

CMCB 2022 Program

January 26 (Wed)

10:00-	Opening Remarks Yoshinobu Baba (Nagoya University, Japan)
Session I Analytical and Applied Chemistry in Crowding Multimolecular Biosystems	
Chair: Akio Ojida (Kyushu University, Japan)	
10:10- I-1	Yoshinobu Baba (Nagoya University, Japan) Nanobiodevices, Quantum Technology, and AI for Research on Chemistry for Multimolecular Crowding Biosystems
10:40- I-2	Kazuhito Tabata (University of Tokyo, Japan) Reconstitution of multimolecular crowding biosystem in microchamber device
11:10- I-3	Atsushi Natsume (Nagoya University, Japan) Genetic cancer detection in molecular crowding systems
11:40-12:00	Break
Chair: Shinya Hagihara (RIKEN, Japan)	
12:00- I-4	Yuji Goto (Osaka University, Japan) Linking Protein Folding and Amyloid Formation under Macromolecular Crowding
12:30- I-5	Shigenori Tanaka (Kobe University, Japan) Dynamical Association/Dissociation Processes of Biomolecules in Crowding Conditions
13:00-14:30	Lunch & Posters

Session II Theoretical and Physical Chemistry in Crowding Multimolecular Biosystems	
Chair: Kazuhito Tabata (University of Tokyo, Japan)	
14:30- II-1	Naoki Sugimoto (Konan University, Japan) To B or Not To B, That Is the Question under the Molecular Crowding
15:00- II-2 Online (14:30 SGT)	Saif A. Khan (NUS, Singapore) Accelerating (Bio)Chemical and Materials Development with Hyperspectral Microfluidics and Machine Learning
15:30- II-3 Online (7:30 CET)	Andrew David Miller (Mendel University in Brno, Czech Republic) Progress in Aligning Nanomedicine with Precision Therapeutic Approaches for the Treatment of Chronic Diseases
16:00-16:20	Break
Chair: Atsushi Natsume (Nagoya University, Japan)	
16:20- II-4 Online (8:20 CET)	Roland Winter (TU Dortmund University, Germany) Temperature, Pressure, and Cosolute Effects on Liquid-Liquid Phase Separation of Biomolecular Condensates: Physical Chemistry and Biological Implications

16:50- II-5 Online (7:50 GMT)	Zoe Waller (UCL School of Pharmacy, UK) Title: Investigations into Repetitive C-rich Sequences in the Human Genome
17:20-17:30	Announcements

January 27 (Thu)

Session III Organic Chemistry in Crowding Multimolecular Biosystems	
Chair: Yuji Goto (Osaka University, Japan)	
9:00- III-1 Online (19:00 EST)	Christina Woo (Harvard University, USA) Target identification by photo-affinity labeling and chemical proteomics
9:30- III-2	Akio Ojida (Kyushu University, Japan) Covalent targeting cellular proteins using new warheads
10:00- III-3	Shinya Hagihara (RIKEN, Japan) Development of chemical tools for plant science
10:30-10:50	Break
Chair: Shigenori Tanaka (Kobe University, Japan)	
10:50- III-4 Online (10:50 KST)	Young-Tae Chang (IBS/Postech, Korea) Multiplex approach of fluorescent probe for live cell distinction
11:20- III-5	Itaru Hamachi (Kyoto University/ERATO, Japan) Chemical labeling of neurotransmitter receptors in live cell and brain (tentative).
11:50-	Closing Remarks Itaru Hamachi (Kyoto University, Japan)