

## 15th Symposium on Molecular Spectroscopy Japan

May 22, 2015 (Friday)

International Hall, Kyushu University

08:25 Opening Remarks: (Kyushu Univ.) K. Harada

(chair: M. Nakajima)

08:30 L1 Study on the DMS-DME Complex by FTMW spectroscopy (2)

(Kanagawa Inst. Tech./Grad. Univ. Advanced Studies) Y. Kawashima, Y. Tatamitani, E. Hirota

08:50 L2 Millimeter-wave Spectroscopy of the HDCCH and D2CCD Radicals

(Kyuhu Univ.) H. Matsubayashi, K. Harada, K. Tanaka

09:10 L3 A Study of Aminoacetonitrile in the Vibrational Excited State by Microwave Spectroscopy

(Toho Univ./Univ. Toyama) C. Fujita, H. Ozeki, K. Kobayashi

09:30 L4 Frequency Measurement of the Terahertz Rotational Lines of  $\text{H}^{13}\text{CO}^+$  and  $\text{D}^{13}\text{CO}^+$

(Univ. Toyama/Univ. Waterloo) M. Suzuki, R. Oishi, F. Matsushima, Y. Moriwakia,  
T. Amano

09:50 L5 Recent Progress in THz Spectroscopy at Jet Propulsion Laboratory (JPL)

(Jet Propulsion Laboratory, California Inst. Tech.) S. Yu, B. J. Drouin, J. C. Pearson, T. Amano

BREAK (10:10 - 10:30)

(chair: K. Kobayashi)

10:30 L6 Theoretical and Experimental Study of the Radiative Ortho-Para Transition in Disulfur Dichloride,  $\text{S}_2\text{Cl}_2$

(Tokyo Inst. Tech.) Z. D. Tafti, A. Mizoguchi, H. Kanamori

10:50 L7 Microwave Spectroscopy of Molecular Complexes Involving the Simplest Criegee Intermediate,  $\text{CH}_2\text{OO}$

(Univ. Tokyo) M. Nakajima, Y. Endo

11:10 L8 The Structure of Deuterated Benzenes in Electronic Ground States and Mass-selected REMPI Spectra of Them;  $S_1 \ 6^1_0 \ 1^n_0$  ( $n=0,1,2$ )

(Kyoto Univ./Inst. Molecular Science/Univ. Tokyo) S. Kunishige, T. Katori, M. Kawabata,  
M. Baba, M. Hayashi, Y. Ohshima, M. Nakajima, Y. Endo

11:30 L9 Electronic Excited States of 1,2-Benzanthracene

(Kyoto Univ.) T. Katori, M. Baba, S. Kunishige

LUNCH (11:50 - 13:00)

(chair: K. Harada)

13:00 S1 【Invited talk: joint-hosting with MORINO Lecture】

Molecular Rotation Signals: Molecule Chemistry ... and Particle Physics  
(Leibniz Univ., Germany) Jens-Uwe Grabow

BREAK (14:00 - 14:20)

(chair: K. Harada)

14:20 S2 【Invited talk】

Molecular Chirality: a New Approach From a Dynamical Point of View  
(Graduate Univ. Advanced Studies: SOKENDAI) E. Hirota

15:10 S3 【Invited talk】

Exploring the Structures of Biomolecules by Raman Optical Activity  
(Saga Univ.) M. Unno

BREAK (15:50 - 16:10)

(chair: M. Araki)

16:10 L10 Development of Chirped Pulse Fourier Transform Microwave Spectrometer

(Univ. Toyama) K. Kobayashi, S. Tsunekawa

16:30 L11 FTMW Spectroscopy of AuOH

(Shizuoka Univ.) T. Okabayashi, H. Hashimoto, E. Y. Okabayashi

16:40 L12 To Be Linear, or not to Be; That Is the Question

(Ochanomizu Univ./FOCUS.) T. Hirano, U. Nagashima

17:00 L13 Vibrational Structure of the X <sup>2</sup>A<sub>2</sub>' State of NO<sub>3</sub>

(Hiroshima City Univ.) M. Fukushima

17:20 L14 Vibrational Assignments of the NO<sub>3</sub> Radical in the Ground State

(Okayama Univ./Nagoya Univ./Hiroshima City Univ.) K. Kawaguchi, J. Tang, R. Fujimori,  
T. Ishiwata

18:30 BANQUET (Fukuoka Recent Hotel)

(chair: J. Tang)

08:30 L15 Polarization Spectroscopy to the CH<sub>3</sub>F in Solid *para*-H<sub>2</sub> by Using Infrared cw-QC Laser

(Tokyo Inst. Tech.) H. Kawasaki, A. Mizoguchi, H. Kanamori

08:50 L16 CO/H<sub>2</sub>O Mixtures: Computer Simulations and Prediction of IR Spectra

(IEM-CSIC, Spain/Hokkaido Univ.) R. Escribano, N. Watanabe, T. Hama, A. Kouchi

09:10 L17 Network of Ground-Based High-Resolution Fourier Transform Spectrometers Measuring Atmospheric Greenhouse Gases: TCCON (Total Carbon Column Observing Network)

(NIES/Nagoya Univ./JAXA/<http://tcon-wiki.caltech.edu>/Akita Prefectural Univ.)

I. Morino, M. Inoue, T. Machida, O. Uchino, H. Ohyama, S. Kawakami, TCCON partners

09:30 L18 Laser Spectroscopic Study of CaH in the UV Region

(Univ. Toyama) K. Watanabe, K. Uchida, K. Kobayashi, F. Matsushima, Y. Moriwaki

09:50 L19 CH<sub>5</sub><sup>+</sup>: the Ground-State Combination Differences

(Univ. Köln/AIST) O. Asvany, K. MT Yamada, S. Brünken, A. Potapov, S. Schlemmer

BREAK (10:10-10:30)

(chair: S. Kasahara)

10:30 L20 Cavity Ring Down Spectroscopy of the  $B^2A_2-X^2B_1$  Electronic Transition of Phenoxy Radical

(Tokyo Univ. of Science) Y. Matsushita, M. Araki, K. Tsukiyama

10:50 L21 Laser Induced Amplified Spontaneous Emission from the  $f0_g^+$  ( $^3P_0$ ) Ion-Pair States of Br<sub>2</sub>

(Tokyo Univ. of Science/Hiroshima City Univ.) S. Hoshino, M. Araki, T. Ishiwata, K. Tsukiyama

11:10 L22 Phase Space, Topology, and Molecules

(Univ. New Brunswick, Canada) S. Ross, F. Bischoff, D. Tokaryk, L. Bates

11:30 L23 Measurement of Vib-rotational Absorption Spectrum in the A-X System of ICl using a Ti:sapphire Ring Laser.

(Tokyo Polytechnic Univ.) Y. Katsuyama, K. Kobayashi, T. Yukiya, N. Nishimiya, M. Suzuki

11:50 L24 Reaction Rate Constant Measurement of MnO Radicals and O<sub>2</sub>, Propene in the Gas Phase

(Japan Women's Univ.) C. Kabuto, N. Yamakita, T. Imajo

LUNCH (12:00 - 13:00)

(chair: M. Misono)

13:00 S4 【Invited talk】

Atomic Clocks by Using Quantum Interference Effects

(Kumamoto Univ.) M. Mitsunaga

BREAK (13:50-14:10)

(chair: H. Ishikawa)

14:10 L25 High-Resolution Spectroscopy of  $S_1^1B_{1u}(v_4=1) \leftarrow S_0^1A_g(v=0)$  Transition of Naphthalene by Doppler-Free Two-Photon Absorption Spectroscopy

(Fukuoka Univ.) A. Nishiyama, K. Nakashima, A. Matsuba, M. Misono

14:30 L26 High-resolution Laser Spectroscopy and Magnetic Effect of the  $B - X$  Transition of  $^{14}NO_3$  and  $^{15}NO_3$  Radicals

(Kobe Univ./Hiroshima City Univ./The Graduate Univ. for Advanced Studies) K. Tada,

H. Matsubara, S. Kasahara, T. Ishiwata, E. Hirota

14:50 L27 High-Resolution Laser Spectroscopy of Chloronaphthalene  $S_1 \leftarrow S_0$  Transition

(Kobe Univ.) S. Kasahara, R. Yamamoto, K. Kanzawa

15:10 L28 Simultaneous Deperturbation for the Multiple Electronic States of  $C_2$

(Okayama Univ.) J. Tang, W. Chen, K. Kawaguchi

BREAK (15:20-15:40)

(chair: M. Misono)

15:40 L29 Laser Spectroscopic Investigation on the Hydrated Anilinium Ion in the Temperature-Variable Ion Trap

(Kitasato Univ.) H. Ishikawa, I. Kurusu, R. Yagi, Y. Kasahara

16:00 L30 X-ray Absorption Spectroscopy of Cerium Oxide Clusters ( $Ce_3O_{4.7}^+$ ) in an Ion Trap

(Genesis Res. Inst. Inc./Kyushu Univ./Toyota Tech. Inst.) T. Hayakawa, M. Arakawa,

S. Sarugaku, K. Ando, K. Tobita, A. Terasaki

16:20 L31 Conformation of Benzyl Methyl Ether Monomer and Its Solvated Clusters

(Fukuoka Univ.) Y. Yamada, K. Nishizono, S. Okajima, Y. Nibu

16:40 L32 Vibrational Spectroscopy of Molecular Crystals Composed of Hydrogen Bond Networks

(Kyushu Univ./Chiba Inst. Tech.) K. Ohyama, N. Yamamoto, K. Goto, T. Sinmyozu, H. Sekiya

17:00 Concluding Remarks