

Session I. Protein Interaction (August 7th 9:00~12:00)

- 9:00-9:30** **Floyd E. Romesberg (The Scripps Research Institute, USA)**
 The Evolution of Biomolecular Function
 (Chair: Ikuo Fujii, Osaka Prefecture University)
- 9:30-10:00** **Masayuki Matsushita (Chugai Pharmaceutical Co., Ltd, Japan)**
 Blue Fluorescent Antibody Sensors
 (Chair: Ikuo Fujii, Osaka Prefecture University)
- 10:00-10:30** **Kai Johnsson (Ecole Polytechnique Federale de Lausanne, Switzerland)**
 Observing and Manipulating Proteins in Living Cells
 (Chair: Ikuo Fujii, Osaka Prefecture University)
- 10:30-11:00** **Coffee Break**
- 11:00-11:30** **Andrew Woolley (University of Toronto, Canada)**
 Designing Photo-controlled Peptides and Proteins
 (Chair: Hisakazu Mihara, Tokyo Institute of Technology)
- 11:30-12:00** **Jaehoon Yu (Seoul National University, Korea)**
 Generation of RNA Specific ligands & Their Usages As Versatile Chemical Tools
 (Chair: Hisakazu Mihara, Tokyo Institute of Technology)

Session II. Functional DNA/RNA (August 7th 14:00~17:00)

- 14:00~14:40 Philip C. Bevilacqua (Pennsylvania State University, USA)**
General Acid-Base Catalysis and pKa Shifting in RNA Enzymes
(Chair: Shu-ichi Nakano, Konan University)
- 14:40~15:20 Larry W. McLaughlin (Boston College, USA)**
Use of Nucleotide Analogues to Probe DNA Structure and Function
(Chair: Kazuya Koumoto, Konan University)
- 15:20~15:40 Coffee Break**
- 15:40~16:20 Nichokas V. Hud (Georgia Institute of Technology, USA)**
Controlling Nucleic Acid Assembly by Small Molecule Binding
(Chair: Daisuke Miyoshi, Konan University)
- 16:20~17:00 Dipankar Sen (Simon Fraser University, Canada)**
Light as Cofactor and Substrate in the Chemistry and Biology of DNA and RNA
(Chair: Takehiko Wada, Osaka University)

Session III. Metals in Chemical Biology (August 8th 9:00~12:00)

- 9:00~9:40 Takashi Hayashi (Osaka University, Japan)
 Functionalization of Hemoproteins by Chemical Modification of Prosthetic Groups
 (Chair: Mitsuhiro Shionoya, University of Tokyo)
- 9:40~10:20 Thomas Carell (Ludwig-Maximilians-Universität, München, Germany)
 DNA Repair and Mutagenic Replication of DNA Lesions
 (Chair: Mitsuhiro Shionoya, University of Tokyo)
- 10:20~10:40 Coffee Break
- 10:40~11:20 Kazuya Kikuchi (Osaka University, Japan)
 Design, Synthesis and Biological Application of Fluorescent Probes which Convert Biological Responses to Chemical Output
 (Chair: Hitoshi Ishida, Kitasato University)
- 11:20~12:00 Thomas V. O'Halloran (Northwestern University, USA)
 Inorganic Battlegrounds in Infectious Disease: Zinc and Iron Chemistry of Malaria Parasite
 (Chair: Hitoshi Ishida, Kitasato University)

Session IV. Cell Function of Macromolecules (August 8th 14:00~17:00)

- 14:00~14:40 **Stefan Matile (University of Geneva, Switzerland)**
 Synthetic Functional Architecture in Lipid Bilayers: From Porous Sensors to Smart Photosystems and cytosolic delivery
 (Chair: Shiroh Futaki, Kyoto University)
- 14:40~15:20 **Jean Gariépy (University of Toronto, Canada)**
 Design and Mining of Combinatorial Toxin Libraries to Identify Anticancer Agents
 (Chair: Takeshi Nagasaki, Osaka City University)
- 15:20~15:40 **Coffee Break**
- 15:40~16:20 **Geert-Jan Boons (The University of Georgia, USA)**
 Increasing the Antigenicity of Tumor Associated Carbohydrates by Targeting Toll-like Receptors
 (Chair: Koichi Fukase, Osaka University)
- 16:20~17:00 **Injae Shin (Yonsei University, Korea)**
 Carbohydrate Microarrays for Glycomics Research
 (Chair: Toshinori Sato, Keio University)

Session V. Nanobiotechnology and Technology Innovation in Biomolecular Chemistry (August 9th 9:00~12:00)

- 9:00-9:40** **Constantinos A. Varotsis (University of Crete, Greece)**
 Probing the Q-Proton Pathway and Docking site Dynamics of ba3-Oxidoreductase by Time-Resolved Step-scan Fourier Transform Infrared Spectroscopy
 (Chair: Shun Hirota, Kyoto Pharmaceutical University)
- 9:40-10:20** **Shoji Takeuchi (The University of Tokyo, Japan)**
 Membrane Protein Chips
 (Chair: Yoshinobu Baba, Nagoya University)
- 10:20-10:40** **Coffee Break**
- 10:40-11:20** **Rainer Haag (Free University of Berlin, Germany)**
 Functional Dendritic Architectures for Biomedical Applications
 (Chair: Keigo Aoi, Nagoya University)
- 11:20-12:00** **Haesik Yang (Pusan National University, Korea)**
 An Electrochemical Immunosensor Using Carbon Nanotube Film
 (Chair: Shigeori Takenaka, Kyushu Institute of Technology)

Poster Presentation (August 7th 12:00 ~ 14:00 and 8th 12:00 ~ 14:00)