 Synthesis of thermoresponsive elastin-like peptide analogs by peptide fragment condensation reaction using papain

Akihiko Nagata¹, Keisuke Tomohara², Keitaro Suyama², Takeru Nose^{1,2} (¹Department of Chemistry, Faculty and Graduate School of Science, Kyushu University, ²Faculty of Arts and Science, Kyushu University)

1P-026 Suppressing aspartimide formation using aspartic acid hydrazide

Haruna Uemura¹, Tetsuo Narumi^{1,2}, Nobuyuki Mase^{1,2}, Kohei Sato^{1,2} (¹Graduate School of Integrated Science and Technology, Shizuoka University, ²Research Institute of Green Science and Technology, Shizuoka University)

1P-027 Peptide ligation enhanced by PNA hybridization

Sae Suzuki¹, Shingo Mizushima¹, Yukino Takeuchi¹, Gosuke Hayashi¹, Hiroshi Murakami^{1,2} (¹Graduate School of Engineering, Nagoya University, ²Institute of Nano-Life-Systems, Institute of Innovation for Future Society, Nagoya University)

1P-028 Acyl sulfonamide-mediated amidation and its application to the synthesis of middle molecular natural peptidic molecules

Ai Koyama, Takefumi Kuranaga, Ryota Morimoto, Takumi Matsumoto, Hideaki Kakeya (Department of System Chemotherapy and Molecular Sciences, Division of Medicinal Frontier Sciences, Graduate School of Pharmaceutical Sciences, Kyoto University)

1P-029 Deoxythymidine-based amphiphilic peptidomimetics with antimicrobial, antibiofilm and anti-inflammatory activities

S. Dinesh Kumar¹, Eun Young Kim¹, Sungtae Yang², Jeong Kyu Bang³, Song Yub Shin¹ (¹Department of Cellular & Molecular Medicine, School of Medicine, Chosun University, ²Department of Microbiology, School of Medicine, Chosun University, ³Division of Magnetic Resonance, Korea Basic Science Institute (KBSI))

1P-030 Synthesis and conformational studies of partial peptide sequences designed from classical swine fever virus core protein

Hinata Tanaka, Hiroyuki Oku (Division of Molecular Science, Graduate School of Science & Technology, Gunma University)

1P-031 Mechanism-based discovery of peptide inhibitors of FGFR3/G697C, a pathogenic active mutant

Daisuke Suzuki, Takayoshi Kinoshita (Graduate School of Structural biology, Osaka Metropolitan University)

1P-032 Analysis of the effect of phosphorylation on HP1 α dynamics by ESR spectroscopy

Toshiki Takei¹, Kohei Muraoka¹, Toru Kawakami¹, Toshiaki Arata², Isao Suetake³, Hironobu Hojo¹
(¹Institute for Protein Research, Osaka University, ²Department of Biology, Graduate School of Science, Osaka Metropolitan University, ³Department of Nutritional Sciences, Graduate School of Nutritional Sciences, Nakamura Gakuen University)

1P-033 A study on the relationship between structure and passive membrane permeability of cyclosporin A

Motoki Sugano¹, Takahiro Ono¹, Takumi Ueda², Koh Takeuchi², Jumpei Morimoto¹, Shinsuke Sando¹
(¹Graduate School of Engineering, The University of Tokyo, ²Graduate School of Pharmaceutical Sciences, The University of Tokyo)

1P-034 Investigating conformational effects in valine-based D/L-peptides with the introduction of cyclic β -amino acids

Eunjin Seo, Hyerim Yoon, Mireu Kim, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

1P-035 Mixed helices of unnatural peptides containing azepane-derived β -amino acid

Chae Na Lim, Ingyu Han, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

1P-036 Conformational effect of γ^4 -amino acid residue on mixed-helical unnatural peptides

Yae Jin Yang, Soo Hyuk Choi (Department of Chemistry, Yonsei University)

1P-037 Design, synthesis, and biological evaluation of SNAIL1 peptide-based inhibitors of lysine-specific demethylase 1

Yuri Takada, Kyohei Adachi, Yuka Fujinaga, Hiroaki Kawanami, Yasunobu Yamashita, Yukihiro Itoh, Takayoshi Suzuki (SANKEN, Osaka University)

1P-038 Development of β -strand-like foldamers consisting of cyclopropane γ -amino acids that function as peptidomimetics

Akiko Yoshida, Shunsuke Kita, Ryotaro Sakashita, Katsumi Maenaka, Satoshi Shuto, Mizuki Watanabe (Faculty of Pharmaceutical Sciences, Hokkaido University)

1P-039 Structure-activity relationship studies of novel SARS-CoV-2 main protease inhibitors with potent antiviral activity

Kouki Shinohara¹, Kohei Tsuji¹, Takahiro Ishii¹, Takuya Kobayakawa¹, Nobuyo Higashi-Kuwata², Yutaro Miura¹, Chika Azuma¹, Hironori Hayashi³, Shin-ichiro Hattori², Haydar Bulut⁴, Shogo Misumi⁵, Hiroaki Mitsuya^{2,4,6}, Hirokazu Tamamura¹ (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, ²National Center for Global Health and Medicine Research Institute, ³International Research Institute of Disaster Science, Tohoku University, ⁴Experimental Retrovirology Section, HIV and AIDS Malignancy Branch, National Cancer Institute, National Institutes of Health, ⁵Faculty of Life Sciences, Kumamoto University, ⁶Kumamoto University Hospital)

1P-040 Structural insights into of the binding affinity of a VEGF-targeting helix-loop-helix peptide to inhibit tumor growth

Kunpei Notsu¹, Masataka Michigami¹, Masayuki Kamo², Takatsugu Hirokawa³, Koji Inaka², Ikuhiko Nakase¹, Ikuo Fujii⁴ (¹Graduate School of Science, Osaka Metropolitan University, ²Maruwa Foods and Bioscience Inc., ³Faculty of Medicine, University of Tsukuba, ⁴Organization for Research Promotion,

Osaka Metropolitan University)

1P-041 Elucidation of the minimum structure of mouse mitocryptide-14 for the induction of neutrophilic activation

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

1P-042 Construction of recombinant expression system of bovine antimicrobial peptides and comparison of the activity

Fumi Hirai¹, Mitsuki Shibagaki¹, Hao Gu¹, Yuya Hizume², Jeremia Oktavian Chrisnanto¹, Dessalegn Abeje Tefera¹, Tomoyasu Aizawa^{1,2} (¹Graduate School of Life Science, Hokkaido University, ²School of Science, Hokkaido University)

1P-043 Identification of a novel insecticidal peptide based on the transcriptome analysis of the venom gland of the scorpion *Liocheles australasiae*

Fuki Iwamoto, Naoya Mitani, Yoshiaki Nakagawa, Masahiro Miyashita (Graduate School of Agriculture, Kyoto University)

1P-044 Growth of *E. coli* in stationary phase enhanced by coiled-coil peptides

Natsumi Nakagawa, Ryutaro Tatei, Kodai Ueno, Yuna Nunokawa, Shuya Sakaguchi, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

1P-045 Rapid platform for screening and maturation of functional peptides

Shin Izuta, Ryota Haba, Yukiko Ishii, Katsuko Sato (Bio Science & Engineering Laboratories, Fujifilm Corporation)

1P-046 Amino acid substitution study in substrate-based lysine-specific demethylase 1 inhibitors

Arisa Tatsunami¹, Hiroki Endo¹, Yukari Ishiko¹, Ren Inoue², Chenliang Hu³, Yuri Takada³, Yukihiro Itoh³, Taeko Kakizawa^{1,2}, Takayoshi Suzuki³ (¹College of Science and Engineering, Kanto Gakuin University, ²Graduate School of Materials and Life Sciences, Kanto Gakuin University, ³The Institute of Scientific and Industrial Research, Osaka University)

1P-047 Development of bifunctional antibody with immune checkpoint inhibitory effect using lasso-grafting

Jinxuan Zhao¹, Naohiro Terasaka², Haruo Aikawa¹, Takashi Matozaki³, Hiroaki Suga¹, Yoji Murata³ (¹Graduate School of Science, The University of Tokyo, ²Earth-Life Science Institute, Tokyo Institute of Technology, ³Graduate School of Medicine, Kobe University)

1P-048 Symmetric-end antimicrobial peptide with multifunctional properties

S. Dinesh Kumar¹, Sungtae Yang², Song Yub Shin¹ (¹Department of Cellular & Molecular Medicine, School of Medicine, Chosun University, ²Department of Microbiology, School of Medicine, Chosun University)

1P-049 Development of exosome-knockdown method Using polyhistidine peptide

Shota Yamada, Tsuyoshi Kawano, Takashi Iwasaki (Graduate School of Sustainability Science, Tottori University)

1P-050 Understanding IRAP inhibition using diverse substrates, inhibitors and mutagenesis

Rie Nakao¹, Nick Barlow¹, Anika Vear², Siew Chai², Adam Kennedy³, Andrea Robinson³, Philip

Thompson¹ (¹Monash Institute of Pharmaceutical Sciences, Monash University, ²Monash Biomedicine Discovery Institute, Department of Physiology, Monash University, ³School of Chemistry, Monash University)

1P-051 Design and synthesis of stapled peptides derived from human-antimicrobial peptide for candidiasis therapy

Jisu Nam, Hyosuk Yun, Ganbaatar Byambasuren, Chul Won Lee (Department of Chemistry, Chonnam National University)

1P-052 Development of affinity scoring system for mammalian cell-displayed antibody library

Takumi Ogawara, Lin Ning, Tetsuya Kadonosono (School of Life Science and Technology, Tokyo Institute of Technology)

1P-053 Functional analysis of antibody mimetic protein for disease related enzyme SCPI

Tamaki Kobayashi¹, Kazuki Yamazaki¹, Junki Shinada¹, Tomotaka Tanaka¹, Kazuhiro Furukawa², Yoshiro Chuman¹ (¹Laboratory of Biological Chemistry, Graduate School of Science and Technology, Niigata University, ²Cell Regulation Laboratory in Biochemistry, Graduate School of Science and Technology, Niigata University)

2P-001–2P-057: November 9 (Thursday) 16:50–18:20

Odd numbers: 16:50–17:35, Even numbers: 17:35–18:20

2P-001 Evaluation of kisspeptin-10 activity using a mammalian cell-surface display system

Keigo Hoshi, Takumi Ogawara, Lin Ning, Tetsuya Kadonosono (School of Life Science and Technology, Tokyo Institute of Technology)

2P-002 Development of a jigsaw-shaped self-assembling peptide for injured brain regeneration

Atsuya Yaguchi¹, Itsuki Ajioka^{2,3}, Hirotsugu Hiramatsu⁴, Takahiro Muraoka^{1,3} (¹Graduate School of Engineering, Tokyo University of Agriculture and Technology, ²Center for Brain Integration Research, Tokyo Medical and Dental University, ³Kanagawa Institute of Industrial Science and Technology, ⁴Department of Applied Chemistry, National Yang Ming Chiao Tung University)

2P-003 Complementing stability and affinity of a linear peptidic binder by adapting retro-inverso to a peptidic covalent binder

Koki Matsuzuka, Riku Katsuki, Masumi Taki (Department of Engineering Science, Graduate School of Informatics and Engineering, the University of Electro-Communications (UEC))

2P-004 Latent reactivities of aryl-fluorosulfate warheads in a peptidic-covalent-binder / protein complex

Yamato Ikeda, Riku Katsuki, Masumi Taki (Graduate School of Informatics and Engineering, the University of Electro-Communications (UEC))

2P-005 Reacton specificity of a peptidic covalent binder possessing a latent reactive warhead in the binder/protein complex

Koki Oginezawa, Riku Katsuki, Masumi Taki (Graduate School of Informatics and Engineering, the University of Electro-Communications (UEC))

2P-006 Elucidation of the cellular delivery mechanism of melittin derivatives

Yusuke Uehata, Yoshimasa Kawaguchi, Naoki Tamemoto, Shiroh Futaki (Institute for Chemical Research,

Kyoto University)

- 2P-007 Pathophysiological roles of mitocryptide-1 in neutrophil infiltration into tissue injury sites**
Hayato Katabuchi, Hakuu Fujiwara, Hirokazu Tanaka, Yoshito Takamuro, Hiroki Morikawa, Tatsuya Hattori, Yoshiaki Kiso, Shintaro Nomura, Hidehito Mukai (Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)
- 2P-008 Estrogen receptor transcriptional activity induced by a putative estrogen-responsive region near the enkephalin gene**
Keita Nakamura, Kyota Shirane, Tomoka Ishibashi, Ayami Matsushima (Department of Chemistry, Faculty of Science, Kyushu University)
- 2P-009 Amyloidogenic mutation of the N-terminal fragment of apolipoprotein A-I generates a new aggregation-prone segment that acts as an entropic driver of aggregation**
Norihiro Namba¹, Takashi Ohgita¹, Hiroko Tamagaki-Asahina², Toshinori Shimanouchi³, Takeshi Sato², Hiroyuki Saito¹ (¹Laboratory of Biophysical Chemistry, Kyoto Pharmaceutical University, ²Division of Liberal Arts Sciences, Kyoto Pharmaceutical University, ³Graduate School of Environmental and Life Science, Okayama University)
- 2P-010 pH- and tumor marker- sensitive dual mode drug delivery vehicle for cancer treatment**
Dong Eun Kim, Yan Lee (Department of Chemistry, College of Natural Sciences, Seoul National University)
- 2P-011 Function of r-peptide, r-PEP(23s-2371) encoded by the latent orf in e. coli rRNA, in defense against antibiotic**
Masahiro Date, Kana Fukazawa, Yuma Omata, Satoshi Muromachi, Natsumi Nakagawa, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)
- 2P-012 Control of reactions between chloroacetyl group-modified peptides and BSH**
Sota Watanabe¹, Ken Inoue¹, Hiroyuki Michiue², Mizuki Kitamatsu¹ (¹Department of Applied Chemistry, Kindai University, ²Neutron Therapy Research Center, Okayama University)
- 2P-013 Chemical regulation of degradative fate of protein by indirect ubiquitination**
Kazuki Yoshida, Ryoka Fujita, Takafumi Furuhashi, Akimitsu Okamoto (Graduate School of Engineering, The University of Tokyo)
- 2P-014 Control of alpha-helical structure of a stapled peptide via N-terminal ligation method**
Kazuhaya Wada, Mizuki Kitamatsu (Department of Applied Chemistry, Kindai University)
- 2P-015 Detection of specific metal ions using fluorescent-labeled cyclic peptides**
Yuhi Maekawa¹, Sora Sakura¹, Rento Fujihara¹, Yuji Furutani², Hisashi Sugime¹, Takashi Ohtsuki², Mizuki Kitamatsu¹ (¹Department of Applied Chemistry, Kindai University, ²Department of Interdisciplinary Science and Engineering in Health Systems, Okayama University)
- 2P-016 Detection of target nucleic acids through ligation between PNA twin probe**
Yutaka Ouchi, Koki Ishii, Sakura Tsuchitani, Mizuki Kitamatsu (Department of Applied Chemistry, Kindai University)
- 2P-017 Detection of self-assembly of fluorescent-labeled cyclic peptides**
Ryodai Yamada, Yuhi Maekawa, Mizuki Kitamatsu (Department of Applied Chemistry, Kindai University)

- 2P-018 Preparation of SARS-CoV-2 3CL protease and investigation of its substrate recognition**
Ryusei Endo¹, Hinata Sano¹, Moe Yokomichi¹, Koki Makabe¹, Shigekazu Yano¹, Yasunao Hattori², Kenta Teruya³, Hiroyuki Konno¹ (¹Graduate School of Science and Engineering, Yamagata University, ²Center for Instrumental Analysis, Kyoto Pharmaceutical University, ³Graduate School of Medicine, Tohoku University)
- 2P-019 pH-responsive reversible bioconjugation using a pair of macrocyclic peptides**
Yuto Ohno, Alexander Vinogradov, Hiroaki Suga (Graduate School of Science, The University of Tokyo)
- 2P-020 Development of stapled peptides as DDS carriers for intracellular delivery of nucleic acids**
Motoharu Hirano^{1,2}, Hidetomo Yokoo², Makoto Oba³, Takashi Misawa², Yosuke Demizu^{1,2} (¹Graduate School of Medical Life Science, Yokohama City University, ²Division of Organic Chemistry, National Institute of Health Sciences, ³Kyoto Prefectural University of Medicine)
- 2P-021 Control of alpha-helical structure of a stapled peptide via dicarboxylic acid linkers**
Takeshi Kondo, Mizuki Kitamatsu, Yoshitame Imai (Department of Applied Chemistry, Kindai University)
- 2P-022 A simple method to modify the surface of extracellular vesicle-mimicking liposomes using curvature-sensing peptides**
Kenta Hosokawa, Kenichi Kawano, Katsumi Matsuzaki (Graduate School of Pharmaceutical Sciences, Kyoto University)
- 2P-023 Intact and phosphorylated peptides derived from the N- and C-terminal regions enhance and inhibit cMet kinase activity, respectively**
Kai Tsumura¹, Yuki Tanaka¹, Kunio Matsumoto², Takayoshi Kinoshita¹ (¹Graduate School of Science, Osaka Metropolitan (Prefecture) University, ²Cancer Research Institute, Kanazawa University)
- 2P-024 Antimicrobial activity of bacillus strains producing antimicrobial peptides isolated from different natural sources**
Jiyeon Kang, Hajeong Jang, Chul Won Lee (Department of Chemistry, Chonnam National University)
- 2P-025 Discovery of *de novo* macrocyclic peptide specifically binding to Siglec-10 among Siglec family proteins**
Wei-En Huang¹, Naohiro Terasaka², Yuma Matsuzaki³, Haruo Aikawa¹, Hiroaki Suga¹ (¹Department of Chemistry, Graduate School of Science, The University of Tokyo, ²Earth- Life Science Institute, Tokyo Institute of Technology, ³Department of Biophysics and Biochemistry, Faculty of Science, The University of Tokyo)
- 2P-026 New design and synthesis of cell-specific penetrating glycopeptides (CPGs)**
Kota Nomura, Yusei Yoshida, Keiji Numata (Department of Material Chemistry, Graduate School of Engineering, Kyoto University)
- 2P-027 Design, synthesis, and screening of DNA-encoded libraries of macrocyclic peptides and peptidomimetics**
Jungyeon Kim¹, Kang Ju Lee¹, Hyun-Suk Lim^{1,2} (¹Department of Chemistry and Division of Advanced Materials Science, Pohang University of Science and Technology (POSTECH), ²Institute for Convergence Research and Education in Advanced Technology, Yonsei University)
- 2P-028 Nanoparticle-based encoded library technology as a powerful tool for discovering potent protein ligands**
Hee Myeong Wang, Kang Ju Lee, Hyun-Suk Lim (Department of Chemistry and Division of Advanced Materials Science, Pohang University of Science and Technology (POSTECH))

- 2P-029 Cellular uptake of peptides with various fluorine functional groups: effects of alkyl and fluoroalkyl groups**
Koji Kadota¹, Ai Kohata¹, Kohsuke Aikawa¹, Jumpei Morimoto¹, Shinsuke Sando¹, Takashi Okazoe^{1,2}
(¹Graduate School of Engineering, The University of Tokyo, ²AGC Inc. Yokohama Technical Center)
- 2P-030 Roles and regulatory mechanism of signaling molecules that involve mitocryptide 3-induced neutrophilic functions**
Shuhei Tsuchiguchi, Takayuki Marutani, Ryota Tanemura, Koji Ohura, Takumi Sasaki, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)
- 2P-031 Roles of signaling molecules in mitocryptide-3-induced neutrophilic functions**
Takumi Sasaki, Takayuki Marutani, Koji Ohura, Ryota Tanemura, Ryota Takeuchi, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio-Science and Technology)
- 2P-032 Improvement of the membrane fusion of extracellular vesicles by loading SARS-CoV-2 spike proteins**
Yuna Nakagawa¹, Yoshimasa Kawaguchi¹, Takao Hashiguchi², Shiroh Futaki¹ (¹Institute for Chemical Research, Kyoto University, ²Institute for Life and Medical Sciences, Kyoto University)
- 2P-033 Selection of peptides that bind to KEAP1 using intein-based selection method**
Kana Nobusawa, Yutaro Watanabe, Tsuyoshi Takahashi (Graduate School of Science and Technology, Gunma University)
- 2P-034 Identification of common receptors for mitocryptides delivered from mitochondrial transit signal sequences**
Ryota Takeuchi, Takayuki Marutani, Takumi Sasaki, Ryota Tanemura, Koji Ohura, Shuhei Tsuchiguchi, Yoshiaki Kiso, Hidehito Mukai (Laboratory of Peptide Science, Graduate School of Bio-Science, Nagahama Institute of Bio- Science and Technology)
- 2P-035 Synthesis of glycopeptides and investigation of their reactivities toward deglycosylating enzymes**
Haruka Inoue¹, Satoshi Takahashi¹, Nozomi Ishii¹, Ichiro Matsuo¹, Yukiko Yoshida², Tadashi Suzuki³, Tsuyoshi Takahashi¹ (¹Gunma University, ²Tokyo Metropolitan Institute of Medical Science, ³RIKEN)
- 2P-036 Designing of transmembrane molecule in giant unilamellar vesicle membrane for mimicking signal transduction**
Subhajit Guria, Kazunori Matsuura (Department of Chemistry and Biotechnology, Graduate School of Engineering, Tottori University)
- 2P-037 Dramatic changes in liposome morphology by light-control of peptide nanofibers modified with spiropyran**
Yingbing Liang, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)
- 2P-038 Structural elucidation of crystalline metal-peptide networks with 12/10-helical β -peptide foldamers**
Ingyu Han, Soo Hyuk Choi (Department of Chemistry, Yonsei University)
- 2P-039 In-cell self-assembly of artificial viral capsid**
Kentarou Sakamoto, Yuka Yamamoto, Hiroshi Inaba, Kazunori Matsuura (Graduate School of Engineering, Tottori University)
- 2P-040 Construction of peptide arrays for the identification of water-soluble polymers**

Yuki Tano, Toshiki Sawada, Shogo Saito, Masayoshi Tanaka, Mina Okochi, Takeshi Serizawa (Department of Chemical Science and Engineering, Tokyo Institute of Technology)

2P-041 Construction of an easy-handling detection system for lead ions using peptidyl microbeads

Shuhei Yoshida¹, Koki Yoshida², Takaaki Tsuruoka², Kenji Usui² (¹Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, ²Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University)

2P-042 Screening and characterization of peptides with affinity for a homogeneous oligomer with uniform monomer sequence and molecular weight

Hyu Murakami¹, Toshiki Sawada¹, Yusuke Saito², Yoshiko Miura², Yu Hosino², Takeshi Serizawa¹ (¹Department of Chemical Science and Engineering, Tokyo Institute of Technology, ²Graduate School of Engineering, Kyusyu University)

2P-043 Preparation of elastic material consisting of water-soluble elastin and other biological components

Iori Maeda¹, Kouki Nakamura¹, Riku Wakamatsu¹, Ayako Tani¹, Noriko Watanabe¹, Takeru Nose² (¹Department of Physics and Information Technology, Kyushu Institute of Technology, ²Faculty of Arts and Science, Kyushu University)

2P-044 Synthesis and high proteolytic resistance of double-stapled peptides possessing isophthalic acid-based crosslinkers

Tetsuya Yasukagawa, Junya Chiba, Yuki Ohishi, Masahiko Inouye (Graduate School of Pharmaceutical Sciences, University of Toyama)

2P-045 Structural and functional analysis of characteristic loops in the oncogenic protein PPM1D

Yuki Hara¹, Haruna Watabe¹, Hikaru Saito¹, Nobuyasu Koga², Kazuhiro Furukawa¹, Yoshiro Chuman¹ (¹Faculty of Science, Niigata University, ²Institute for Protein Research (IPR), Osaka University)

2P-046 Fluorescence behaviors of new boron-containing peptidomimetics

Sota Chiba¹, Makoto Roppongi², Toru Oba¹ (¹Department of Material and Environmental Chemistry, Faculty of Engineering, Utsunomiya University, ²Center for Instrumental Analysis, Utsunomiya University)

2P-047 Development of screening system based on *in situ* click chemistry for efficient discovery of potent ligands

Minkyung Kim (Department of Chemistry and Division of Advanced Material Science, Pohang University of Science and Technology (POSTECH))

2P-048 Development of fluorescent probes for extracellular pH-imaging of 3D cultured cancer cells in self-assembling peptide hydrogels

Yumi Kitano, Ren Aoki, Hisakazu Mihara, Hiroshi Tsutsumi (School of Life Science and Technology, Tokyo Institute of Technology)

2P-049 Analysis of misfolded cysteine-rich peptides abnormally secreted by the recombinant expression system in yeast

Ichihō Yoshikawa, Ami Hanaoka, Tomona Iizuka, Jingkang Zheng, Tomoyasu Aizawa (Laboratory of Protein Science, Graduate School of Life Science, Hokkaido University)

2P-050 On-DNA grignard reactions for DNA-encoded library synthesis

Muhammad Aliyu Idris¹, Dongmin Shin¹, Hyun-Suk Lim^{1,2} (¹Department of Chemistry and Division of Advanced Material Science, Pohang University of Science and Technology (POSTECH), ²Institute for

Convergence Research and Education in Advanced Technology, Yonsei University)

2P-051 Evaluation of ER α -ERR α synergistic transcriptional activation using reporter constructs containing estrogen response elements connected by different numbers of nucleotide linkers

Kota Aramaki, Kyota Shirane, Atsuya Nishimoto, Keita Nakamura, Ayami Matsushima (Department of Chemistry, Faculty of Science, Kyushu University)

2P-052 Liquid-liquid phase separation by nucleophosmin and ribosomal protein for nucleolus formation

Seiyo Doi, Itsumi Tani, Yui Oikawa, Daiki Kurosu, Natsumi Nakagawa, Rui Kamada, Kazuyasu Sakaguchi (Laboratory of Biological Chemistry, Department of Chemistry, Faculty of Science, Hokkaido University)

2P-053 Investigation of the antimicrobial activity and cell viability of myticalin A6 (3-23)-(Trp-Pro-Arg)_n-OH derivatives

Keiko Okimura, Tatsuo Takahashi, Ayaka Yamamoto, Michiyo Morimoto, Miho Kajino, Kana Kamiya, Tohru Daikoku (Faculty of Pharmaceutical Sciences, Hokuriku University)

2P-054 Characteristic tyrosine-rich region of silk fibroin reveals dual propensity to converge with different types of secondary structures

Hisayuki Morii, Masayuki Nara (Department of Chemistry, Liberal Arts and Sciences Division, Tokyo Medical and Dental University (TMDU))

2P-055 Drug loading and release behavior of short elastin-derived peptides containing phenylalanine

Suguru Taniguchi¹, Tsugumi Fujita², Iori Maeda³ (¹Department of Biochemistry, Fukuoka Dental College, ²Department of Physiological Science and Molecular Biology, Fukuoka Dental College, ³Department of Physics and Information Technology, Kyushu Institute of Technology)

2P-056 Chemical redesign of intrinsically disordered domain for selective regulation of phytohormone-associated transcription factors in plants

Yousuke Takaoka¹, Ruiqi Liu¹, Qi Li¹, Minoru Ueda^{1,2} (¹Graduate School of Science, Tohoku University, ²Graduate School of Life Sciences, Tohoku University)

2P-057 Properties of peptide nucleic acid containing *n*⁴-bis(aminomethyl)benzoylated cytosine for enhanced DNA binding

Shun-suke Moriya¹, Mai Kiyosue¹, Yosuke Demizu², Masaaki Kurihara³, Atsushi Kittaka¹, Toru Sugiyama¹ (¹Faculty of Pharma-Sciences, Teikyo University, ²Division of Organic Chemistry, National Institute of Health Sciences, ³Faculty of Pharmaceutical Sciences, Shonan University of Medical Sciences)

3P-001–3P-056: November 10 (Friday) 11:15–12:45

Odd numbers: 11:15–12:00, Even numbers: 12:00–12:45

3P-001 Theoretical study on activation mechanism of *N*-sulfanylethylanilide-based protein labeling reagent on protein surface

Akira Shigenaga, Ryuji Kyan (Faculty of Pharmacy and Pharmaceutical Sciences, Fukuyama University)

3P-002 Synthesis of boron-containing peptidomimetics utilizing N-fused rings

Toru Oba¹, Hiroto Oikawa¹, Yuka Yoshizawa¹, Makoto Roppongi² (¹Department of Material and Environmental Chemistry, Faculty of Engineering, Utsunomiya University, ²Center for Instrumental Analysis, Utsunomiya University)

- 3P-003 Synthesis and evaluation of 1,6-disubstituted pyrrolizidine-3-one derivatives to discover a novel agonist for opioid receptors**
Takaaki Mizuguchi, Moe Akimoto, Shigeto Hirayama, Yoko Kohno, Mizuha Yamamoto, Fumika Karaki, Kennosuke Itoh, Hideaki Fujii (Laboratory of Medicinal Chemistry, School of Pharmacy, Kitasato University)
- 3P-004 Design, synthesis, and application of highly sensitive labeling reagents for amino acids**
Takefumi Kuranaga, Mayuri Minote, Ryota Morimoto, Chengqian Pan, Haruka Ogawa, Hideaki Kakeya (Department of System Chemotherapy and Molecular Sciences, Division of Medicinal Frontier Sciences, Graduate School of Pharmaceutical Sciences, Kyoto University)
- 3P-005 The biological activity of the joining peptide of proopiomelanocortin**
Kyona Hiroshima, Shigeru Shimamoto, Yuji Hidaka (Graduate School of Science and Engineering Research, Kindai University)
- 3P-006 Examination of the solid-phase peptide synthesis and the two-chain folding of bromelain inhibitor VI**
Sawa Akaboshi¹, Michio Iwaoka^{1,2} (¹Graduate School of Science, Tokai University, ²Institute of Advanced Biosciences, Tokai University)
- 3P-007 Suppression of Met oxidation in solid-phase peptide synthesis with sulfide compounds and its application to the synthesis of crustacean insulin-like peptide**
Hidekazu Katayama¹, Naoaki Tsutsui² (¹School of Engineering, Tokai University, ²Graduate School of Bioresources, Mie University)
- 3P-008 Synthesis of β -sheet peptides conjugated with microbeads or artificial functional groups forming β -barrel nanopores**
Fumihiro Kayamori¹, Takuto Kariya¹, Yoshio Hamada¹, Zugui Peng², Ryuji Kawano², Kenji Usui¹ (¹Faculty of Frontiers of Innovative Research in Science and Technology, Konan University, ²Department of Biotechnology and Life Science, Tokyo University of Agriculture and Technology)
- 3P-009 Aqueous microwave assisted solid phase peptide synthesis without hydroxy side chain protection**
Keiko Hojo^{1,2}, Satoshi Kitagawa¹, Yuichiro Oki¹, Munetaka Kunishima^{1,2} (¹Faculty of Pharmaceutical Sciences, Kobe Gakuin University, ²Cooperative Research Center of Life Science, Kobe Gakuin University)
- 3P-010 Development of helical peptides utilizing aspartate picolyl ester as a side chain crosslink by metal ions**
Takuma Kato, Yukino Yamamoto, Naoki Kosukegawa, Akari Yoshikawa, Akiko Asano, Mitsunobu Doi (Faculty of Pharmacy, Osaka Medical and Pharmaceutical University)
- 3P-011 High throughput construction and sequence determination of on-bead cyclic peptide libraries for discovery of medicinal medium sized molecules**
Kyoshi Nokihara, Toru Sasaki, Atsushi Kitagawa, Yuki Tominaga, Takeshi Kasama (HiPep Laboratories)
- 3P-012 Development of helical template peptides for efficient DDS carrier**
Takashi Misawa¹, Takahito Ito^{1,2}, Takuma Kato³, Nobumichi Ohoka¹, Takao Inoue¹, Mitsunobu Doi³, Yosuke Demizu^{1,2} (¹National Institute of Health sciences, ²Graduate School of Medical Life Science, Yokohama City University, ³Faculty of Pharmacy Osaka Medical and Pharmaceutical University)
- 3P-013 Structural insights into a cellular internalization mechanism of VEGF-targeting HLH peptide-drug conjugates**

Masataka Michigami¹, Kunpei Notsu¹, Masayuki Kamo², Takatsugu Hirokawa³, Koji Inaka², Ikuhiko Nakase¹, Ikuro Fujii⁴ (¹Graduate School of Science, Osaka Metropolitan University, ²Maruwa Foods and Bioscience Inc., ³Faculty of Medicine, University of Tsukuba, ⁴Organization for Research Promotion, Osaka Metropolitan University)

3P-014 ATR-FTIR analysis of the Ca²⁺-binding site III of rabbit skeletal muscle troponin C: Effect of amino-acid replacement of the Ca²⁺ coordination structure

Masayuki Nara¹, Hisayuki Morii¹, Akira Sakamoto², Takuya Miyakawa³, Masaru Tanokura⁴ (¹Liberal Arts and Sciences Division, Tokyo Medical and Dental University (TMDU), ²College of Science and Engineering, Aoyama Gakuin University, ³Graduate School of Agricultural and Life Sciences, University of Kyoto, ⁴Graduate School of Agricultural and Life Sciences, University of Tokyo)

3P-015 Synthesis and biological evaluation of N-methylated cyclic peptides against triple-negative breast cancer

Chikako Takano¹, Hiromasa Ueno¹, Kanta Matsumoto¹, Hiroyuki Oku¹, Seiji Torii², Keiichi Yamada^{1,3} (¹Department of Chemistry and Chemical Biology, Gunma University, ²Center for Food Science and Wellness, Gunma University, ³Division of Molecular Science, Graduate School of Science and Technology, Gunma University)

3P-016 Evaluation of hypothalamic messenger RNA levels of neuromedin U and its receptors in mice with decreased sociality by chronic social defeat stress

Yui Suzuki, Asuka Nomoto, Katsuya Morito, Kazuki Nagasawa, Kentaro Takayama (Laboratory of Environmental Biochemistry, Kyoto Pharmaceutical University)

3P-017 Substrate screening study with synthetic peptides against bace1

Reo Yamada, Masaki Midorikawa, Ayu Asai, Norimasa Takasu, Ren Fujii, Taeko Kakizawa (College of Science and Engineering, Kanto Gakuin University)

3P-018 Peptide-immobilized nanospheres for antibody detection to investigate the history of porcine epidemic diarrhea virus infection in wild boars

Hiroyuki Oku¹, Yuya Tatsumi¹, Yuko Oku² (¹Division of Molecular Science, Graduate School of Science & Engineering, Gunma University, ²Aoi-Tori Family Clinic)

3P-019 Synthesis and antimicrobial activity of novel polymyxin B analogs conjugated with levofloxacin

Naoki Sakura¹, Yuki Sato², Masakazu Miura², Keiichi Ohshima¹ (¹Medical Genetics Division, Shizuoka Cancer Center Research Institute, ²Faculty of Pharmaceutical Sciences, Hokuriku University)

3P-020 Detection of E2 activity on lateral flow immunoassay with artificial E3S

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

3P-021 Effect of lysine replacement with arginine in amphipathic helical peptide on siRNA delivery into cells

Shun-ichi Wada, Takumi Shimoda, Junsuke Hayashi, Hidehito Urata (Faculty of Pharmacy, Osaka Medical and Pharmaceutical University)

3P-022 Utilization of a non-specific kinase inhibitor for the development of high-affinity bivalent polo-like kinase 1 polo-box domain inhibitors

Kohei Tsuji^{1,2}, Hirokazu Tamamura¹, Terrence R. Burke, Jr.² (¹Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University (TMDU), ²Chemical Biology Laboratory, Center for Cancer Research, National Cancer Institute, National Institutes of Health)

- 3P-023 In situ conversion of albumin into an artificial metalloenzyme modified with RGD peptides**
Kyosuke Imai¹, Kyohei Muguruma², Akiko Nakamura², Yuriko Kusakari², Ambara R. Pradipta^{1,2}, Katsunori Tanaka^{1,2} (¹Department of Chemical Science and Engineering, School of Materials and Chemical Technology, Tokyo Institute of Technology, ²Biofunctional Synthetic Chemistry, RIKEN Cluster for Pioneering Research)
- 3P-024 Enzyme activity and peptidomimetic inhibitor affinity for drug-resistant mutant intermediates of HIV protease**
Koushi Hidaka^{1,2}, Motoyasu Adachi³ (¹Research Facility Center for Science and Technology, Kobe University, ²Graduate School of Health Sciences, Kobe University, ³Institute for Quantum Life Sciences, National Institute of Quantum Science and Technology)
- 3P-025 Detachable PEG with KL-L9P, antimicrobial sensitizing peptide to control gram-negative bacteria sensitization**
Yuna Hur, Dae Hee Cheon, Yan Lee (Department of Chemistry, College of Natural Sciences, Seoul National University)
- 3P-026 Design of hydrophobic cell-penetrating stapled peptides as drug carriers**
Hidetomo Yokoo¹, Keisuke Tsuchiya^{1,2}, Kanako Horikoshi^{1,3}, Minami Fujita^{1,3}, Motoharu Hirano^{1,3}, Maho Miyamoto^{1,3}, Yosuke Demizu^{1,3,4} (¹Division of Organic Chemistry, National Institute of Health Sciences, ²Division of Pharmaceutical Organic Chemistry, Faculty of Pharmaceutical Sciences, ³Graduate School of Medical Life Science, Yokohama City University, ⁴Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)
- 3P-027 Synthesis of peptide-boron nitride hybrids for intracellular boron delivery**
Takahiro Kayashita, Kin-ya Tomizaki (Department of Materials Chemistry, Ryukoku University)
- 3P-028 Synthesis and secondary structure of his-tagged collagen model peptide**
Raraho Kanda, Kin-ya Tomizaki (Department of Materials Chemistry, Ryukoku University)
- 3P-029 Synthesis of nano-sized ribbon-like gold crystals linked to a nuclear localization signal sequence**
Kazutoshi Ishida¹, Takahiro Kayashita¹, Takahito Imai¹, Masayuki Yamasaki², Kin-ya Tomizaki² (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Sciences and Human Nutrition, Ryukoku University)
- 3P-030 Synthesis of gold nanorods modified with hepatocellular carcinoma target sequence peptide and evaluation of their photothermal conversion properties**
Shoya Fujimoto¹, Takahito Imai¹, Masayuki Yamasaki², Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Sciences and Human Nutrition, Ryukoku University)
- 3P-031 Development of peptide carriers for drug delivery to cancer cells**
Rika Fujisawa¹, Masayuki Yamasaki², Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Sciences and Human Nutrition, Ryukoku University)
- 3P-032 Synthesis of heterodimeric peptides tethering FRET probes for monitoring endosomal escape**
Karen Tanaka¹, Masayuki Yamasaki², Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Sciences and Human Nutrition, Ryukoku University)

- 3P-033 Identification and analysis of antioxidant peptides produced by bacterial strains isolated from fermented food and soil**
Jang Hajcong, Jiyeon Kang, Chul Won Lee (Department of Chemistry, Chonnam National University)
- 3P-034 Development of novel lysosome-targeting chimera (LYTAC) for HER2 protein degradation**
Keisuke Hamada, Ten Hashimoto, Rinoka Iwashita, Yuji Yamada, Yamato Kikkawa, Motoyoshi Nomizu (Department of Clinical Biochemistry, School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)
- 3P-035 Cytotoxicity of self-assembling peptide conjugated with a mitochondria targeting signal sequence**
Katsuya Kishine¹, Masayuki Yamasaki², Kin-ya Tomizaki¹ (¹Department of Materials Chemistry, Ryukoku University, ²Department of Food Sciences and Human Nutrition, Ryukoku University)
- 3P-036 Intein linkers for selective control of protein drug functions at weakly acidic conditions**
Yan Lee (Department of Chemistry, Seoul National University)
- 3P-038 Design and synthesis of the mechanism-based inhibitor probes against the glycoside hydrolase family 116 β -D-abinofuranosidase**
Akihiro Ishiwata¹, Riku Fukushima², Shinya Fushinobu², Kiyotaka Fujita³, Katsunori Tanaka^{1,4}, Yukishige Ito^{1,5} (¹RIKEN Cluster for Pioneering Research, ²Department of Biotechnology, The University of Tokyo, ³Faculty of Agriculture, Kagoshima University, ⁴Department of Chemical Science and Engineering, Tokyo Institute of Technology, ⁵Graduate School of Science, Osaka University)
- 3P-039 Cell imaging of CPP-conjugated nuclear receptor coactivator peptide**
Mutsuki Suzuki, Toshimasa Itoh, Nami Ohashi (Laboratory of Drug Design and Medicinal Chemistry, Showa Pharmaceutical University)
- 3P-040 Enhanced EGFR activation by hydrophobic anions and its influence on cellular responses**
Ayaka Sugiyama¹, Mika Omura¹, Takeshi Sato², Masaya Hagiwara³, Ikuo Fujii¹, Shiroh Futaki⁴, Ikuhiko Nakase¹ (¹Graduate School of Science, Osaka Metropolitan University, ²Kyoto Pharmaceutical University, ³RIKEN Hakubi Research Teams, ⁴Institute for Chemical Research, Kyoto University)
- 3P-041 Enhancing cell-penetrating abilities of arginine-rich peptides through helical structure and hydrophobicity**
Makoto Oba¹, Shun Nakajima², Kurumi Misao², Hidetomo Yokoo^{1,3}, Masakazu Tanaka² (¹Medical Chemistry, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, ²Graduate School of Biomedical Sciences, Nagasaki University, ³Division of Organic Chemistry, National Institute of Health Sciences)
- 3P-042 Peptide-lipid hybrid vesicle with harvested lipid membrane from liposome**
Motoki Ueda^{1,2}, Mohammed Abdelhamid Ramadan Abosheasha¹, Yoshihiro Ito^{1,2} (¹RIKEN Center for Emergent Matter Science, ²RIKEN Cluster for Pioneering Research)
- 3P-043 Synthesis and evaluation of peptoid-peptide hybrid for biomaterials application**
Yoshiaki Hirano^{1,2}, Yuya Yamada¹, Makoto Aono¹, Masaki Iwamoto¹ (¹Faculty of Chemistry, Materials and Bioengineering, Kansai University, ²Kansai University Medical Polymer Research Center, Kansai University)
- 3P-044 Screening and activity evaluation oh ant-ice nucleation peptide from bacteriophage-displayed peptide libraries**

Yoshiaki Hirano^{1,2}, Sora Okamoto¹, Madoka Washizaki¹ (¹Faculty of Chemistry, Materials and Bioengineering, Kansai University, ²Kansai University Medical Polymer Research Center, Kansai University)

3P-045 Peptide-chitosan-dicarboxylic acid crosslinked hydrogel promotes cell attachment activities

Kentaro Hozumi^{1,2}, Chie Takahashi², Motoyoshi Nomizu³ (¹School of Wellness, Shigakkan University, ²Department of Applied Clinical Dietetics, Kitasato Junior College of Health and Hygienic Science, ³School of Pharmacy, Tokyo University of Pharmacy and Life Sciences)

3P-046 Effect of linearly polarized microwaves on calcium carbonate mineralization using peptides

Fumihiro Kayamori^{1,2}, Kan Hirao¹, Ryuji Osawa³, Nobuhiro Nakanishi^{2,4,5}, Kin-ya Tomizaki^{6,7}, Tomohiro Umetani^{2,8}, Kenji Usui^{1,2,5} (¹Faculty of Frontiers of Innovative Research in Science and Technology, Konan University, ²Research Institute for Nanobio-environment and Non-Ionizing Radiation, Konan University, ³Seikoh Giken Co. Ltd., ⁴DSP Research, Inc., ⁵Beyond5G Donated Lectures, Konan University, ⁶Department of Materials Chemistry, Ryukoku University, ⁷Innovative Materials and Processing Research Center, Ryukoku University, ⁸Faculty of Intelligence and Informatics, Konan University)

3P-047 Extracellular histone H3: a multifunctional host defense molecule with distinct antimicrobial and cytotoxic regions

Yuri Tanaka, Yuriko Inamura, Manami Suzuki, Itaru Hasunuma, Shawichi Iwamuro (Laboratory of Regulatory Biology, Department of Biology, Faculty of Science, Toho University)

3P-048 Increasing hydrolytic activity of catalytic antibody by deletion of Pro95 in CDR3

Satoshi Nakagawa¹, Naoya Hatsuyama¹, Emi Hifumi^{2,3}, Taizo Uda^{3,4}, Hiroaki Taguchi¹ (¹Faculty of Pharmaceuticals Sciences, Suzuka University of Medical Science, ²Institute for Research Management, Oita University, ³Research Center for GLOBAL/LOCAL Infectious Diseases, Oita University, ⁴Nanotechnology Laboratory, Institute of Systems, Information Technologies and Nanotechnologies (ISIT))

3P-050 Affinity maturation of lipocalin-type prostaglandin D synthase by directed evolution

Asako Yamaguchi¹, Yui Shiozaki¹, Nagisa Abe¹, Emi Sanui¹, Takehiro Kodani¹, Toshio Nishihara¹, Takashi Inui², Ikuro Fujii¹ (¹Graduate School of Science, Osaka Metropolitan University, ²Graduate School of Agriculture, Osaka Metropolitan University)

3P-051 Peptide separation and purification study using polymer-based separation materials

Tomoaki Tsuchiya, Shohei Ohara, Miku Ishimaru, Masato Towata (Life Solutions Technology Center R&D Division, Mitsubishi Chemical Corporation)

3P-052 Mutational analyses of the substrate binding site of a trypsin-like serine protease

Nana Sakata¹, Yuri Murakami¹, Orika Ashida¹, Mitsuhiro Miyazawa², Shigeru Shimamoto¹, Yuji Hidaka¹ (¹Graduate School of Science and Engineering Research, Kindai University, ²Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

3P-053 Stabilization of the conformation of cocoonase by introducing intramolecular disulfide bonds

Yuri Murakami¹, Nana Sakata¹, Orika Ashida¹, Mitsuhiro Miyazawa², Shigeru Shimamoto¹, Yuji Hidaka¹ (¹Graduate School of Science and Engineering Research, Kindai University, ²Institute of Agrobiological Sciences, National Agriculture and Food Research Organization)

3P-054 Site-selective incorporation of a functional group into Lys175 of chymotrypsin by using peptidyl 1-aminoalkylphosphonate diphenyl ester-derivatives

Ryoga Tsuchiya¹, Yamato Yoshida¹, Hirofumi Kuroda², Shin Ono¹ (¹Department of Applied Chemistry, Kanazawa Institute of Technology, ²Department of General Education, National Institute of Technology)

3P-055 AI assisted HPLC method development for cyclic peptides by automated column screening and chromatogram simulation

Kazuhide Konishi, Yuko Aoki, Shigenori Sonoki, Galushko Sergey (ChromSword Japan Co. Ltd.)

3P-056 Development of an antibody-drug conjugate (ADC) linkage platform through the specific interactions of peptide and protein

Jeongin Hwang, Yan Lee (Department of Chemistry, Seoul National University)