

**32nd Symposium on
Chemical Kinetics and Dynamics
Book of Abstracts**

**第 32 回化学反応討論会
講演要旨集**

June 1-3, 2016

Sonic City Hall, Saitama

Hosted by

Local Organizing Committee of SCKD2016

Cooperated by

The Chemical Society of Japan
Japan Society for Molecular Science
The Atomic Collision Society of Japan
Saitama Foundation for Culture and Industry
The University of Electro-Communications

Symposium

[Venue]

Sonic City Hall

1-7-5 Sakuragi-cho, Omiya-ku, Saitama

330-8669, Japan

Telephone: 048-647-4558

◆ Oral presentation

2F: Small Hall

◆ Poster presentation

4F: International Conference Room

◆ Exhibition

4F: International Conference Room

Banquet

Awarding of Best Poster Prize

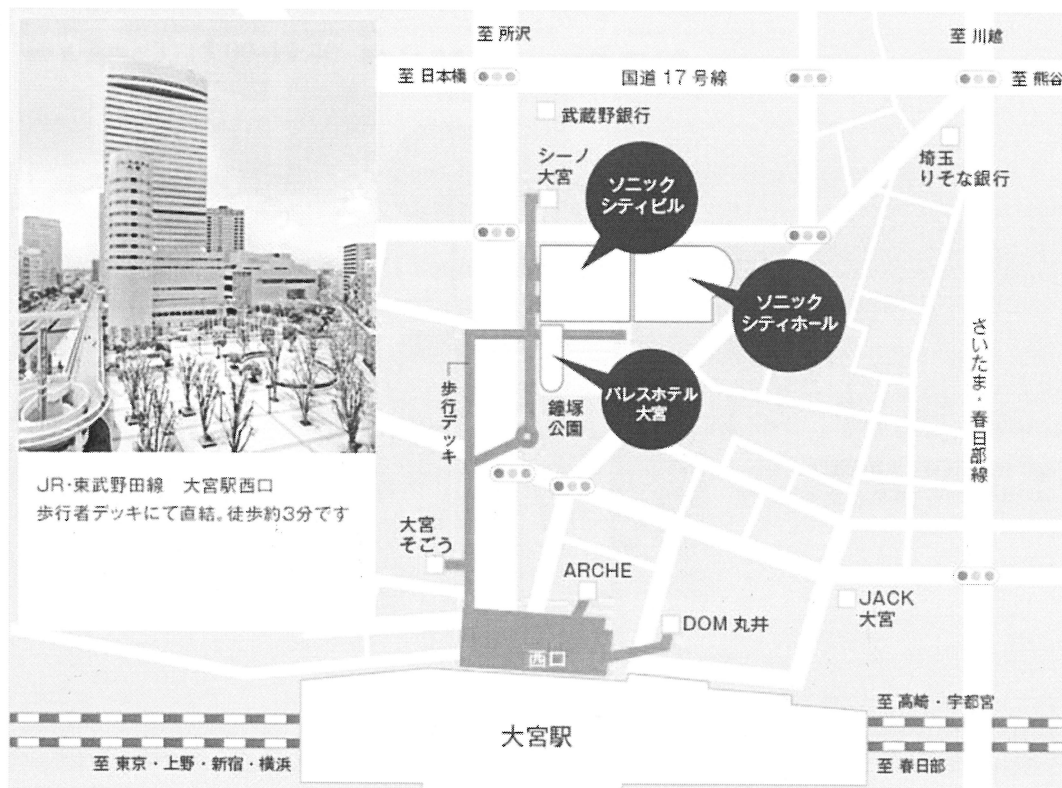
[Venue]

Sonic City Hall

◆ 4F: Omiya Sonic Civic Hall

[Date & Time]

18:00-20:00 on June 2, 2016 (Thu)



シンポジウム

[会場]

大宮ソニックシティホール

〒330-8669

埼玉県さいたま市大宮区桜木町 1-7-5

電話：048-647-4558

◆口頭発表

2階：小ホール

◆ポスター発表

4階：国際会議室

◆企業展示会

4階：国際会議室

懇親会

ベストポスター賞 表彰式

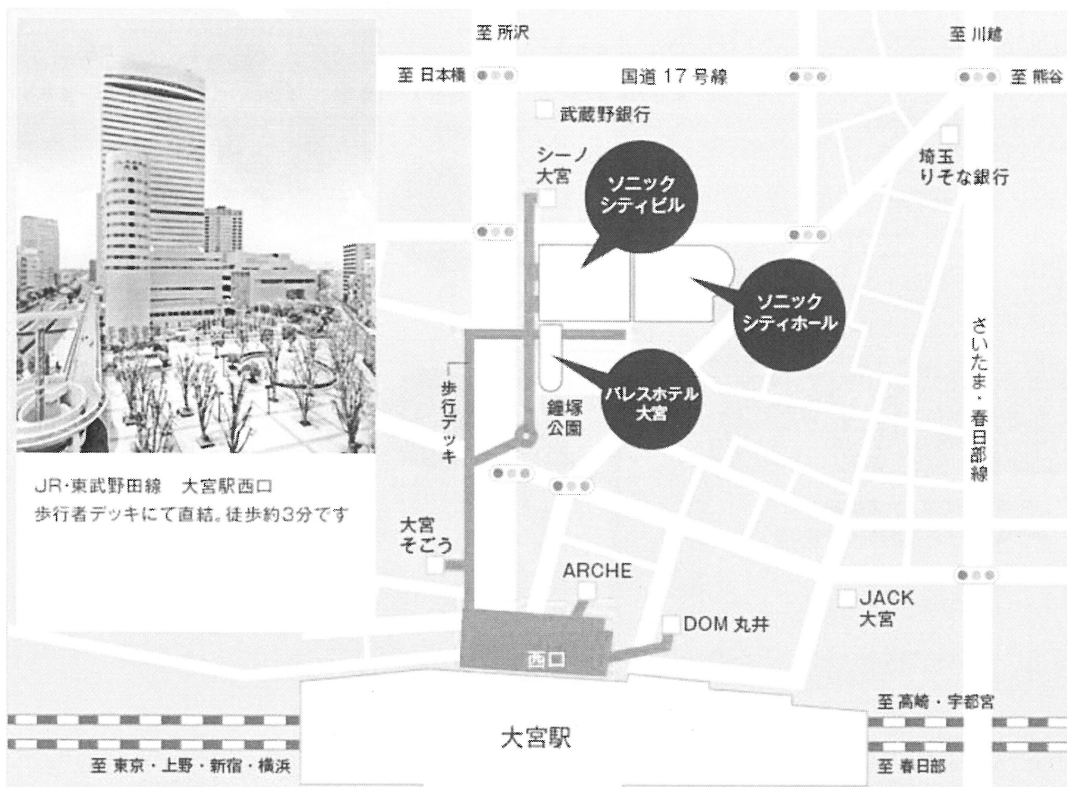
[会場]

大宮ソニックシティホール

◆4階：市民ホール (401+402)

[日時]

2016年6月2日 (18:00-20:00)



32nd Symposium of Chemical Kinetics and Dynamics

Invited lecture (40 min, including discussion)

- S1** Gabriel Da Silva (The University of Melbourne)
June 1, 15:00-15:40
- S2** Chaoyuan Zhu (National Chiao Tung University)
June 1, 16:50-17:30
- S3** Alexander V. Benderskii (University of Southern California)
June 2, 10:30-11:10
- S4** Oliver L. A. Monti (The University of Arizona)
June 2, 15:00-15:40
- S5** Balakrishnan Naduvalath (University of Nevada, Las Vegas)
June 2, 16:10-16:50
- S6** Tsutomu Miyasaka (Toin University of Yokohama)
June 2, 16:55-17:35
- S7** Shin-ichi Adachi (Institute of Materials Structure Science KEK)
June 3, 10:30-11:10
- S8** Kaito Takahashi (IAMS)
June 3, 13:00-13:40

Oral presentation (15 min talk with 10 min discussion)

June 1-3, 1A1 - 3A10

June 2-3, 2Y1 - 3Y3 (Young Researcher Session)

Poster presentation (120 min)

June 1, 13:00 - 15:00, 1P01 - 1P37

June 2, 13:00 - 15:00, 2P01 - 2P36

Wednesday, June 1st 10:20-18:20	Thursday, June 2nd 9:00-17:35	Friday, June 3rd 9:00-17:20
	9:00-10:15 Chair : Akira Miyoshi 2Y1 Le Yu 2Y2 Tatsuhiko Kashimura 2Y3 Yo-ichi Yamamoto	9:00-10:15 Chair : Hiroshi Kohguchi 3Y1 Shugo Takeuchi 3Y2 Shinichi Fukahori 3Y3 Yuki Nojima
10:20-10:30 Opening Remarks	10:15-10:30 Break (15 min)	10:15-10:30 Break (15 min)
10:30-12:10 Chair:Masakazu Yamazaki 1A1 Takayuki Ebata 1A2 Kaoru Yamazaki Chair : Takuya Horio 1A3 Mizuho Fushitani 1A4 Izumi Iwakura	10:30-12:00 Chair : Satoshi Takeuchi S3 Alexander V. Benderskii 2A1 Prashant Chandra Singh 2A2 Ken Miyajima	10:30-12:00 Chair : Shoichi Yamaguchi S7 Shinichi Adachi 3A1 Masakazu Yamazaki 3A2 Takuya Horio
12:10-13:00 Lunch (50 min)	12:00-13:00 Lunch (60 min)	12:00-13:00 Lunch (60 min)
13:00-15:00 Poster	13:00-15:00 Poster	13:00-14:30 Chair : Kiyoshi Yagi S8 Kaito Takahashi 3A3 Kenichiro Saita 3A4 Yasuhiro Oba
		14:30-14:45 Break (15 min)
15:00-16:30 Chair : Akira Matsugi S1 Gabriel Da Silva 1A5 Akira Miyoshi 1A6 Hajime Akimoto	15:00-16:05 Chair: Yoshihiro Yamakita S4 Oliver L. A. Monti 2A3 Kenji Katayama	14:45-16:00 Chair : Kiminori Maeda 3A5 Kouichi Hosaka 3A6 Kiichirou Koyasu 3A7 Morihisa Saeki
	16:05-16:10 Short Break (5 min)	16:00-16:05 Short Break (5 min)
16:30-16:50 Break (20 min)	16:10-16:50 Chair : Mikiya Fujii S5 Balakrishnan Naduvalath	
16:50-18:20 Chair : Hiroshi Ushiyama S2 Chaoyuan Zhu 1A7 Hirohiko Kono 1A8 Koji Ando	16:50-16:55 Short Break (5 min)	16:05-17:20 Chair : Takuhiro Otsu 3A8 Shinji Nonose 3A9 Haruki Ishikawa 3A10 Taketoshi Minato
	16:55-17:35 Chair : Koichiro Mitsuke S6 Tsutomu Miyasaka	
	18:00-20:00 Banquet	

Day 1 (June 1st)

10:30-11:20 (Chair: YAMAZAKI, Masakazu)

1A1 UV-deep UV pump-probe spectroscopic study of the dark state of the molecule having C=O group - Application to para-methoxy methylcinnamate -
EBATA, Takayuki¹; MIYAZAKI, Yasunori¹; KINOSHITA, Shinnosuke¹;
INOKUCHI, Yoshiya¹; SUMIDA, Masataka¹; ONITSUKA, Yuuki¹;
KOHGUCHI, Hiroshi¹; YAMAZAKI, Kaoru^{2,3}; HARABUCHI, Yu^{2,3};
TAKETSUGU, Tetsuya^{2,3}; MAEDA, Satoshi^{2,3}; EHARA, Masahiro⁴
(¹Hiroshima University, ²Hokkaido University, ³JST-CREST, ⁴IMS)

1A2 Non-radiative decay pathways of trans-para-methoxy methylcinnamate
YAMAZAKI, Kaoru^{1,2}; HARABUCHI, Yu^{1,2}; TAKETSUGU, Tetsuya^{1,2};
MAEDA, Satoshi^{1,2}; MIYAZAKI, Yasunori³; KINOSHITA, Shinnosuke³;
INOKUCHI, Yoshiya³; EBATA, Takayuki³; SUMIDA, Masataka³; ONITSUKA,
Yuuki³; KOHGUCHI Hiroshi³; EHARA, Masahiro⁴
(¹Hokkaido University, ²JST-CREST, ³Hiroshima University, ⁴IMS)

11:20-12:10 (Chair: HORIO, Takuya)

1A3 Real-time probing of N₂ Rydberg wavepacket dynamics by EUV laser high harmonics
FUSHITANI, Mizuho¹; TOIDA, Yuto¹; LÉGARÉ, François²; HISHIKAWA,
Akiyoshi¹
(¹Nagoya University, ²INRS-EMT)

1A4 Direct observation of molecular structural changes during reactions induced by coherent molecular vibrational excitation using a sub-5-fs pulse laser
IWAKURA, Izumi
(Kanagawa University)

12:10-13:00 Lunch time

13:00-15:00 Poster presentation

15:00-16:30 (Chair: MATSUGI, Akira)

S1 Atmospheric oxidation mechanisms of amines
DA SILVA, Gabriel
(The University of Melbourne)

1A5 Quantum chemical investigation on the PAH Formation and growth via

fulvenallenyl derivatives

MIYOSHI, Akira

(The University of Tokyo)

- 1A6** Overview of atmospheric reactions related to secondary organic aerosols (SOA)
- Aqueous phase organic reactions and air/water interface reactions -
AKIMOTO, Hajime
(National Institute for Environmental Studies)

16:30-16:50 Coffee break

16:50-18:20 (Chair: USHIYAMA, Hiroshi)

- S2** Simple and accurate nonadiabatic switching probability for trajectory-based non-Born-Oppenheimer molecular dynamics simulations
ZHU, Chaoyuan
(National Chiao Tung University)

- 1A7** Simulation of XFEL-induced Coulomb explosion: Momentum correlations and energy distributions of fragment ions of multiply charged 5-iodouracil
TAKAHASHI, Yusuke¹; KANNO, Manabu¹; HISHINUMA, Naoki¹;
NAKAMURA, Kosuke¹; NAGAYA, Kiyonobu^{2,3}; FUKUZAWA, Hironobu^{1,3};
OHMURA, Satoshi⁴; UEDA, Kiyoshi^{1,3}; KONO, Hirohiko¹
(¹Tohoku University, ²Kyoto University, ³RIKEN SPring-8 Center, ⁴Hiroshima Institute of Technology)

- 1A8** Electronic excited states calculation from localized electron wave packet dynamics
ANDO, Koji
(Kyoto University)

Day 2 (June 2nd)

9:00-10:15 (Chair: MIYOSHI, Akira)

2Y1 Probing π - π^* photoisomerization mechanism for trans-azobenzene by on-the-fly trajectory-based nonadiabatic molecular dynamics simulations

YU, Le^{1,2}; ZHU, Chaoyuan²

(¹Northwest University, ²National Chiao Tung University)

2Y2 Non-statistical F₁/F₂ rotational distribution of the CN fragments derived from the A-band photodissociation of ICN

KASHIMURA, Tatsuhiko; IKEZAKI, Tomoya; OHTA, Yusuke; YABUSHITA, Satoshi

(Keio University)

2Y3 Wavelength dependence of UV photoemission from solvated electrons in bulk water, methanol, and ethanol

YAMAMOTO, Yo-ichi; KARASHIMA, Shutaro; ADACHI, Shunsuke; SUZUKI, Toshinori

(Kyoto University)

10:15-10:30 Coffee break

10:30-12:00 (Chair: TAKEUCHI, Satoshi)

S3 Water interfaces: Hydrogen bonding through the eye of vibrational spectroscopy

BENDERSKII, Alexander V.

(University of Southern California)

2A1 Femtosecond water dynamics at charged lipid interfaces revealed by 2D heterodyne-detected vibrational sum frequency generation

SINGH, Prashant Chandra^{1,2}; INOUE, Ken-ichi¹; NIHONYANAGI, Satoshi^{1,3}; YAMAGUCHI, Shoichi^{1,4}; TAHARA, Tahei^{1,3}

(¹RIKEN, ²Indian Association for the Cultivation of Science, ³RIKEN Center for Advanced Photonics, ⁴Saitama University)

2A2 Oxidation process of rhodium metal clusters with nitrous oxide

MIYAJIMA, Ken; MAFUNE, Fumitaka

(The University of Tokyo)

12:00-13:00 Lunch time

13:00-15:00 Poster presentation

15:00-16:05 (Chair: YAMAKITA, Yoshihiro)

S4 Ultrafast dynamics of carriers at hybrid organic / inorganic semiconductor interfaces

MONTI, Oliver L. A.

(The University of Arizona)

2A3 Distinction between reactive and non-reactive trap states in photocatalytic reactions revealed by transient grating technique

KATAYAMA, Kenji; KUWAHARA, Shota

(Chuo University)

16:05-16:10 Short break

16:10-16:50 (Chair: FUJII, Mikiya)

S5 Geometric phase effects in ultracold chemistry

BALAKRISHNAN, Naduvalath

(University of Nevada, Las Vegas)

16:50-16:55 Short break

16:55-17:35 (Chair: MITSUKE, Koichiro)

S6 Recent progresses in solution-processed perovskite solar cells and optoelectronic devices

MIYASAKA, Tsutomu

(Toin University of Yokohama)

18:00- Banquet

Day 3 (June 3rd)

9:00-10:15 (Chair: KOHGUCHI, Hiroshi)

3Y1 Multielectron-transfer mechanism in photocatalytic oxygen evolution proved by light-intensity dependence analysis

TAKEUCHI, Shugo¹; TAKASE, Mai^{2,3}; TAKASHIMA, Mai^{1,3}; OHTANI, Bunsho^{1,3}

(¹Hokkaido University, ²Muroran Institute of Technology, ³Institute for Catalysis, Hokkaido University)

3Y2 Orientation-resolved photoelectron angular distribution in dissociative ionization of methanol in intense ultraviolet laser fields

FUKAHORI, Shinichi¹; AKAGI, Hiroshi²; YAMANOUCHI, Kaoru¹; ITAKURA, Ryuji²

(¹The University of Tokyo, ²QST KPSI)

3Y3 Observation of weakly hydrogen-bonded water at lipid/water interfaces with heterodyne-detected sum frequency generation spectroscopy

NOJIMA, Yuki; SUZUKI, Yudai; YAMAGUCHI, Shoichi

(Saitama University)

10:15-10:30 Coffee break

10:30-12:00 (Chair: YAMAGUCHI, Shoichi)

S7 Visualizing chemical reactions in solution with femtosecond X-ray scattering

ADACHI, Shin-ichi

(Institute of Materials Structure Science, KEK)

3A1 Development of a highly-sensitive atomic momentum spectrometer: Towards momentum-space imaging of nuclear motions during a chemical reaction

YAMAZAKI, Masakazu; HOSONO, Masaki; TANG, Yaguo; TAKAHASHI, Masahiko

(IMRAM, Tohoku University)

3A2 Complete observation of cascaded radiationless transitions by VUV photoelectron imaging

HORIO, Takuya; SPESYVTSEV, Roman; SUZUKI, Yoshi-ichi; SUZUKI, Toshinori

(Kyoto University)

12:00-13:00 Lunch time

13:00-14:30 (Chair: YAGI, Kiyoshi)

- S8** Theoretical understanding on the Criegee intermediate decay process
TAKAHASHI, Kaito
(IAMS)
- 3A3** Theoretical study on mechanism of the photochemical ligand substitution of fac-[Re^I(bpy)(CO)₃(PR₃)⁺ complex
SAITA, Kenichiro; HARABUCHI, Yu; MAEDA, Satoshi; TAKETSUGU, Tetsuya
(Institute of Low Temperature Science, Hokkaido University)
- 3A4** Quantum-tunneling hydrogen abstraction from dimethyl ether-water complex solid at low temperatures: On the effect of complex formation
OBA, Yasuhiro; WATANABE, Naoki; KOUCHI, Akira
(Hokkaido University)

14:30-14:45 Coffee break

14:45-16:00 (Chair: MAEDA, Kiminori)

- 3A5** Unexpected isotope effect on the cross section of 2p pair formation in the photoexcitation of H₂, D₂ and HD
HOSAKA, Kouichi¹; TORIZUKA, Yutaro¹; YACHI, Kazufumi¹; SCHMIDT, Philipp²; KNIE, Andre²; JANKALA, Kari³; EHRESMANN, Arno²; ODAGIRI, Takeshi⁴; KITAJIMA, Masashi¹; KOUCHI, Noriyuki¹
(¹Tokyo Institute of Technology, ²University of Kassel, ³University of Oulu, ⁴Sophia University)
- 3A6** Dissociative adsorption of carbon dioxide on cobalt cluster anions
YANAGIMACHI, Akimaro¹; KOYASU, Kiichirou^{1,2}; VALDIVIELSO, David Yubero³; GEWINNER, Sandy⁴; SCHÖLLKOPF, Wieland⁴; FIELICKE, André³; TSUKUDA, Tatsuya^{1,2}
(¹The University of Tokyo, ²ESICB Kyoto University, ³Technische Universität Berlin, ⁴Fritz-Haber-Institut der Max-Planck-Gesellschaft)
- 3A7** Time-resolved XAFS study on photo-induced particle formation of palladium in presence of molybdenum ion
SAEKI, Morihisa¹; MATSUMURA, Daiju²; TAGUCHI, Tomitsugu¹; YOMOGIDA, Takumi²; OHBA, Hironori¹
(¹QST, ²JAEA)

16:00-16:05 Short break

16:05-17:20 (Chair: OTOSU, Takuhiro)

- 3A8** Proton transfer reactions of biomolecular ions with gaseous molecules
NONOSE, Shinji; ISONO, Hideo; AKIYAMA, Hiroki; TANIMURA, Taiju;
MIYAZAWA, Masato; SASAOKA, Hayato
(Yokohama City University)
- 3A9** Temperature dependence of hydration structures of phenol-water cluster cations
KURUSU, Itaru; YAGI, Reona; KASAHARA, Yasutoshi; ISHIKAWA, Haruki
(Kitasato University)
- 3A10** Manipulation of atomic defects on metal oxide surfaces
MINATO, Taketoshi^{1, 2, 3}; KAJITA, Seiji⁴; PANG, Chi-Lun⁵; ASAO, Naoki¹;
YAMAMOTO, Yoshinori¹; NAKAYAMA, Takashi⁴; KAWAI, Maki⁶; KIM,
Yousoo²
(¹Tohoku University, ²RIKEN, ³Kyoto University, ⁴Chiba University,
⁵University College London, ⁶The University of Tokyo)

Poster Session

* Candidate for the Best Poster Prize

Day 1 (June 1st, 13:00 - 15:00)

- 1P01** Strong temperature dependence of nuclear spin conversion of H₂ on amorphous solid water at around 10 K
UETA, Hirokazu^{1,2}; WATANABE, Naoki¹; HAMA, Tetsuya¹; KOUCHI, Akira¹
(¹Institute of Low Temperature Science, Hokkaido University, ²NIMS)
- 1P02** Isotope-selective ionization utilizing molecular alignment with shaped laser pulse; current status of shaped laser pulse generation
AKAGI, Hiroshi¹; KUMADA, Takayuki²; OTOBE, Tomohito¹; ITAKURA, Ryuji¹; YOKOYAMA, Atsushi¹; HASEGAWA, Hirokazu³; OHSHIMA, Yasuhiro⁴
(¹QST KPSI, ²JAEA, ³The University of Tokyo, ⁴Tokyo Institute of Technology)
- 1P03** Momentum-mapping images for fragment ions in Coulomb explosion of dichloroethylene isomers
WADA, Yoriko^{1,3}; AKAGI, Hiroshi¹; KUMADA, Takayuki²; ITAKURA, Ryuji¹; WAKABAYASHI, Tomonari³
(¹QST KPSI, ²JAEA, ³Kindai University)
- 1P04** Nonlinear optical response of molecules rotationally excited by impulsive Raman scattering
YOKOYAMA, Keiichi; KOBAYASHI, Takanori
(JAEA)
- 1P05** A theoretical study of hexanediol dehydration reaction
SHIGA, Motoyuki
(JAEA)
- 1P06** Trapped ion electron diffraction apparatus for determination of geometrical structures of molecular ions
TANAKA, Hideaki; KATO, Keiko; KANYA, Reika; YAMANOUCHI, Kaoru
(The University of Tokyo)
- 1P07** Study on gas dissolution dynamics at the gas-liquid interface by using an ionic liquid beam
MATSUURA, Yusuke¹; TERAMOTO, Takahiro²; OHOYAMA, Hiroshi¹
(¹Osaka University, ²Ritsumeikan University)
- 1P08** Translational diffusion in lipid membranes analyzed by standing evanescent-wave fluorescence correlation spectroscopy
OTOSU, Takuhiro; YAMAGUCHI, Shoichi
(Saitama University)

- 1P09** Relative yields of radicals produced in methanol by irradiation -Effect of LET and deuteration-
NAKAGAWA, Seiko¹; MURAKAMI, Takeshi²
 (¹Tokyo Metropolitan Industrial Technology Research Institute, ²National Institute for Quantum and Radiological Science and Technology)
- 1P10** Volatility of alpha-pinene ozonolysis secondary organic aerosol: Importance of heterogeneous reactions
SATO, Kei¹; FUJITANI, Yuji¹; INOMATA, Satoshi¹; MORINO, Yu¹; SHIMONO, Akio²; HIKIDA, Toshihide²; IMAMURA, Takashi¹; TAKAMI, Akinori¹; TANIMOTO, Hiroshi¹; TANABE, Kiyoshi¹
 (¹National Institute for Environmental Studies, ²Shoreline Science Research Inc.)
- 1P11** Oxidation of methyl-substituted benzenes: The effect for auto-ignition of heptane
 ONO, Kota; SAITO, Masaki; BIN MAHAT, Muhammad Khairi; OGUCHI, Tatsuo
 (Toyohashi University of Technology)
- 1P12** Theoretical study for the decomposition reaction of unsymmetrical dimethyl hydrazine
KANNO, Nozomu; HONDOU, Hironori
 (Meijo University)
- 1P13*** Energy landscape of intramolecular reactions in metal-ligand self-assembly: Model hamiltonian approach
MATSUMURA, Yoshihiro¹; IUCHI, Satoru²; SATO, Hirofumi^{1,3}
 (¹Kyoto University, ²Nagoya University, ³ESICB, Kyoto University)
- 1P14*** Theoretical Study of Phenolphthalein in Solution
TANAHASHI, Yuta¹; SATO, Hirofumi^{1,2}
 (¹Kyoto University, ²ESICB, Kyoto University)
- 1P15*** Study of atmospheric removal processes of 1,1,1-trifluoro-2-iodoethane by the photolysis and the reaction with NO₃
SHIBATA, Yusuke; WATANABE, Kosuke; NAKANO, Yukio
 (Tokyo Gakugei University)
- 1P16*** Development of TiO₂ thin films aimed at high-efficient dye sensitized solar cells
FUJIYA, Takumu; SAITO, Akane; MITSUKE, Koichiro
 (Josai University)
- 1P17*** Time resolved magnetic field effect on the spin selective chemical reaction of intermediate biradical in flavin adenine dinucleotide
ARAKAWA, Kazuya¹; MAEDA, Kiminori¹; WOODWARD, Jonathan²

(¹Saitama University, ²The University of Tokyo)

- 1P18*** Transient absorption detected magnetic resonance probed by an LED light source
NAITO, Yusuke; NAKAYAMA, Daisuke; MAEDA, Kiminori
(Saitama University)
- 1P19*** Photochemical reaction of adsorbed molecules at nanogap between silver nanoparticle and silver substrate
AKAI, Keitaro¹; IIDA, Chiaki¹; FUTAMATA, Masayuki¹
(Saitama University)
- 1P20*** Heterodyne-detected sum frequency generation spectroscopy of the water surface in the free OH region
SUZUKI, Yudai; NOJIMA, Yuki; YAMAGUCHI, Shoichi
(Saitama University)
- 1P21*** Photo-degradation of ketoprofen inhibited by antioxidants and local anesthetics
TAKARA, Ayaka; WATANABE, Shimpei; OKUYAMA, Keisuke; SHIMADA, yohsuke; GOTO, Satoru
(Tokyo University of Science)
- 1P22*** Amorphization with cyclodextrin derivatives and the effect on improvement of the aqueous solubility of indomethacin
HIRAI, Ayako; LI, Yingpeng; SHIMADA, Yohsuke; GOTO, Satoru
(Tokyo University of Science)
- 1P23** [Canceled]
- 1P24*** Photochemical reaction of aromatics with CCl₄
KAJIMOTO, Kentarou¹; OGUCHI, Tatsuo²; WATANABE, Akihiro¹
(¹Kobe City College of Technology, ²Toyohashi University of Technology)
- 1P25*** Rotationally-resolved high resolution laser spectroscopy of NO₃ radical; 628 nm vibronic band of *B-X* transition
HIRATA, Michihiro¹; KASAHARA, Shunji¹; TADA, Kohei¹; ISHIWATA, Takashi²; HIROTA, Eizi³
(¹Kobe University, ²Hiroshima City University, ³The Graduate University for Advanced Studies)
- 1P26*** Rotationally-resolved high resolution laser spectroscopy of the S₁←S₀ transition of fluorene
KURODA, Shinji; NAKANO, Takumi; KASAHARA, Shunji
(Kobe University)
- 1P27*** Photochemical reactions between ethylene and chlorine in solid phase below 80 K

MARUYAMA, Hiroaki; SEKI, Kanekazu
(Yokohama National University)

- 1P28*** Temperature dependence of proton transfer reaction of peptide ion in the gas phase
SASAOKA, Hayato; AKIYAMA, Hiroki; TANIMURA, Taiju; MIYAZAWA, Masato; NONOSE, Shinji
(Yokohama City University)
- 1P29*** Computational study of Ullmann coupling catalyzed by a single metal atom
URUSHIBATA, Keita¹; ZHANG, Rui-Qing²; MORI, Seiji¹
(¹Ibaraki University, ²City University of Hong Kong)
- 1P30*** Low-lying π^* resonances of standard and rare DNA and RNA bases studied by the projected CAP/SAC-CI method
KANAZAWA, Yuki^{1,2}; EHARA, Masahiro^{1,2}; SOMMERFELD, Thomas³
(¹SOKENDAI, ²IMS, ³Southeastern Louisiana University)
- 1P31*** Oxidation reaction dynamics of gas-phase aluminum atom
HIRATA, Daiki; HONMA, Kenji
(Hyogo University)
- 1P32*** A clean source of B atoms without using explosive boron compounds
MIYATA, Atsushi; UMEMOTO, Hironobu
(Shizuoka University)
- 1P33*** Real time measurement of the reaction of $[\text{TCNQ}]_2^{2-}$ under CT band excitation by visible sub-10 fs laser pulse
HASHIMOTO, Sena; YABUSHITA, Atsushi; IWAKURA, Izumi
(Kanagawa University)
- 1P34*** Ring-polymer molecular dynamics study of photoexcitation of the silver atom in helium clusters
SEKI, Yusuke¹; YOSHIDA, Takahiko¹; TAKAYANAGI¹, Toshiyuki; SHIGA, Motoyuki²
(¹Saitama University, ²JAEA)
- 1P35*** Reaction modeling for oxidation of Aluminum in gas phase
MAEDA, Junya¹; SABA, Masatoshi²; KATO, Takafumi²; OGUCHI, Tatsuo¹
(¹Toyohashi University of Technology, ²DENKA Company Limited)
- 1P36** Molecular structure at the poly(2-methoxyethyl acrylate)/water interface
MYALITSIN, Anton¹; NIHONYANAGI, Satoshi^{1,2}; YAMAGUCHI, Shoichi³; YANAGISAWA, Junji⁴; AOKI, Takashi⁴; TAHARA, Tahei^{1,2}
(¹RIKEN, ²RIKEN Center for Advanced Photonics, ³Saitama University, ⁴Kyoto Institute of Technology)

1P37* Theoretical study on substituent and solvent effects for nanocube formed with gear-shaped amphiphile molecules
MASHIKO, Takako¹; HIRAOKA, Shuichi²; NAGASHIMA, Umpei³;
TACHIKAWA, Masanori¹
(¹Yokohama City University, ²The University of Tokyo, ³FOCUS)

Day 2 (June 2nd, 13:00 - 15:00)

- 2P01** Electron-impact induced inner-valence ionization of N₂ and O₂ studied by electron-ion coincidence spectroscopy
WATANABE, Noboru; YAMADA, So; TAKAHASHI, Masahiko
(Tohoku University)
- 2P02** Optimal control of molecular alignment for time-resolved X-ray imaging
YOSHIDA, Masataka; OHTSUKI, Yukiyo
(Tohoku University)
- 2P03** Adsorption rate constants of CO on cobalt oxide cluster ions investigated by ion mobility mass spectrometry
NAKANO, Motoyoshi; MORIYAMA, Ryoichi; OHSHIMO, Keijiro; MISAIZU, Fuminori
(Tohoku University)
- 2P04** Non-sequential multiple ionization process of CS₂ in few-cycle intense laser fields
MATSUDA, Akitaka; HISHIKAWA, Akiyoshi
(Nagoya University)
- 2P05** Reaction path analysis of the photodissociation dynamics of methylamine
KAWAI, Shinnosuke
(Shizuoka University)
- 2P06** Selective observation of double resonance effect in Fourier transform two dimensional transient absorption spectrum
YAMAZAKI, Ryokuhei; WADA, Akihide
(Kobe University)
- 2P07** Transient photoluminescence spectroscopy of organic dyes adsorbed on thin films of metal oxide semiconductor
MITSUKE, Koichiro; TATSUNO, Yo; INABA, Soshi
(Josai University)
- 2P08** Thermal decomposition of nitromethane studied by cavity-enhanced absorption spectroscopy behind shock waves
MATSUGI, Akira; SHIINA, Hiroumi
(AIST)
- 2P09** Reaction dynamics of charge separated states studied by magnetic spin effects in biomimetic systems
MAEDA, Kiminori¹; SATO, Kozue¹; SUDA, Ayaka¹; HORE, Peter J²; LIDDELL, Paul³; GUST, Devens³
(¹Saitama University, ²University of Oxford, ³Arizona State University)

- 2P10** Magnetic field effects on photochemical reactions in ionic liquids
YAGO, Tomoaki; WAKASA, Masanobu
 (Saitama University)
- 2P11** A kinetic study on catalytic bromination of kerf loss silicon using iron
TOMONO, Kazuaki; MOKUGE, Yui; SAKAMOTO, Ryo
 (National Institute of Technology, Ube College)
- 2P12*** Theoretical studies on the structural dependence of the electronic properties of perovskite oxynitride photocatalysts
KUBO, Ayako; GIORGI, Giacomo; YAMASHITA, Koichi
 (The University of Tokyo, CREST-JST)
- 2P13*** Gas phase reaction of Au⁻ and Au₂⁻ toward CH₃I
MURAMATSU, Satoru¹; KOYASU, Kiichirou^{1,2}; TSUKUDA, Tatsuya^{1,2}
 (¹The University of Tokyo, ²ESICB, Kyoto University)
- 2P14*** Microscopic studies of magnetosensitive photochemistry
ANTILL, Lewis Martyn; WOODWARD, Jonathan Roger
 (The University of Tokyo)
- 2P15*** Photoreaction mechanism of vanillin by matrix-isolation infrared spectroscopy
OKAMURA, Takuya; AKAI, Nobuyuki; NAKATA, Munetaka
 (Tokyo University of Agriculture and Technology)
- 2P16*** Photoreaction mechanism of 3-chloro-4-hydroxybenzaldehyde in solid argon
HATAYAMA, Takahiro; AKAI, Nobuyuki; NAKATA, Munetaka
 (Tokyo University of Agriculture and Technology, BASE)
- 2P17*** Kinetics of electron injection from donor- π -acceptor type dyes to nanocrystalline metal oxide semiconductors
FUJIYA, Takumu; TANAKA, Nobuhide; MITSUKE, Koichiro; TAKAHASHI, Katsuya; HASHIMOTO, Masashi
 (Josai University)
- 2P18*** Addition rate constants of radicals to the double bond of diethyl fumarate and diethyl maleate measured by pulsed EPR method and theoretical analysis of the activation energy
TAKAHASHI, Hirona; HAGIWARA, Kenta; KAWAI, Akio
 (Tokyo Institute of Technology)
- 2P19*** Anion controlled spectral shift of O₂(¹ Δ_g) phosphorescence in ionic liquids
YOSHIDA, Tsuyoshi¹; KAWAI, Akio¹; KHARA, Dinesh Chandra²; SAMANTA, Anunay²
 (¹Tokyo Institute of Technology, ² University of Hyderabad)
- 2P20*** Time-resolved near infrared spectra of O₂(¹ Δ_g)-nitroxide collision complex in

- molecular solvents and in an ionic liquid
KATO, Mai; YOSHIDA, Tsuyoshi; KAWAI, Akio
(Tokyo Institute of Technology)
- 2P21*** A new type of the electron monochromator considering the space charge effects for electron-molecule collision experiment
OKUMURA, Takuma; MORI, Yuma; SAYAMA, Atsushi; KITAJIMA, Masashi; HOSAKA, Kouichi; KOUCHI, Noriyuki
(Tokyo Institute of Technology)
- 2P22*** Isotopic and temperature effects on photo-dissociation rate constants calculated from first principles applied to planetary atmospheres
FUJIWARA, Ayaka¹; DANIELACHE, Sebastian^{1,2}; KONDORSKY, Alexey³; NANBU, Shinkoh¹; TOKUE, Ikuo⁴
(¹Sophia University, ²Earth-Life Science Institute, ³P.N.Lebedev Physical Institute of Russian Academy of Science, ⁴Niigata University)
- 2P23*** Theoretical study of 2-hydroxyacrylophenone cyclization reaction
KAGAYA, Yoko; KOBAYASHI, Osamu; NANBU, Shinkoh
(Sophia University)
- 2P24*** Development of a new semiclassical MD method
OHTA, Ayumi¹; NANBU, Shinkoh¹; TERANISHI, Yoshiaki²; NAKAMURA, Hiroki^{2,3}
(¹Sophia University, ²National Chiao Tung University, ³Nakamura Institute of Chemical Dynamics)
- 2P25*** Identification of the electronically excited NH₂ product in the photodissociation of methylamine
ONITSUKA, Yuuki; YAMASAKI, Katsuyoshi; KOHGUCHI, Hiroshi
(Hiroshima University)
- 2P26*** Detection of sulfur atoms (¹D and ³P) and branching ratio between reaction and quenching in the S(¹D) + OCS system
GOTO, Hiroki; TANIMOTO, Haruka; MIYACHI, Shinwa; KOHGUCHI, Hiroshi; YAMASAKI, Katsuyoshi
(Hiroshima University)
- 2P27*** Kinetic study on the vibrational relaxation of S₂(a¹Δ_g) by collisions with SF₆
HARA, Ayano¹; GOTO, Hiroki²; UCHIYAMA, Toru²; KOHGUCHI, Hiroshi²; YAMASAKI, Katsuyoshi²
(¹Kyoto University, ²Hiroshima University)
- 2P28*** Asymmetric Coulomb explosion of CO₂ in phase-locked two-color intense laser fields
FUJISE, Hikaru¹; ENDO, Tomoyuki^{1,3}; KAWACHI, Yuuna¹; ISHIHARA, Ayaka¹; HISHIKAWA, Akiyoshi^{1,2}

(¹Nagoya University, ²RCMS, Nagoya University, ³INRS-EMT)

- 2P29*** Ion imaging study of photofragments from Mg⁺Ar and Ca⁺Ar complex ions using double linear reflectron mass spectrometers
NAKASHIMA, Yuji; OKUTSU, Kenichi; YAMAZAKI, Kenichiro; FUJIMOTO, Keita; NAKANO, Motoyoshi; OHSHIMO, Keijiro; MISAIZU, Fuminori
(Tohoku University)
- 2P30*** Photodesorption and adsorption states of CO on water ice during 157 nm irradiation
MATSUDA, Shohei¹; YAMAZAKI, Motoki²; YABUSHITA, Akihiro¹; HARATA, Akira¹
(¹Kyushu University, ²Kyoto University)
- 2P31*** Penning ionization electron spectroscopy of L-alanine and determination of isomeric landscapes
ISHIGURO, Yuki; TAKANO, Yosuke; YAMAKITA, Yoshihiro
(The University of Electro-Communications)
- 2P32*** Quantum dynamics study on bond-selected dissociative electron attachment of HDO
YOSHIDA, Takahiko; TAKAYANAGI, Toshiyuki
(Saitama University)
- 2P33*** Quantum transition state dynamics of the cyclooctatetraene unimolecular reaction on ab initio potential energy surface
TOKIZAKI, Chihiro; YOSHIDA, Takahiko; TAKAYANAGI, Toshiyuki
(Saitama University)
- 2P34*** Kinetic analysis of photocatalytic reaction of methylene blue adsorbed on nanocrystalline TiO₂ films
ENOKI, Masami; IIDA, Yuichiro; KATOH, Ryuzi
(Nihon University)
- 2P35*** Quantum chemical calculations of electron attachment to isolated sugar molecules
KONDO, Manami; FUJITA, Tomoki; TAKAYANAGI, Toshiyuki
(Saitama University)
- 2P36*** Time-of-flight reflectron spectrometry of laser-ablated TiO_n (*n* = 0-2) - acetone cluster ions
IWASAKI, Hidenori; SHIMOKAWARA, Shota; YAMAKITA, Yoshihiro
(The University of Electro-Communications)