

第 2 日目 11 月 9 日 (水) / Day 2 (Wed. 9th Nov.)

9:30-17:00 Corporate Exhibition 【venue : Orange-Hall Lobby】

9:30-17:00 Poster Exhibition 【venue : 4th floor of the office building next to the Hall】

Lecture Session III 【venue : Orange Hall】

9:40-11:50 Chairpersons: Takahisa Ikegami (L3-1 ~ L3-3) and Yoh Matsuki (L3-4 ~ L3-6)

9:40-10:00

L3-1 Mapping the per-residue surface electrostatic potential of CAPRIN1 along its phase separation trajectory

○Yuki Toyama^{1) 2) 3)}, Atul Kaushik Rangadurai^{1) 2) 3) 4)}, Julie D. Forman-Kay^{2) 4)},
Lewis E. Kay^{1) 2) 3) 4)}

^{1)Department of Molecular Genetics, University of Toronto, ^{2)Department of Biochemistry, University of Toronto, ^{3)Department of Chemistry, University of Toronto, ^{4)Hospital for Sick Children, Program in Molecular Medicine}}}}

10:00-10:20

L3-2 Biphasic activation of β -arrestin 1 upon interaction with a GPCR revealed by methyl-TROSY NMR

○Yutaro Shiraishi¹⁾, Yutaka Kofuku²⁾, Takumi Ueda²⁾, Shubhi Pandey³⁾,
Hemlata Dwivedi-Agnihotri³⁾, Arun K. Shukla³⁾, Ichio Shimada¹⁾

^{1)RIKEN Center for Biosystems Dynamics Research, ^{2)Graduate School of Pharmaceutical Sciences, The University of Tokyo, ^{3)Department of Biological Sciences and Bioengineering, Indian Institute of Technology, Kanpur}}}

10:20-10:40

L3-3 An affinity-driven protonation-coupled substrate transport of a MATE transporter

○Koh Takeuchi¹⁾, Ichio Shimada²⁾

^{1)Graduate School of Pharmaceutical Sciences, University of Tokyo, ^{2)RIKEN Center for Biosystems Dynamics Research}}

10:40-10:50 Break time

10:50-11:10

L3-4 Correlation and distance measurements between ^1H and ^{14}N using ^{14}N overtone NMR spectroscopy

○Yusuke Nishiyama^{1) 2)}

¹⁾RIKEN-JEOL Collaboration Center, RIKEN, ²⁾JEOL RESONANCE Inc.

11:10-11:30

L3-5 Revealing cation disorder and hydrogen bonding in minerals via multi-nuclear NMR and first-principles calculation

○Xianyu Xue¹⁾

¹⁾Institute for Planetary Materials, Okayama University

11:30-11:50

L3-6 Innovations in High-field Protein Solid-state NMR and its Applications to Amyloid- β Fibrils and Other Biomolecules

Ayesha Wickramasinghe²⁾, Tatsuya Matsunaga²⁾, Isamu Matsuda¹⁾, Mohammad Jafar Tehrani¹⁾, Hibiki Terami¹⁾, Yoshiki Shigemitsu¹⁾, Naohiro Kobayashi²⁾, ○Yoshitaka Ishii^{1), 2)}

¹⁾School of Life Science and Technology, Tokyo Institute of Technology, Yokohama, Japan, ²⁾BDR Center, RIKEN, Yokohama, Japan

11:50-13:30 **Lunch**

Invited Lectures 【venue : Orange Hall】

13:30-15:25 Chairpersons: Kazuhiko Yamada (IL-1), Yoshitaka Ishii (IL-2), Shinichi Tate (IL-3)

13:30-14:05

IL-1 NMR-Based Molecular Rheology for the Study of Chain Motion in Complex Polymer Systems

○Kay Saalwächter¹⁾, Anton Mordvinkin¹⁾, Marcus Suckow²⁾, Diana Döhler³⁾, Frank Böhme²⁾, Wolfgang H. Binder³⁾, Ralph H. Colby⁴⁾

¹⁾Institut für Physik – NMR, Martin-Luther-Univ. Halle, Germany, ²⁾IPF Dresden, Germany,

³⁾Macromol. Chemistry, MLU Halle, Germany, ⁴⁾Penn State U, State College, USA

14:05-14:40

IL-2 Non-Covalent Secondary Bonding Interactions Examined via Multinuclear Solid-State Magnetic Resonance

○David L. Bryce¹⁾

¹⁾University of Ottawa, Ottawa, Canada.

14:40-14:50 **Break time**

14:50-15:25

IL-3 Studying protein weak interaction by NMR

○Nico Tjandra¹⁾

¹⁾Biochemistry and Biophysics Center, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, U.S.A.

15:25-15:35 Honorary-Member Award Ceremony by the Nuclear Magnetic Resonance Society of Japan 【venue : Orange Hall】

Chairperson: Toshimichi Fujiwara

15:35-15:45 **Break time**

Award lectures 【venue : Orange Hall】

15:45-16:55 Chairpersons: Yutaka Ito and Koh Takeuchi

15:45-15:55

Award Ceremony by the Nuclear Magnetic Resonance Society of Japan

15:55-16:25

AL-1 Clarification of the GPCR signaling mechanism based on the function-related conformational dynamics

○Takumi Ueda¹⁾

¹⁾Graduate School of Pharmaceutical Sciences, The University of Tokyo

16:25-16:55

AL-2 Atomic-level elucidation of amyloid formation mechanism by NMR spectroscopy

○Daichi Morimoto¹⁾

¹⁾Department of Molecular Engineering, Kyoto University

16:55-17:05 **Break time**

Honorary Lectures 【venue : Orange Hall】

17:05-18:25 Chairperson: Gota Kawai (Vice-President of the Nuclear Magnetic Resonance Society of Japan)

17:05-17:15

Honorary-Lecture Ceremony by the Nuclear Magnetic Resonance Society of Japan

17:15-17:50

HL-1 Pulse!

○K. Takegoshi¹⁾

¹⁾Kyoto Univ. Kyoto, Japan

17:50-18:25

HL-2 Tips to prevent aggregation and denaturation of proteins/peptides in solution NMR

○Kaori Wakamatsu¹⁾

¹⁾Gunma University, Kiryu, Gunma, Japan.

19:00-21:00

Banquet 【venue : Sansuien】

MC: Takashi Nakamura