

**Physical Chemistry and Biochemistry**  
**- Ultrafast Spectroscopy and Imaging of Chemical and Biological Systems -**  
**Sep. 28 - Sep. 30, 2013**  
**Room F**

Chaired by Kiyoshi Ueda (Tohoku Univ.), Ryuzi Katoh (Nihon Univ.),  
Akihiro Morita (Tohoku Univ.), and Hirohiko Kono (Tohoku Univ.)

**Sep. 28 (Sat.)**

**9:00 - 12:00**

***Collaboration of theory and experiment - Chaired by Akihiro Morita -***

- 28F1 Hiroshi Fukumura (Tohoku University, Japan)  
"Laser-induced Physical and Chemical Changes in Binary Liquid Mixtures: How Long Should We Wait Until the System Entropy is Maximized?"
- 28F2 Tahei Tahara (RIKEN, Japan)  
"Structure and Dynamics of Water Interfaces Revealed by Heterodyne-Detected Sum-Frequency Generation"
- 28F3 Michitoshi Hayashi (National Taiwan University, Taiwan)  
"A Molecular Theory of Sum Frequency Generation and its Application"
- 28F4 Ryuzi Katoh (Nihon University, Japan)  
"Primary Processes in Dye-sensitized Solar Cells Studied by Transient Laser Spectroscopy"
- 28F5 Nobuhiro Ohta (Hokkaido University, Japan)  
"Electric Field Effects on Photoinduced Dynamics and Function of Organic Molecular Systems"
- 28F6 Jörn Manz (Freie Universität Berlin, Germany)  
"Panta Rhei - Electronic and Nuclear Fluxes in Molecules"

**13:00-15:30**

***X-ray chemistry and biology - dedicated to Ada Yonath - Chaired by Kiyoshi Ueda -***

- 28F7 Shin-ichi Adachi (KEK-Photon Factory, Japan)  
"Capturing Atomic Structural Dynamics by Picosecond Time-resolved X-ray Diffraction, Scattering, and Spectroscopy"
- 28F8 Simone Techert (DESY/ University of Göttingen/ Max-Planck Institute for Biophysical Chemistry, Germany)  
"Structural Dynamics Investigations in Chemistry with High Brilliance Pulsed X-ray Sources"
- 28F9 Junko Yano (Lawrence Berkeley National Laboratory, USA)  
"Simultaneous Femtosecond X-ray Spectroscopy and Diffraction of Photosystem II"
- 28F10 So Iwata (Kyoto University, Japan)  
"Recent Progress in Structural Biology at SACLA"
- 28F11 Ilme Schlichting (Max-Planck Institute for Medical Research, Germany)  
"XFELs - Emerging Opportunities in Structural Biology"

**Sep. 29 (Sun.)**

**8:50-10:50**

***Ultrafast physical chemistry* – dedicated to Y.T. Lee – Chaired by Hirohiko Kono –**

29F1 Sheng H. Lin (National Chiao-Tung University, Taiwan)

“Quantum Chemical Calculations of Intramolecular Vibrational Relaxation of Molecules and Clusters”

29F2 Chi-Kung Kenny Ni (Institute of Atomic and Molecular Sciences, Taiwan)

“Recent Progress in the Investigation of MALDI Mechanisms”

29F3 Toshinori Suzuki (Kyoto University/ RIKEN, Japan)

“Ultrafast Photoelectron Spectroscopy in Gas and Liquid Phases”

29F4 Marc J.J. Vrakking (Max-Born Institute, Germany)

“Attosecond Time-resolved Molecular Dynamics”

**10:50-11:00**

Koichi Yamada (Advanced Industrial Science and Technology, Japan)

“Professor Yonezo Morino and The Morino Foundation for Molecular Science”

**Sep.30 (MOn.)**

**9:00-10:30**

***Ultrafast biochemistry* – Chaired by Ryuzi Katoh –**

30F1 Villy Sundström (Lund University, Sweden)

“Fundamental Steps of Photoprotection and Photocatalysis”

30F2 Masahide Terazima (Kyoto University, Japan)

“Spectrally Silent Processes are Important for Reactions Toward Biological Function”

30F3 Kankan Bhattacharyya (Indian Association for the Cultivation of Science, India)

“Conformational Dynamics in a Protein and Solvation Dynamics in a Live Cell: Time Resolved Microscopy”