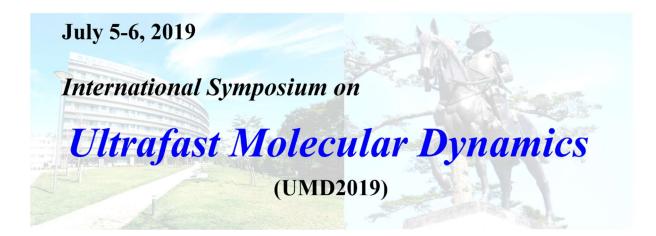
Program



Venue:

Aoba Science Hall (H-04), Graduate School of Science, Tohoku Univ. 6-3, Aramaki Aza-Aoba, Aoba-ku, Sendai 980-8578, Japan

Co-host organizations:

Graduate School of Science, Tohoku Univ. Institute of Multidisciplinary Research for Advanced Materials, Tohoku Univ. Network Joint Research Center for Materials and Devices Japan Intense Light Field Science Society

Co-chairs (Tohoku Univ.):

Yukiyoshi Ohtsuki (Department of Chemistry, Graduate School of Science) Masahiko Takahashi (Institute of Multidisciplinary Research for Advanced Materials)

Committee members (Tohoku Univ.):

Yasuyuki Araki (Institute of Multidisciplinary Research for Advanced Materials) Asuka Fujii (Department of Chemistry, Graduate School of Science) Manabu Kanno (Department of Chemistry, Graduate School of Science) Fuminori Misaizu (Department of Chemistry, Graduate School of Science) Akihiro Morita (Department of Chemistry, Graduate School of Science) Misaki Okunishi (Institute of Multidisciplinary Research for Advanced Materials) Shen Ye (Department of Chemistry, Graduate School of Science)

Advisory board:

Kiyoshi Ueda

(Institute of Multidisciplinary Research for Advanced Materials, Tohoku Univ.) Kaoru Yamanouchi (Department of Chemistry, School of Science, The Univ. of Tokyo)

Contact:

Laboratory of Theoretical Chemistry Department of Chemistry, Graduate School of Science, Tohoku Univ. 6-3, Aramaki Aza-Aoba, Aoba-ku, Sendai 980-8578, Japan Tel & Fax: (+81)22-795-7725 E-mail: ohtsuki@m.tohoku.ac.jp 25 min = 22 min Presentation + 3 min Discussion *35 min = 30 min Presentation + 5 min Discussion

July 5 (Friday)

12:50- Opening

(Session I) 13:00-14:25 Chair: Kaoru Yamanouchi (The University of Tokyo, Japan)

* H. Bernhard Schlegel (Wayne State University, USA) Computational simulation of electron dynamics in intense laser fields

Kenichi L. Ishikawa (The University of Tokyo, Japan) Simulations of atoms, molecules, clusters, and solids in intense laser fields

Hiroshi Akagi (QST, Japan) Laser induced deformation of a molecular orbital in ethanol on a suboptical cycle time scale

(Break) 14:25-14:45

(Session II) 14:45-16:20 Chair: Ryuji Itakura (QST, Japan)

Hideki Ohmura (AIST, Japan) Sub-cycle attosecond control of molecular ionization by using Fouriersynthesized laser fields * Akiyoshi Hishikawa (Nagoya University, Japan)

Coherent reaction control of symmetric molecules using two-color intense laser fields

* Kenji Ohmori (IMS, Japan) Ultrafast quantum many-body dynamics in an ultracold BEC and Mott insulator of ⁸⁷Rb atoms

Group Photography 16:20 – 16:25 inside the symposium room (Break) 16:25-16:40

(Session III) 16:40-18:15 Chair: Akihiro Morita (Tohoku University, Japan)

* Chao Xu¹, Feng Long Gu¹ and OChaoyuan Zhu²

(¹South China Normal University, China, ²National Chiao-Tung University, Taiwan)

Photo-induced Wolff rearrangement reaction of 5-diazo Meldrum's acid revealed by on-the-fly nonadiabatic dynamic simulation

* Tetsuya Taketsugu (Hokkaido University, Japan) Reaction pathways and dynamics of the excited-state branching reaction of stilbene derivatives

Michitoshi Hayashi (National Taiwan University, Taiwan) Molecular individuality in molecular crystals: First principle study of Terahertz vibrational spectroscopy

19:00- Banquet

July 6 (Saturday)

(Session IV) 10:00-11:15 Chair: Hideki Ohmura (AIST, Japan)

Hironobu Fukuzawa (Tohoku University, Japan) X-ray induced ultrafast dynamics in molecules using XFEL

OReika Kanya and Kaoru Yamanouchi (The University of Tokyo, Japan) Laser-assisted streaking of electron diffraction patterns for ultrafast molecular imaging

OMasakazu Yamazaki and Masahiko Takahashi (Tohoku University, Japan) Towards filming a movie of atomic motions during a chemical reaction

(Break) 11:15-11:30

(Session V) 11:30-12:20 Chair: Manabu Kanno (Tohoku University, Japan)

Shiro Koseki (Osaka Prefecture University, Japan) Theoretical calculations of the emission spectra and radiationless transition rate constants in OLED

OTsuyoshi Kato and Kaoru Yamanouchi (The University of Tokyo, Japan) Effective-potential description of time-dependent many-electron wave functions (Lunch) 12:20-13:10

(Session VI) 13:10-14:35 Chair: Akiyoshi Hishikawa (Nagoya University, Japan)

OLe Yu and Masahiko Takahashi (Tohoku University, Japan) Ab initio nonadiabatic molecular dynamics study on the photodissociation of acetone at 195 nm

Heng-Liang Wu (National Taiwan University, Taiwan) Controlling electrochemical lithium deposition and sulfur reduction mechanism through liquid electrolytes

*Hirohiko Kono (Tohoku University, Japan) Field-induced ultrafast dynamics of molecules: Development from fundamentals to applications

14:35- closing