

List of Poster Presentations

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P002	Development of Chiral Condensing Reagents for the Stereocontrolled Synthesis of Phosphorus-modified oligonucleotide analogs <u>Kosuke Shoji</u> ¹⁾ , Yusuke Maeda ²⁾ , Rintaro Hara ¹⁾ , Takeshi Wada ¹⁾ 1) Graduated School of Pharmaceutical Sciences, Tokyo University of Science, 2) Faculty of Applied Biological Sciences, Gifu University		
P003	Construction of G-quadruplex structure using bipyridine containing DNA <u>Sohei Sakashita</u> ¹⁾ , Hiroshi Sugiyama ¹⁾²⁾ , Soyoung Park ¹⁾ 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute of Integrated Cell-Material Science (iCeMS), Kyoto University		
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P005	An Attempt to Photo-induced RNA Acetylation by Oligonucleotides Containing 1-Acetyl-7-nitroindolines <u>Kenji Kikuta</u> , Jan Barta, Yosuke Taniguchi, Shigeki Sasaki Graduate School of Pharmaceutical Sciences, Kyushu University		
P006	Concise synthesis of the 5'-carba analogs of nucleotides via photoredox-catalyzed fragmentation of 2'-deoxy-5'-O-phthalimidonucleosides <u>Yuta Ito</u> , Airi Kimura, Takashi Osawa, Yoshiyuki Hari Faculty of Pharmaceutical Sciences, Tokushima Bunri University		
P007	A Fluorescence Probe for Direct Analysis of O-GlcNAc Transferase Activity <u>Shiori Umemoto</u> ¹⁾ , Hiroaki Suga ²⁾ , Eric T. Kool ¹⁾ 1) Department of Chemistry, Graduate School of Science, The University of Tokyo, 2) Department of Chemistry, Stanford University		
P008	Formation of various metal-mediated base pairs by a 9-azaphenoxazine nucleobase <u>Akane Fujii</u> ¹⁾²⁾ , Yuki Kishimoto ¹⁾²⁾ , Osamu Nakagawa ¹⁾²⁾ , Satoshi Obika ¹⁾²⁾ 1) Graduate School of Pharmaceutical Sciences, Osaka University, 2) CREST, Japan Science and Technology Agency (JST)		
P009	Creation of the ischemia-selective oligonucleotide therapeutics systems with intracellular condition-responsive Peptide Ribonucleic Acids (PRNAs) - RNase H mediated catalytic RNA cleavage system by Hemi-gapmer type chimeric PRNAs - <u>Masahito Inagaki</u> ¹⁾ , Daisuke Unabara ¹⁾ , Ryohei Uematsu ¹⁾ , Yasuyuki Araki ¹⁾ , Seiji Sakamoto ¹⁾ , Satoru Ishibashi ²⁾ , Takanori Yokota ²⁾ , Takehiko Wada ¹⁾ 1) Institute of Multidisciplinary Research for Advanced Material (IMRAM), Tohoku University, 2) Department of Neurology and Neurological Science, Tokyo Medical and Dental University		

- P010** A Solid-Supported Acidic Oxazolium Perchlorate as a Heterogeneous Catalyst for *N*-Glycosylation Reactions
Masaki Tsukamoto¹⁾, Nabamita Basu¹⁾, Kin-ichi Oyama²⁾
 1) Graduate School of Informatics, Nagoya University, 2) Chemical Instrumentation Facility, Research Center for Materials Science, Nagoya University
- P011** Effect of the 3-position modifications of the 2'-deoxy aminopyridinyl-pseudocytidine derivatives on the selectivity and stability of antiparallel triplex DNA with a CG inversion site
Lei Wang, Yosuke Taniguchi, Hidenori Okamura, Shigeki Sasaki
 Graduate School of Pharmaceutical Sciences, Kyushu University
- P012** Synthesis and Property of 5'-C-Aminoalkyl-modified siRNA
Ryohei Kajino¹⁾, Kana Koizumi²⁾, Yusuke Maeda³⁾, Yoshihito Ueno¹⁾²⁾³⁾⁴⁾⁵⁾
 1) Department of Life Science and Chemistry, The Graduate School of Natural Science and Technology, Gifu University, 2) Graduate School of Applied Biological Science, Gifu University, 3) Faculty of Applied Biological Sciences, Gifu University, 4) The United Graduate School of Agricultural Science, Gifu University, 5) Center of Highly Advanced Integration of Nano and Life Science, Gifu University (G-CHAIN)
- P013** Effects of chemical properties of nucleosides on quantum tunneling-based DNA sequencing
Takafumi Furuhata¹⁾, Takahito Ohshiro²⁾, Ryosuke Ueki¹⁾, Masateru Taniguchi²⁾, Shinsuke Sando¹⁾
 1) Department of Chemistry & Biotechnology, Faculty of Engineering, The University of Tokyo, 2) The Institute of Scientific and Industrial Research, Osaka University
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Takashi Osawa¹⁾, Yuka Hitomi¹⁾, Sawako Wakita¹⁾, Masakazu Dohi²⁾, Yuta Ito¹⁾, Satoshi Obika²⁾, Yoshiyuki Hari¹⁾
 1) Faculty of Pharmaceutical Sciences, Tokushima Bunri University, 2) Graduate School of Pharmaceutical Sciences, Osaka University
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Hui Shi, Shigeki Sasaki, Yosuke Taniguchi
 Graduate School of Pharmaceutical Sciences, Kyushu University
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Tomohiro Aoyama, Kosuke Muto, Lintaro Watanabe, Takashi Kanamori, Hideya Yuasa, Akihiro Ohkubo
 Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology
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 Fushimi Pharmaceutical Co. Ltd.
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Yuya Magata, Yosuke Taniguchi, Hidenori Okamura, Shigeki Sasaki
 Graduate School of Pharmaceutical Sciences, Kyushu University
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Shuhei Nishizawa, Tanasak Kaewsomboon, Takashi Kanamori, Hideya Yuasa, Akihiro Ohkubo
 Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology

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Daiki Sugiyama, Takashi Shiozawa, Kentaro Ohno, Takahito Tomori, Yoshiaki Masaki, Kohji Seio
 Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology
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Takuma Shiraiwa, Kousuke Ikeda, Hirotomo Tanaka, Takashi Kanamori, Hideya Yuasa, Akihiro Ohkubo
 Department of Life Science and Technology, School of Life Science and Technology, Tokyo Institute of Technology
- P022** Synthesis of 7-deazaguanine and 7-deazaguanosine derivatives
Natsuhisa Oka¹⁾²⁾, Akane Fukuta¹⁾, Kaori Ando¹⁾
 1) Department of Chemistry and Biomolecular Science, Faculty of Engineering, Gifu University, 2) Center for Highly Advanced Integration of Nano and Life Sciences (G-CHAIN), Gifu University
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Yukichi Namioka¹⁾, Ayumi Igarashi²⁾, Kazuki Sato²⁾, Sho Uehara²⁾, Rintaro Hara¹⁾, Takeshi Wada¹⁾
 1) Graduate School of Pharmaceutical Sciences, Tokyo University of Science, 2) Graduate School of Frontier Sciences, The University of Tokyo
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Hao Yang, Yosuke Taniguchi, Hidenori Okamura, Lei Wang, Shigeki Sasaki
 Graduate School of Pharmaceutical Sciences, Kyushu University
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Masayuki Fujii¹⁾, Yasuhiro Shinkai¹⁾, Svetlana V. Vasilyeva²⁾, Alesya A. Fokina²⁾, Dmitry A. Stetsenko²⁾³⁾
 1) Department of Biological & Environmental Chemistry, Kindai University, 2) Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia, 3) Novosibirsk State University, Novosibirsk, Russia
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Kana Koizumi¹⁾, Toshifumi Kano¹⁾, Yusuke Maeda²⁾, Yoshihito Ueno¹⁾²⁾³⁾⁴⁾
 1) Graduate School of Applied Biological Sciences, Gifu University, 2) Faculty of Applied Biological Sciences, Gifu University, 3) The United Graduate School of Agricultural Science, Gifu University, 4) Center for Highly Advanced Integration of Nano and Life Sciences, Gifu University (G-CHAIN)
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 1) Graduate School of Pharmaceutical Sciences, Tokyo University of Science, 2) Graduate School of Frontier Sciences, The University of Tokyo
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Natsumi Sasaki, Daisuke Miyoshi, Junji Kawakami
 Department of Nanobiochemistry, FIRST, Konan University
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Bohao Cheng¹⁾, Hiromu Kashida¹⁾, Naohiko Shimada²⁾, Atsushi Maruyama²⁾, Hiroyuki Asanuma¹⁾
 1) Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, 2) School of Life Science and Technology, Tokyo Institute of Technology
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Misaki Kamen¹⁾, Mika Sawada, Nae Sakimoto, Junji Kawakami
 Department of Nanobiochemistry, FIRST, Konan University

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Masaki Hibino¹⁾, Yuichiro Aiba¹⁾, Osami Shoji¹⁾, Yoshihito Watanabe²⁾
 1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Research Center for Materials Science, Nagoya University
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Leo Takeshita, Kentaro Ohno, Kento Nagaoka, Yuji Yamada, Yoshiaki Masaki, Kohji Seio
 Department of Life Science and Technology, Tokyo Institute of Technology
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Tingting Zou¹⁾, Fumitaka Hashiya¹⁾, Seiichiro Kizaki¹⁾, Hiroshi Sugiyama¹⁾²⁾
 1) Department of Chemistry, Graduate school of Sciences, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
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 Nucleic Acid Chemistry and Engineering Unit, Okinawa Institute of Science and Technology Graduate University (OIST)
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Kinuko Ueno¹⁾, Kaori Tsukakoshi¹⁾, Alessandro Porchetta²⁾, Francesco Ricci²⁾, Kazunori Ikebukuro¹⁾
 1) Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology, 2) Chemistry Department, University of Rome Tor Vergata
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Kanako Nose¹⁾, Ryoma Noguchi¹⁾, Rina Hoshino¹⁾, Naoki Masuda¹⁾, Hiroyuki Nakagawa²⁾, Masatora Fukuda¹⁾
 1) Department of Chemistry, Faculty of Science, Fukuoka University, 2) Department of Earth system science, Faculty of Science, Fukuoka University
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Yuuichi Orimoto¹⁾, Yuriko Aoki¹⁾²⁾
 1) Department of Material Sciences, Faculty of Engineering Sciences, Kyushu University, 2) Japan Science and Technology Agency, CREST
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 1) Department of Chemistry, University of Tsukuba, 2) Graduate School of Life Science, University of Hyogo, 3) Department of Materials Engineering, National Institute of Technology, Nagaoka College, 4) Department of Physical Chemistry, Graduate School of Pharmaceutical Science, University of Chiba
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 1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) Graduate School of Pharmaceutical Sciences, Hokkaido University, 3) Graduate School of Pharmaceutical Sciences, Tokushima University
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 Division of Chemistry, Department of Medical Sciences, Faculty of Medicine, University of Miyazaki
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Mayuko Tonosaki, Shogo Yokota, Taka-aki Higuchi, Yusuke Itou, Keita Hamasaki
 Department of Applied Chemistry, Graduate School of Engineering and Science, Shibaura Institute of Technology
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 Institute of multidisciplinary research for Advanced Materials, Tohoku University
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 Department of Applied Chemistry, Graduate School of Engineering and Science, Shibaura Institute of Technology
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 Department of Engineering Science, Graduate School of Informatics and Engineering, The University of Electro-Communications
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 Institute of Advanced Energy, Kyoto University
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 1) Graduate School of Life Science, Hokkaido University, 2) Faculty of Advanced Life Science, Hokkaido University
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 Graduate School of Pharmaceutical Science, Tokushima University
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 Division of Pure and Applied Science, Graduate School of Science and Technology, Gunma University
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 The Institute of Science and Industrial Research, Osaka University

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Tomohiro Sawadaishi¹⁾, Kousuke Sato²⁾, Satoshi Ichikawa¹⁾
 1) Faculty of Pharmaceutical Sciences, Hokkaido University, 2) Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido
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Kouichi Harada, Yutaro Shirasaka, Takashi Harada, Daisuke Watanabe, Keita Hamasaki
 Department of Applied Chemistry, Graduate School of Engineering and Science, Shibaura Institute of Technology,
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 Department of Applied Chemistry, Graduate School of Engineering, University of Hyogo
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 Division of Chemistry, Graduate School of Engineering Science, Osaka University
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 1) Department of Nucleic Acids Bioengineering, Institute of Bioorganic Chemistry, Polish Academy of Sciences, 2) Department of Physics, Chemistry and Pharmacy, Biomolecular Nanoscale Engineering Center, University of Southern Denmark
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 Division of Chemistry, Graduate School of Engineering Science, Osaka University
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 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences, Kyoto University
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Shun Nakano¹⁾, Tomoki Tamura¹⁾, Raj Kumar Das²⁾, Eiji Nakata¹⁾, Young-Tae Chang²⁾³⁾, Takashi Morii¹⁾
 1) Institute of Advanced Energy, Kyoto University, 2) Department of Chemistry & MedChem Program of Life Sciences, National University of Singapore, 3) Pohang University of Science and Technology, Republic of Korea
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Haruka Matsui¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences, Kyoto University
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 Institute of Advanced Energy, Kyoto University

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Taku Suenaga¹⁾, Yusuke Maeda²⁾, Rintaro Hara¹⁾, Takeshi Wada¹⁾
 1) Graduate School of Pharmaceutical Sciences, Tokyo University of Science, 2) Graduate School of Applied Biological Sciences, Gifu University
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 Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology
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Tomoyoshi Iida, Reijiro Yoshino, Rintaro Hara, Takeshi Wada
 Graduate School of Pharmaceutical Sciences, Tokyo University of Science
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 Department of Advanced Science and Technology, Japan Advanced Institute Science and Technology
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Tatsuya Ohyama¹⁾, Hisae Tateishi-Karimata¹⁾, Shuntaro Takahashi¹⁾, Shinobu Sato²⁾, Shigenori Tanaka³⁾, Shigeori Takenaka²⁾, Naoki Sugimoto¹⁾⁴⁾
 1) Frontier Institute for Biomolecular Engineering Research (FIBER), 2) Department of Applied Chemistry, Kyushu Institute of Technology, 3) Graduate School of System Informatics, Kobe University, 4) Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
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Shinobu Sasago, Shigetaka Nakamura, Kenzo Fujimoto
 Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology
- P069** Relationship between malignant alteration in cancer cells and the transcript mutations by G-quadruplex formations in the template DNA
Hisae Tateishi-Karimata¹⁾, Keiko Kawauchi²⁾, Tatsuya Ohyama¹⁾, Naoki Sugimoto¹⁾²⁾
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- P070** RNA FISH using ultrafast photo-cross-linkable beacon probes containing 3-cyanovinylcarbazole
Misaki Hashimoto, Chinami Kano, Shigetaka Nakamura, Kenzo Fujimoto
 Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology
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Ambadas B. Rode¹⁾, Tamaki Endoh¹⁾, Naoki Sugimoto¹⁾²⁾
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Daisuke Maeda, Hayato Kawabata, Yang Hung, Shigetaka Nakamura, Kenzo Fujimoto
 Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology

- P073** Cross-linking behavior of psoralen-conjugated oligonucleotides toward epigenetic DNA modifications
Asako Yamayoshi¹⁾²⁾, Takeshi Yamada³⁾, Yasuyuki Araki⁴⁾, Akira Murakami⁵⁾, Takehiko Wada⁴⁾, Kazuhiko Nakatani³⁾, Hiroshi Sugiyama²⁾⁶⁾
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Shigetaka Nakamura, Hui Yang, Chihiro Hirata, Florian Kersaudy, Kenzo Fujimoto
 Department of Advanced Science and Technology, Japan Advanced Institute of Science and Technology
- P075** Does molecular crowding regulate C9orf72-related ALS/FTD diseases by RNA foci formation?
Ye Teng¹⁾, Hisae Tateishi-Karimata¹⁾, Naoki Sugimoto¹⁾²⁾
 1) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University, 2) Graduate School of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University
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 Tatsuya Konda¹⁾, Hidekazu Hiroaki¹⁾²⁾, Tetsuya Kodama¹⁾²⁾
 1) Graduate School of Pharmaceutical Sciences, Nagoya University, 2) Structural Biology Research Center, Nagoya University
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Hinako Asakura¹⁾, Kazuki Hirose¹⁾, Maho Tsuchida¹⁾, Masami Sugauma¹⁾²⁾, Keitaro Yoshimoto³⁾, Koji Wakui³⁾, Masami Sibukawa¹⁾, Shingo Saito¹⁾
 1) Graduate School of Science and Engineering, Saitama University, 2) Research Institute for Clinical Oncology, Saitama Cancer Center, 3) Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo
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Ji Hoon Han¹⁾, Soyoung Park¹⁾, Hiroshi Sugiyama¹⁾²⁾
 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
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Ayumi Kodama¹⁾, Naoko Abe¹⁾, Fumiaki Tomoike¹⁾, Yasuaki Kimura¹⁾, Yoshihiro Ito²⁾, Ken Matsumoto²⁾, Minoru Yoshida²⁾, Yoshihiro Shimizu²⁾, Tomoshi Kameda³⁾, Hiroshi Abe¹⁾²⁾
 1) Nagoya University of Chemistry, 2) RIKEN, 3) AIST
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Turja Kanti Debnath¹⁾, Akimitsu Okamoto¹⁾²⁾
 1) Graduate School of Engineering, The University of Tokyo, 2) Research Center for Advanced Science and Technology, The University of Tokyo
- P082** Controlled fluorescence blinking for DNA structure analysis
Takafumi Miyata¹⁾, Naohiko Shimada¹⁾, Kiyohiko Kawai²⁾, Atsushi Maruyama¹⁾
 1) Department of Life Science and Technology, Tokyo Institute of Technology, 2) The Institute of Scientific and Industrial Research, Osaka University
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Sefan Asamitsu¹⁾, Shunsuke Obata¹⁾, Anh Tuấn Phan²⁾, Kaori Hashiya¹⁾, Toshikazu Bando¹⁾, Hiroshi Sugiyama¹⁾³⁾
 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore, 3) Institute for Integrated Cell-Material Science (WPI-iCeMS), Kyoto University

- P084** Chemical Probe for Studying Human Telomere RNA G-quadruplex
Takumi Ishizuka, Masaomi Otatsume, Yan Xu
 Division of Chemistry, Department of Medical Sciences, Faculty of Medicine, University of Miyazaki
- P085** Evaluation of cooperative binding of the small molecule ligands to DNA repeating sequence
 Hirotaka Murase, Tomoharu Noguchi, Gentaro Wakisaka, Ting Wu, Shigeki Sasaki
 Graduate school of pharmaceutical sciences Kyushu University
- P086** G-quadruplex formation by hairpin Pyrrole-imidazole Polyamide dimer
Shunsuke Obata¹⁾, Sefan Asamitsu¹⁾, Kaori Hashiya¹⁾, Toshikazu Bando¹⁾, Hiroshi Sugiyama¹⁾²⁾
 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences (WPI-iCeMS), Kyoto University
- P087** Creation of PEG knot using DNA helical structure
Yuta Yamasaki, Yuta Ikeda, Akinori Kuzuya, Yuichi Ohya
 Department of Chemistry and Materials Engineering, Kansai University
- P088** Interaction of a cyclic tetraoxazole with i-motif DNA and its effect on this structure
Shadi Sedghi Masoud¹⁾, Yudai Yamaoki²⁾, Yue Ma¹⁾, Masato Katahira²⁾, Kazuo Nagasawa¹⁾
 1) Department of Life Science and Biotechnology, Faculty of Technology, Tokyo University of Agriculture and Technology, 2) Institute of Advanced Energy and Graduate School of Energy Science, Kyoto University
- P089** A fluorescence based screening system for ligands targeting non-canonical DNA structures
Jagannath Jana¹⁾, Tamaki Endoh¹⁾, Yuka Kataoka²⁾, Shinobu Sato³⁾, Shigeori Takenaka³⁾, Masayasu Kuwahara²⁾, Naoki Sugimoto¹⁾⁴⁾
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- P090** Specific Binding between Metal Ion and Mismatched Base Pair Involving 5-Position Modified Cytosines
Fumihiro Arakawa¹⁾, Ayami Yaguchi¹⁾, Akira Ono²⁾, Hidetaka Torigoe¹⁾
 1) Department of Applied Chemistry, Faculty of Science, Tokyo University of Science, 2) Department of Material & Life Chemistry, Faculty of Engineering, Kanagawa University
- P091** N-Methyl modification transforms a chlorophyll derivative into a G-quadruplex stabilizing ligand
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- P092** Direct Screening of Self-Cleaving Ribozyme Activity in Mammalian Cells
Yoko Nomura, Hsiao-Chiao Chien, Yohei Yokobayashi
 Nucleic Acid Chemistry and Engineering Unit, Okinawa Institute of Science and Technology Graduate University
- P093** Nano Structure Design for RNA Interference
Zhaoma Shu¹⁾, Baiju G. Nair²⁾, Naoko Abe¹⁾, Genichiro Tsuji¹⁾, Fumiaki Tomoike¹⁾, Yasuaki Kimura¹⁾, Yoshihiro Ito²⁾, Hiroshi Abe¹⁾²⁾
 1) Department of Chemistry, Graduate School of Science, Nagoya University, 2) RIKEN Center for Emergent Matter Science

- P094** Development of anti-miR oligonucleotide by using serinol nucleic acid and 2,6-diaminopurines
Yukiko Kamiya¹⁾, Yuka Donoshita¹⁾, Hiroshi Kamimoto¹⁾, Keiji Murayama¹⁾, Jumpei Ariyoshi¹⁾²⁾, Hiroyuki Asanuma¹⁾
 1) Department of Biomolecular Engineering, Graduate School of Engineering, Nagoya University, 2) Venture Business Laboratory (VBL), Nagoya University
- P095** A pseudoknot type hammerhead ribozyme which is responsible for a point mutation in a substrate RNA
Mituhiko K. Yamada¹⁾²⁾, Yoshio Kato³⁾, Yoshinori Kondo¹⁾, Vladimír Sychrovský⁴⁾, Yoshiyuki Tanaka¹⁾⁵⁾
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- P097** Development of lipid-siRNA conjugates having efficient cellular uptake and a potent RNAi effect
Takanori Kubo¹⁾, Yoshio Nishimura¹⁾, Makoto Hirano¹⁾, Kazuyoshi Yanagihara²⁾, Toshio Seyama¹⁾
 1) Faculty of Pharmacy, Yasuda Women's University, 2) Exploratory Oncology Research & Clinical Trial Center, National Cancer Center
- P098** Specific light-up system based on signal amplification by ternary initiation complexes
Hiroto Fujita¹⁾, Yuka Kataoka¹⁾, Yasuyo Nakajima²⁾, Masanobu Yamada²⁾, Naoki Sugimoto³⁾⁴⁾, Masayasu Kuwahara¹⁾
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- P099** Chaperoning of allosteric nucleic acid enzyme with cationic polymer for miRNA detection
Orakan Hanpanich, Tomoya Oyanagi, Naohiko Shimada, Atsushi Maruyama
 Tokyo Institute of Technology, Department of Bioscience and Biotechnology
- P100** Capture of cancer cells on a gold substrate modified with DNA aptamer
Yusuke Kitamura¹⁾, Ayase Tashima¹⁾, Miho Nakamura¹⁾, Yuta Nakashima¹⁾, Keiichi Yasuda²⁾, Masaaki Iwatsuki³⁾, Yousuke Katsuda¹⁾, Hideo Baba³⁾, Yoshitaka Nakanishi¹⁾, Toshihiro Ihara¹⁾
 1) Faculty of Advanced Science and Technology, Kumamoto University, 2) OGIC Technologies Co., Ltd., 3) Faculty of Life Sciences, Kumamoto University
- P101** Creating single-stranded ends on PCR products for facile and visual gene detection
Zhe Sui¹⁾, Tong Li¹⁾, Ran An¹⁾²⁾, Makoto Komiyama¹⁾³⁾, Xingguo Liang¹⁾²⁾
 1) College of Food Science and Engineering, Ocean University of China, 2) Laboratory for Marine Drugs and Bioproducts, Qingdao National Laboratory for Marine Science and Technology, 3) National Institute for Materials Science (NIMS), Namiki
- P102** Screening of oral cancer based on the methylation frequency of *hTERT* gene using multi-electrochemical chip
Shinobu Sato¹⁾, Kazuya Haraguchi²⁾, Mana Hayakawa²⁾, Kazuhiro Tominaga²⁾, Shigeori Takenaka¹⁾
 1) Department of Applied Chemistry and Research Center for Biomicrosensing Technology, Kyushu Institute of Technology, 2) Kyushu Dental University
- P103** Target DNA detection using alkaline phosphatase fused zinc finger protein for diagnosis
Jinhee Lee¹⁾, Christophe A. Marquette²⁾, Loïc J. Blum²⁾, Kaori Tsukakoshi¹⁾, Koji Sode¹⁾, Kazunori Ikebukuro¹⁾
 1) Department of Biotechnology & Life Science, Graduate School of Engineering, Tokyo University of Agriculture & Technology, 2) Institute for Molecular and Supramolecular Chemistry and Biochemistry, Claude Bernard University Lyon 1

- P104** Smart aptamers changing its structure and binding affinity to the target protein responding to cations
 Kazunori Ikebukuro¹⁾, Kaori Tsukakoshi¹⁾, Maui Nishio¹⁾, Yuta Takano¹⁾, Daisuke Matsumoto¹⁾, Ayana Yamagishi²⁾, Yoshio Kato²⁾, Chikashi Nakamura¹⁾²⁾
 1) Department of Biotechnology and Life Science, Graduate school of Engineering, Tokyo University of Agriculture and Technology, 2) Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
- P105** Preparation of pH responsive DNA quadruplex Hydrogels
Shizuma Tanaka, Shinsuke Yukami, Kazuki Fukushima, Kenta Wakabayashi, Akinori Kuzuya, Yuichi Ohya
 Department of Chemistry and Materials Engineering, Kansai University
- P106** Competitive binding of thrombin aptamers and antithrombin against thrombin
Kaoru Konda, Jinhee Lee, Kaori Tsukakoshi, Kazunori Ikebukuro
 Department of Biotechnology and Life Science, Graduate School of Engineering, Tokyo University of Agriculture and Technology
- P107** A novel assay of nucleic acids using bioorthogonal SERS probes
Ryo Ota, Noriyuki Takagi, Yuki Nagai, Akio Kobori
 Department of Bimolecular Engineering, Graduate school of science and technology, Kyoto Institute of Technology
- P108** Development of intracellular RNA detection probe enable chemical signal amplification
Hiroshi Abe, Mao Ito, Fumiaki Tomoike, Yasuaki Kimura, Naoko Abe
 Graduate School of Science, Nagoya University
- P109** Improvement of Sequence Discrimination Ability of Molecular Beacons by the Addition of Short Oligomers
Masakazu Kawasaki, Kazuo Shinozuka, Tomohisa Moriguchi
 Division of Molecular Science, Graduate School of Science and Technology, Gunma University
- P110** Split G-triplex DNA-Hemin Complex Exhibits Peroxidase Activity to Detect Target Gene
Ryo Akiba, Hidetaka Torigoe
 Department of Applied Chemistry, Faculty of Science, Tokyo University of Science
- P111** Sequence-Specific Detection of Methylated DNA with Chemical Probes
Fumika Takeuchi¹⁾, Akimitsu Okamoto¹⁾²⁾
 1) Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo., 2) The Research Center for Advanced Science and Technology (RCAT), The University of Tokyo.
- P112** Quadruplex DNA Structures of A Series of Tandemly Repeated Thrombin Binding Aptamer Sequences and Their Application to Remove Lead(II)
Ayami Yaguchi, Kanako Deguchi, Hidetaka Torigoe
 Department of Applied Chemistry, Faculty of Science, Tokyo University of Science
- P113** Activity enhancement of peroxidase-mimicking DNazyme by cationic copolymers
Hiroki Sato, Naohiko Shimada, Atushi Maruyama
 Department of Life Science and Technology, Tokyo Institute of Technology
- P114** miRNA-Responsive CRISPR System
Sora Matsumoto¹⁾²⁾, Kaoru R. Komatsu¹⁾, Moe Hirosawa¹⁾, Hirohide Saito¹⁾
 1) Center for iPS cell Research and Application, Kyoto University, 2) Department of Applied Life Sciences, Faculty of Agriculture, Kyoto University

- P115** Immunochemical Sensing of Epigenomic Modification Using An Alkylating Immobilization Linker
Takaaki Kurinomaru, Naoshi Kojima, Ryoji Kurita
 Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
- P116** Evaluation of Alkylating PI Polyamide Conjugates Targeting RUNX Binding Sites
Rina Maeda¹⁾, Gengo Kashiwazaki²⁾, Shunsuke Obata²⁾, Toshikazu Bando²⁾, Hiroshi Sugiyama²⁾³⁾
 1) Graduate School of Advanced Integrated Studies in Human Survivability, Kyoto University, 2) Department of Chemistry, Graduate School of Science, Kyoto University, 3) Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University
- P117** Gultathione-labile protecting groups for phosphodiester moieties
Takayuki Ohta, Yuta Yamamoto, Akira Ono, Hisao Saneyoshi
 Department of Material and Life Chemistry, Faculty of Engineering, Kanagawa University
- P118** Creation of intracellular condition-responsible oligonucleotide therapeutics system with Peptide Ribonucleic Acids (PRNAs)-DNA chimera: Synthesis of chimeric PRNA-DNA derivatives incorporated with PRNA-Phenylboronic acid unit
Yuri Fukuyo¹⁾, Masahito Inagaki¹⁾, Ryohei Uematsu¹⁾, Mitsuo Asai¹⁾, Daisuke Unabara¹⁾, Yasuyuki Araki¹⁾, Seiji Sakamoto¹⁾, Satoru Ishibashi²⁾, Takanori Yokota²⁾, Takehiko Wada¹⁾
 1) Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, 2) Department of Neurology and Neurological Science, Tokyo Medical and Dental University
- P119** The development of SiO₂ nanoparticle delivery system for nucleotide prodrugs to increase their antiviral and anticancer activity
Svetlana Vasilyeva¹⁾, Alexander Shtil²⁾, Albina Petrova²⁾, Sergei Balakhnin³⁾, Polina Achigecheva⁴⁾, Vladimir Silnikov¹⁾, Inga Grin¹⁾, Dmitry Stetsenko¹⁾
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- P120** Synthesis of RNA Having an Acetylamino Group at the 5'-End to Prepare an siRNA Modified at the 5'-Terminus
Reiko Iwase, Tsuyohito Maekawa
 Graduate School of Science & Engineering, Teikyo University of Science
- P121** Synthesis of a novel phosphotriester backbone for intracellularly activated prodrugs
Junichiro Yamamoto, Kenji Hagiwara, Takashi Sawada, Masakazu Honma, Atsushi Miwa, Toshiyuki Atsumi, Fumikazu Shinohara
 Innovative Technology Laboratories, Kyowa Hakko Kirin Co., Ltd.
- P122** Effects of PEG-modification on the endo-position of an antisense oligonucleotide on tumor accumulation and tumor permeability
Kenji Hagiwara¹⁾, Kana Kurihara²⁾, Masakazu Honma¹⁾, Junichiro Yamamoto¹⁾, Fumikazu Shinohara¹⁾
 1) Innovative Technology Laboratories, Research Functions Unit, R & D Division, Kyowa Hakko Kirin Co., Ltd., 2) Research Core Function Laboratories, Research Functions Unit, R & D Division, Kyowa Hakko Kirin Co., Ltd.
- P123** Spontaneous Aggregation of DNA-Modified Anisotropic Nanoparticles for Gene Diagnosis and Directed Assembly
Guoqing Wang¹⁾, Yoshitsugu Akiyama²⁾, Naoki Kanayama³⁾, Tohru Takarada¹⁾, Mizuo Maeda¹⁾
 1) RIKEN, 2) Tokyo University of Science, 3) Shinshu University

- P124** Development of novel drug delivery system for targeting circulating microRNA
Asako Yamayoshi¹⁾²⁾, Ryo Konishi²⁾³⁾, Akio Kobori³⁾, Naoto Yamashita⁴⁾, Eishi Ashihara⁴⁾, Akira Murakami⁴⁾, Hiroshi Sugiyama²⁾⁵⁾
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- P125** Direct observation of photoresponsive DNA nanodevice and its self-assembly
Yuu Kamada¹⁾, Elena Willner³⁾, Yuki Suzuki¹⁾, Tomoko Emura¹⁾, Kumi Hidaka¹⁾, Hendrik Dietz³⁾, Hiroshi Sugiyama¹⁾²⁾, Masayuki Endo¹⁾²⁾
 1) Department of Chemistry, Graduate School of Science, Kyoto University, 2) Institute for Integrated Cell-Material Sciences, 3) Physik Department, Walter Schottky Institute, Technische Universität München
- P126** DNA Hybridization-driven Peptide Ligation
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 1) Department of Chemistry and Biotechnology, Faculty of Engineering, The University of Tokyo, 2) Research Center for Advanced Science and Technology, The University of Tokyo
- P127** Preparation of functional fibrin gels using a modified DNA aptamer and the effects on apoptosis
Hiroto Fujita, Miyuki Shiina, Yusuke Inoue, Masayasu Kuwahara
 Graduate School of Science and Technology, Gunma University
- P128** Oligonucleotides Analogues and Conjugates as Splice-Correcting Agents for Duchenne Muscular Dystrophy
Alesya Fokina¹⁾, Graham McClorey²⁾, Boris Chelobanov¹⁾³⁾, Ekaterina Burakova¹⁾, Andrei Arzumanov⁴⁾, Wang Meiling³⁾, Masayuki Fujii⁵⁾, Michael Gait⁴⁾, Matthew Wood²⁾, Dmitry Stetsenko¹⁾³⁾
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- P129** Characterization of the cytidine deamination properties of human APOBEC3B by real-time NMR, which are quite different from those of APOBEC3G
Li Wan¹⁾²⁾, Takashi Nagata¹⁾²⁾, Ryo Morishita³⁾, Akifumi Takaori-Kondo⁴⁾, Masato Katahira¹⁾²⁾
 1) Institute of Advanced Energy, Kyoto University, 2) Graduate School of Energy Science, Kyoto University, 3) CellFree Sciences Co., Ltd., Matsuyama, Ehime, Japan, 4) Department of Hematology and Oncology, Graduate School of Medicine, Kyoto University
- P130** Chemical construction of DNA-encoded one-bead one-compound library and its application
Ryo Yoshiba, Ryosuke Ueki, Jumpei Morimoto, Shinsuke Sando
 Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo
- P131** Synthetic mRNA devices that detect endogenous signals and control mammalian cell fate
Shunsuke Kawasaki, Hirohide Saito
 Department of Life Science Frontiers, Center for iPS Cell Research and Application, Kyoto University
- P132** In vitro selection of DNA aptamers to a growth factor receptor and their characterization
Saki Atsuta¹⁾, Ryosuke Ueki¹⁾, Ayaka Utsumi¹⁾, Yohei Hayashi²⁾, Shinsuke Sando¹⁾
 1) Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, 2) Laboratory of Gene Regulation, Faculty of Medicine, University of Tsukuba

- P133** DNA libraries with the base-appended base (BAB) modification is extremely useful to aptamer selection
Hiroataka Minagawa¹⁾, Kentaro Onodera²⁾, Tatsuro Kasai²⁾, Hiroto Fujita²⁾, Masayasu Kuwahara²⁾, Naoto Kaneko¹⁾, Katsunori Horii¹⁾, Iwao Waga¹⁾
 1) Innovation Laboratory, NEC Solution Innovators, 2) Graduate School of Science and Technology, Gunma University
- P134** Evaluation of interactions between DNA G-quadruplex and small biomolecules selected by high-throughput screening
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 1) Faculty of Frontiers of Innovative Research in Science and Technology (FIRST), Konan University, Kobe, Japan, 2) Frontier Institute for Biomolecular Engineering Research (FIBER), Konan University, Kobe, Japan
- P135** Synthesis of long DNA wires containing metallo-base pairs
Kenta Ishikawa, Hisao Saneyoshi, Akira Ono
 Department of material & life chemistry, Faculty of engineering, Kanagawa University
- P136** Effect of ribonucleotide backbone on mutagenic potential and repair mechanism of 7,8-dihydro-8-oxoguanine
Akira Sassa¹⁾, Manabu Yasui²⁾, Hiroyuki Sasanuma³⁾, Shunichi Takeda³⁾, Kaoru Sugasawa⁴⁾, Masamitsu Honma²⁾, Kiyoe Ura¹⁾
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- P137** Crystal structures of oligonucleotides having metallo-base pairs
Akira Ono¹⁾, Toru Sugawara¹⁾, Hikari Ito¹⁾, Misato Goto¹⁾, Hisao Saneyoshi¹⁾, Jiro Kondo²⁾
 1) Department of material & life chemistry, Faculty of engineering, Kanagawa University, 2) Faculty of Science and Technology, Department of Materials and Life Sciences, Sophia University
- P138** Sensitivity Gains using Microflow LC/MS for Oligonucleotide Analysis
Maki Terasaki¹⁾, Kenji Hirose¹⁾, Michael Donegan²⁾, James Murphy²⁾
 1) Nihon Waters K.K., 2) Waters Corporation
- P139** Synthesis and duplex formation of oligonucleotides with 1,2-diamine groups
Takahiro Atsugi, Hisao Saneyoshi, Akira Ono
 Department of Materials and Life Chemistry, Kanagawa University
- P140** Synthesis of cell-permeable fluorogenic oligonucleotides
Yuta Yamamoto, Akira Ono, Hisao Saneyoshi
 Department of Material & Life Chemistry, Faculty of Engineering, Kanagawa University
- P142** Design of fluorescent peptide nucleic acid probes targeting double stranded-RNAs
Yusuke Sato, Takaya Sato, Seiichi Nishizawa
 Department of Chemistry, Graduate School of Science, Tohoku University