Oral sessions

May 26 (Monday)

8:30–8:40

Opening Address

Yasuhisa Mizutani (The University of Osaka, Japan)

8:40–8:50

Welcome Address

Akira Harada (Director, Yamada Science Foundation; Professor Emeritus, The University of Osaka, Japan)

Chairperson: Thomas Elsaesser (Max Born Institute, Germany)

8:50-9:20

IT01 **Manipulating UV/VIS Spectra by Vibrational Excitation in Fluorophores, Catalysts, Photoswitches and Photoreceptors**

Luuk J.G.W van Wilderen, Lara Denninger, Jakob Kapp, Hafiz M. A. Masood, Hendrik Brunst, Maximiliane Horz, Irene Burghardt, and Jens Bredenbeck (Institute of Biophysics, Goethe University, Germany, and Institute of Physical and Theoretical Chemistry, Goethe University, Germany)

9:20-9:40

CT01 **Unveiling the Ultrafast Vibronic Coupling in Hybrid Perovskite Material**

Beier Hu, Navendu Mondal, Ziming Chen, Dmitry Maslennikov, Maksym Kovalenko, Andrew Rappe, and Artem Bakulin (Imperial College London, UK, ETH Zürich, Switzerland, and University of Pennsylvania, USA)

9:40-10:00

CT02 **Vibrational Ladder Climbing and Relaxation Dynamics of Carbon Dioxide in Liquid**

Ikki Morichika, Hiroki Tsusaka, and Satoshi Ashihara (Institute of Industrial Science, The University of Tokyo, Japan)

10:00–10:30 Coffee break

Chairperson: Satoshi Ashihara (The University of Tokyo, Japan)

10:30-11:00

IT02 **Raman Snapshots of Polarons in Organic and Inorganic Materials**

Jyotishman Dasgupta (Tata Institute of Fundamental Research, India)

11:00-11:20

CT03 **Coherent polaron vibrations in liquids - the collective dynamics of solvated electrons**
Thomas Elsaesser, Matthias Runge, Jia Zhang, Poonam Singh, Klaus Reimann, and Michael Woerner (Max Born Institute, Germany)

11:20-11:40

CT04 **Origin of the inhomogeneity of hydrated electrons examined by transient two-dimensional electronic spectroscopy**
Korenobu Matsuzaki and Tahei Tahara (RIKEN, Japan)

11:40-12:00

CT05 **Exploring pigment-protein interactions in *de novo* maquettes using super-broadband two-dimensional electronic spectroscopy**
Camilla Gajo, Caleb Jordan, JL Ross Anderson, and Thomas A.A. Oliver (University of Bristol, UK)

12:05–13:05 Lunch

Chairperson: Takumi Noguchi (Nagoya University, Japan)

14:00-14:30

IT03 **Site-specific dynamics of membrane-protein interaction observed by mid-IR quantum cascade laser spectroscopy**
Paul Stritt, Michael Jawurek, and Karin Hauser (University of Konstanz, Germany)

14:30-14:50

CT06 **Time-resolved infrared spectroscopy on microbial rhodopsins in micro- and milli-second ranges**
Yuji Furutani (Nagoya Institute of Technology, Japan)

14:50-15:10

CT07 **Cryo-Raman study of photoconversion mechanism of a cyanobacteriochrome from *Fremyella diplosiphon***
Tomotsumi Fujisawa, Yasuhiro Jyojima, Masako Hamada, Yuu Hirose, and Masashi Unno (Saga University, Japan, and Toyohashi University of Technology, Japan)

15:10-15:30

CT08 **The effect of billion years of evolution on ultrafast protein dynamics**
Philipp J. Heckmeier, Isabelle F. Harvey-Seutcheu, Raoul E. Herzog, Jeannette Ruf, Charlotte Rochereau, Philipp Janke, Paul Fischer, and Peter Hamm (Department of Chemistry, University of Zurich, Switzerland, and Department of Systems Biology, Columbia University, New York, USA)

15:30–16:00 Coffee break

Chairperson: Erik T. J. Nibbering (Max Born Institute, Germany)

16:00-16:30

IT04 **Advances in the use of transition dipole strength analysis to investigate peptide structure and polymorphism**

Lauren Elizabeth Buchanan (Vanderbilt University, USA)

16:30-16:50

CT09 **Tools for Protein Structural Analysis: Combining Machine Learning and Experimental Ultrafast 2D-IR Spectroscopy**

Amy Farmer, Kelly Brown, Sophie Kendall-Price, Gregory Greetham, and Neil Hunt (University of York, UK, and STFC Central Laser Facility, UK)

16:50-17:10

CT10 **Following Ultrafast Processes in Prussian Blue with Electrochemical 2D IR Spectroscopy**

Anuj Pennathur, Andrei Tokmakoff, and Nicholas Lewis (University of Chicago, USA)

17:10-17:30

CT11 **Intramolecular Vibrational Energy Transfer in a Heteroleptic Manganese Carbonyl Complex Tracked by Two-Colour 2D-IR Spectroscopy**

Stefan Flesch, Barbara Procacci, Sabina Gurung, Ian James Stewart Fairlamb, Neil Terrence Hunt, and Jason Martin Lynam (University of York, UK)

18:00–19:30 Dinner

19:45–21:15 Poster session

May 27 (Tuesday)

Chairperson: Shoichi Yamaguchi (Saitama University, Japan)

8:30-9:00

IT05 **Quantifying hydrogen bonding in liquids and aqueous solutions using correlated vibrational spectroscopy**
Sylvie Roke (Ecole Polytechnique Fédérale - STI - IBI - LBP, Switzerland)

9:00-9:20

CT12 **Electrostatics and Intermolecular Electronic Motions Related to Vibrational Spectral Features of Hydrogen-Bonded Systems**
Hajime Torii (Shizuoka University, Japan)

9:20-9:40

CT13 **Ultrafast spectral diffusion at the air/water interface revealed by interferometric 2D HD-VSFG spectroscopy**
Woongmo Sung, Satoshi Nihonyanagi, and Tahei Tahara (Molecular Spectroscopy Laboratory, RIKEN, Japan, and RIKEN Center for Advanced Photonics (RAP), RIKEN, Japan)

9:40-10:00

CT14 **Vibronic Coupling at Interfaces by Developing Interface-Specific Phase-Cycling Two-Dimensional Electronic-Vibrational Sum Frequency Spectroscopy(2D-EVSFG)**
Yi Rao (Utah State University, USA)

10:00–10:30 Coffee break

Chairperson: Jianping Wang (University of Chinese Academy of Sciences, China)

10:30-11:00

IT06 **Atomic-Scale Phonon Studies Using Tip-Enhanced Near-Field Optical Spectroscopy**
Takashi Kumagai (Institute for Molecular Science, Japan)

11:00-11:20

CT15 **Thermoelastic dynamics at the nanoscale via EUV transient gratings and diffuse scattering**
Flavio Capotondi and Filippo Bencivenga (Elettra Sincrotrone Trieste, Italy)

11:20-11:40

CT16 **Resolving the Structure of High Concentration Lithium Ion Electrolytes Using Localized (midIR) and Delocalized (THz) Vibrational Modes**

Orlando Carrillo Bohorquez, Mario Gonzalez-Jimenez, Klaas Wynne, and Daniel Kuroda (Louisiana State University, USA, and University of Glasgow, UK)

11:40-12:00

CT17 **Temperature Dependence of Intermolecular Vibrational Band of Deep Eutectic Solvent Reline by Femtosecond Raman-Induced Kerr Effect Spectroscopy**
Hideaki Shirota and Maharoof Koyakkat (Chiba University, Japan)

Group photo shooting

12:10–13:10 Lunch

Chairperson: Tahei Tahara (RIKEN, Japan)

14:00-14:30

IT07 **Finding and Steering Reaction Coordinates in Photoinduced Electron Transfer Process in Transition Metal Supramolecular Systems**
Lin X. Chen (Argonne National Lab/Northwestern University, USA)

14:30-14:50

CT18 **Ultrafast Photoacid-Base Reactions in Aqueous Solution**
Marc-Oliver Winghart, Debkumar Rana, Anna-Luisa Upterworth, Sambit Das, Douglas Garrett, Amy Cordones, Dan DePonte, Kristjan Kunnus, Elizabeth Ryland, Mattis Fondell, Sebastian Eckert, Kelly Gaffney, Ehud Pines, Georgi Dakovski, Philippe Wernet, Michael Odelius, Daniel Sebastiani, and Erik T.J. Nibbering (Max-Born-Institute for Nonlinear Optics and Short Pulse Spectroscopy, Germany, Martin-Luther-Universität, Halle-Wittenberg, Germany, Department of Physics, Stockholm University, AlbaNova University Center, Stockholm, Sweden, Sweden, PULSE Institute, SLAC National Accelerator Laboratory and Stanford University, Menlo Park, California, USA, Linac Coherent Light Source, SLAC National Accelerator Laboratory, Menlo Park, California, USA, USA, Institute for Methods and Instrumentation for Synchrotron Radiation Research, HZB-BESSYII, Berlin, Germany, Department of Chemistry, Ben Gurion University of the Negev, Beersheva, Israel, and Department of Physics and Astronomy, Uppsala University, Lägerhyddsvägen 1, Uppsala, Sweden)

14:50-15:20

IT08 **Tracking photoinduced electron and proton transfer and the coupled solvent dynamics with femtosecond X-rays**
Elisa Biasin, Michael Sachs, Abdullah Kahraman, Robert Schoenlein, Niri Govind, Munira Khalil, and Christopher Larsen (Pacific Northwest National Laboratory, USA, SLAC National Accelerator Laboratory, USA, University of Washington, USA, and University of Auckland, New Zealand)

15:20-15:40

CT19 **Combining time-resolved IR spectroscopy with time-resolved XFEL crystallography to capture the catalytic intermediates of cytochrome P450nor**
Minoru Kubo, Takashi Nomura, Takehiko Tosha, Yusuke Kanematsu, Yu Takano, Hiroshi Sugimoto, and Yoshitsugu Shiro (University of Hyogo, Japan, RIKEN SPring-8 Center, Japan, and Hiroshima City University, Japan)

15:40–16:10 Coffee break

Chairperson: Peter Vöhringer (University of Bonn, Germany)

16:10-16:30

CT20 **Control and analysis of coherence in ultrafast x-ray crystallography**
Jasper J. van Thor, Samuel Perrett, and Christopher Hutchison (Imperial College London, UK)

16:30-16:50

CT21 **Formation of Ground-State Intermediate during Electronic Relaxation of Pyrimidine Nucleobases**
Toshinori Suzuki, Yuki Obara, Srijon Ghosh, Shota Kamibashira, Alexander Humeniuk, Shunsuke Adachi, and Yasuhisa Mizutani (Kyoto University, Japan, and Osaka University, Japan)

16:50-17:10

CT22 **Out to C, the influence of neighboring bases on guanine excited states in guanine cytosine oligo systems**
Mark Stitch, Páraic M Keane, Gerard W. Doorley, Gregory M Greetham, John M Kelly, Michael Towrie, Anthony W Parker, and Susan Quinn (University College Dublin, Ireland, STFC Rutherford Appleton Laboratory, UK, and University of Dublin Trinity College, Ireland)

17:10-17:40

IT09 **Photothermal energy conversion by heme in proteins**
Misao Mizuno (Kyoto University, Japan)

18:00–19:30 Dinner

19:45–21:15 Poster session

May 28 (Wednesday)

Chairperson: Amber Krummel (Colorado State University, USA)

8:30-9:00

IT10 **Measuring Water Dynamics in Biomolecular Condensates**

Carlos R Baiz, Keegan A Lorenz-Ochoa, Moonyeon Cho, and Euihyun Lee (University of Texas at Austin, USA)

9:00-9:20

CT23 **How water determines collagen structure and self-assembly**

Guido Giannetti, Fumiki Matsumura, Amarins Zuiker, Imko Boxma, Dilara Coban, Johannes Hunger, Ioana M. Ilie, Mischa Bonn, Sander Woutersen, and Giulia Giubertoni (University of Amsterdam, Netherlands, Max Planck Institute for Polymer Science, Germany, and University of Vienna, Austria)

9:20-9:40

CT24 **Mechanistic data from 2D IR spectroscopy leads to the atomic structure of an amyloid oligomer**

Martin Zanni (University of Wisconsin-Madison, USA)

9:40-10:00

CT25 **Raman and Infrared Diffusion-Ordered Spectroscopy sheds new light on nanoparticles, amyloids, and mixed solutions**

Carolyn Jil Moll, Giulia Giubertoni, Daan Vos de Wael, Robert Schmidt, Freek Ariese, and Sander Woutersen (University of Amsterdam, Netherlands, and Free University of Amsterdam, Netherlands)

10:00–10:30 Coffee break

Chairperson: Masanari Okuno (The University of Tokyo, Japan)

10:30-10:50

CT26 **Observing a Ti-based photoredox catalyst *in-situ* with time-resolved IR-spectroscopy**

Jonas Schmidt, Luis I. Domenianni, and Peter Vöhringer (University of Bonn, Germany)

10:50-11:10

CT27 **Time-Resolved Infrared Spectroscopic Studies on Artificial Photosynthesis**

Ken Onda, Teruyuki Honda, Rikuya Nagao, Tomohiro Ogawa, and Kiyoshi Miyata (Kyushu University, Japan)

11:10-11:30

CT28 **Ultrafast Hot Electron Induced Adsorbate Vibrational Dynamics on Electrodes Probed by *in situ* Time-resolved Sum Frequency Generation Spectroscopy**

Isaac Tangen, Tian Qiu, Jinhui Meng, Joseph Subotnik, and Tianquan Lian (Emory University, USA, and Princeton University, USA)

11:35–12:35 Lunch

13:00–17:30 Excursion (Hikone Castle)

18:00–19:30 Dinner

May 29 (Thursday)

Chairperson: Kevin Kubarych (University of Ottawa, Canada)

8:30-9:00

IT11 **Unraveling Ultrafast Chemical Reaction Dynamics of Condensed-Phase Complex Molecules through Vibrational Coherence**
Yusuke Yoneda and Hikaru Kuramochi (Institute for Molecular Science, Japan, and Graduate Institute for Advanced Studies, Japan)

9:00-9:20

CT29 **Twisted Intramolecular Charge Transfer Probed by Time-Resolved Vibrational Spectroscopy**
Sebok Lee, Jongwon Im, Taehyung Jang, and Yoonsoo Pang (Gwangju Institute of Science and Technology, Korea)

9:20-9:40

CT30 **Structural Evolutions in the Multiexciton Generation Processes in Slip-Stacked Perylene Dye Array probed by Time-resolved Impulsive Stimulated Raman Spectroscopy**
Dongho Kim (Department of Chemistry, Yonsei University, Korea)

9:40-10:00

CT31 **Excited State Vibrational Coherences in Solvent-Switchable Perylene Diimide Dimers**
Giovanni Bressan, Timothy Barendt, and Stephen Roy Meech (University of East Anglia, UK, and University of Birmingham, UK)

10:00–10:30 Coffee break

Chairperson: Tianquan Lian (Emory University, USA)

10:30-11:00

IT12 **Thulium-fiber-based field-resolved infrared spectroscopy for biology and medicine**
Jan Ornik, Florian Lindinger, Aarya Aarya, Lakshya Sharma, Max Kieker, Aleksandra Borek-Dorosz, Maximilian Högner, Felix Paries, Jens Limpert, and Ioachim Emil Petru Pupeza (Leibniz Institute of Photonic Technology, "Leibniz Health Technologies", Germany, Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau, Germany, Institute of Applied Physics, Abbe Centre of Photonics, Friedrich Schiller University, Germany, and Fraunhofer Institute for Industrial Mathematics ITWM, Germany)

11:00-11:20

CT32 **Vibrationally Enhanced Alkynyl Stretch as an Infrared Marker for Molecular Structure and Dynamics**
Jianping Wang (Institute of Chemistry, Chinese Academy of Sciences, China)

11:20-11:50

IT13 **Functional Bond-Selective Microscopy at the Single Molecule Regime**
Lu Wei (California Institute of Technology, Division of Chemistry and Chemical Engineering, USA)

11:50-12:10

CT33 **Unraveling diffusion-controlled bimolecular reaction dynamics using single-molecule fluorescence-encoded infrared spectroscopy**
Seung Yeon Lee, Lukas Whaley-Mayda, Abhirup Guha, Chih-Tsun Yang, and Andrei Tokmakoff (The University of Chicago, USA)

12:15–13:15 Lunch

Chairperson: Ken Onda (Kyushu University, Japan)

14:00-14:30

IT14 **Understanding light-induced dynamics in photoreceptor proteins using multiscale simulations**
Igor Schapiro (Department of Physics, Technical University Dortmund, Germany)

14:30-14:50

CT34 **Excited-State Symmetry Breaking as an Ultrasensitive Tool to Probe Microscopic Electric Fields**
Bogdan Dereka (University of Zurich, Switzerland)

14:50-15:10

CT35 **Towards Controlling Excited-State Symmetry Breaking in Organic and Organometallic Systems: A Perspective Through Transient Two-Dimensional Infrared Spectroscopy**
Ricardo J. Fernández-Terán, Evangelos Balanikas, Joseph Koelbel, and Eric Vauthey (Department of Physical Chemistry, University of Geneva, Switzerland)

15:10-15:30

CT36 **Ultrafast Dynamics of High-Energy Exciton States in a Synthetic Light-Harvesting Complex**
Maxim S. Pshenichnikov and Sundar Raj Krishnaswamy (Zernike Institute for Advanced Materials, University of Groningen, Netherlands)

15:30–16:00 Coffee break

Chairperson: Shinsuke Shigeto (Kwansei Gakuin University, Japan)

16:00-16:30

IT15 **Stimulated Raman Scattering (SRS) microscopy with electronic enhancement**
Andrea Pruccoli, Nico Reuter, Rushikesh Burde, Martin J Winterhalder, and Andreas Zumbusch (University of Konstanz, Germany)

16:30-16:50

CT37 **Imaging Drying Dynamics of Human Stratum Corneum using CARS spectroscopic imaging**
Sayuki Tokunaga, Yusuke Murakami, Ryosuke Oketani, Kotaro Hiramatsu, and Hideaki Kano (Kyushu University, Japan, University of Tsukuba, Japan, International Institute for Integrative Sleep Medicine, Japan, and Keio University, Japan)

16:50-17:20

IT16 **Quantitative Stimulated Raman scattering imaging through spectral focusing**
Dan Fu (University of Washington, USA)

17:20-17:40

CT38 **Tip-enhanced elastic scattering spectroscopy at the single nanometer scale**
Jun Nishida, Akitoshi Shiotari, Akihiro Otomo, Ryota Iino, Melanie Müller, and Takashi Kumagai (Institute for Molecular Science, Japan, Fritz Haber Institute, Germany, and Kyoto University, Japan)

18:20–20:20 Banquet

May 30 (Friday)

Chairperson: Koichi Iwata (Gakushuin University, Japan)

8:30-9:00

IT17 **Excited State Evolution in Low Bandgap Organic Semiconductors**

Mohammed Azzouzi, Elham Rezasoltani, Matthew Bird, Jack Coker, Anthony W. Parker, Igor Sazanovich, Gregory M. Greetham, Michael Towrie, Alise Virbule, Michelle S. Vezie, Garrett Swain LeCroy, Despina Heracleous, Hugo Bronstein, Alberto Salleo, Jenny Nelson, and Sophia Charalambous Hayes (University of Cyprus, Cyprus, Imperial College London, UK, Central Laser Facility, Research Complex at Harwell, STFC Rutherford Appleton Laboratory, UK, Stanford University, USA, Brookhaven National Laboratory, USA, and Cambridge University, UK)

9:00-9:20

CT39 **Time-Resolved Spectroscopic Investigation of Selected Oxenium Ions and Arylnitrenium Ions**

David Lee Phillips (University of Hong Kong, Hong Kong)

9:20-9:40

CT40 **Time-resolved vibrational spectroscopy in advanced emissive molecular systems**

Kiyoshi Miyata, Ami Takada, Takumi Ehara, Tomohiro Ryu, Masaki Saigo, Yuushi Shimoda, and Ken Onda (Kyushu University, Japan)

9:40–10:10 Coffee break

Chairperson: Susan Quinn (University College Dublin, Ireland)

10:10-10:40

IT18 **Toward a Rational Understanding of Polariton Chemistry**

Tianlin Liu, Guoxin Yin, Harsh Bhakta, Tianyu Sheng, and Wei Xiong (University of California, San Diego, USA)

10:40-11:00

CT41 **Vibrational Polariton Transport**

Kevin Kubarych, Saptarsi Mondal, and Binit Santra (University of Ottawa, Canada, and University of Michigan, USA)

11:00-11:20

CT42 **Nonlinear Infrared Signal Enhancement in Weakly-Coupled Molecular Systems**

Ashley Paige Fidler, Cynthia G. Pyles, Jeffrey C. Owrutsky, Blake S. Simpkins, and Adam D. Dunkelberger (NRC Postdoctoral Associate, U.S. Naval Research Laboratory, USA, Chemistry Division, U.S. Naval Research Laboratory, USA, and Precise Systems, Inc., USA)

11:20–11:30

Invitation to TRVS 2027

Wei Xiong (University of California, San Diego, USA)

11:30–11:40

Closing Address

Yasuhisa Mizutani (The University of Osaka, Japan)

Poster sessions

May 26 (Monday)
19:45–21:15

PA01 **Ultrafast Formation of Platinum(II) Metallonitrenes by N_2 Elimination from Azide Diradical Ligands from Time-Resolved femtosecond IR Spectroscopy**
Markus Bauer, Luis Ignacio Domenianni, and Peter Vöhringer (Rheinische Friedrich-Wilhelms-Universität Bonn, Germany)

PA02 **Complex Ultrafast Photophysics of a Rhodanine Photoswitch**
Anam Fatima, Pratip Chakraborty, Garth Jones, Isabelle Chambrier, Andrew Cammidge, Giorgia Logan, Xinyue Xu, Trevor Smith, Christopher Hall, and Stephen Meech (School of Chemistry University of East Anglia, UK, and Department of Chemistry University of Melbourne, Australia)

PA03 **Light-induced structural changes of sensory rhodopsin II and transducer fusion protein *p*SRII-*p*HtrII) analyzed by surface-enhanced infrared spectroscopy**
Tatsuya Sakamoto, Jingyi Tang, Soichiro Kato, Tatsuro Nishikino, and Yuji Furutani (Graduate School of Enginering, Nagoya institute of technology, Japan, and OptoBioTechnology Research Center, Nagoya Institute of Technology, Japan)

PA04 **Quantum/classical mixed approach to OH-stretch excited-state dynamics of water**
Shoichi Yamaguchi (Saitama University, Japan)

PA05 **Tracking the enzymatic activity of Hexokinase with 2D-IR spectroscopy**
Till Stensitzk, Philip Gasse, and Henrike Müller-Werkmeister (Universität Potsdam, Germany)

PA06 **Observation of Salt-Bridge Formation at the Surface of Water**
Aswathi Vilangottunjalil (AMOLF, Netherlands)

PA07 **Time-resolved infrared dual-comb spectroscopy using quantum cascade lasers reveals differences in conformational changes of two heliorhodopsins found from a bacterium and an archaeon**
Toshiki Nakamura, Manish Singh, Masahiro Sugiura, Soichiro Kato, Ryo Yamamoto, Hideki Kandori, and Yuji Furutani (Nagoya Institute of Technology, Japan, and OptoBioTechnology Research Center, Nagoya Institute of Technology, Japan)

PA08 **Precision Terahertz Dielectric and Temperature-Dependent Measurements of Advanced Semiconductor Materials**
Edwin J. Heilweil (National Institute of Standards and Technology, US Dept. of Commerce, USA)

PA09 **A general mapping program for predicting (vibrational) spectra of any system**
Kim van Adrichem and Thomas La Cour Jansen (Rijksuniversiteit Groningen, Netherlands)

PA10 **Targeting Molecular Subpopulations in Light-Activated Catalysis: Insights from 2D-VE Spectroscopy**
Lara Denninger, Luuk J. G. W. van Wilderen, and Jens Bredenbeck (Goethe University Frankfurt/M., Germany)

PA11 **Apusomonad rhodopsins: A novel class of near-UV-absorbing anion channelrhodopsins**
Luis Javier Galindo, Shunki Takaramoto, Takashi Nagata, Andrey Rozenberg, Hiroto Takahashi, Oded Béjà, and Keiichi Inoue (The Institute for Solid State Physics, The University of Tokyo, Japan, Institute of Water Research, University of Granada, Spain, Department of Ecology, University of Granada, Spain, Faculty of Biology, Technion–Israel Institute of Technology, Israel, and The Nancy and Stephen Grand Technion Energy Program (GTEP), Technion–Israel Institute of Technology, Israel)

PA12 **Vibrational Relaxation Time at the Air/Isotopically Diluted Water Interface Investigated by Time-resolved HD-VSFG Spectroscopy**
Erika Kinoshita, Woongmo Sung, Satoshi Nihonyanagi, Hiroshi Okuyama, and Tahei Tahara (Department of Chemistry, Graduate School of Science, Kyoto University, Japan, Molecular Spectroscopy Laboratory, RIKEN, Japan, and RIKEN Center for Advanced Photonics (RAP), RIKEN, Japan)

PA13 **Probing the Interfacial Region of Lipid Bilayer and the Effect of Head Group in the Hydrophobic Region Using Azide Probe**
Md Muhaiminul Islam, Cameron A. Dennis, Sithara U. Nawagamuwage, and Igor V. Rubtsov (Tulane University, USA)

PA14 **Time-Lapse Raman Imaging with Deuterium Probing of Metabolic Dynamics in Fungal Hyphal Tips**
Mitsuru Yasuda, Norio Takeshita, and Shinsuke Shigeto (Kwansei Gakuin University, Japan, and University of Tsukuba, Japan)

PA15 **Structural Changes of Protein Moiety of Inward Proton-Pumping Rhodopsin Observed by Time-Resolved UV Resonance Raman Spectroscopy**
Kosuke Fujimura, Taito Urui, Hideki Kandori, and Yasuhisa Mizutani (The University of Osaka, Japan, and Nagoya Institute of Technology, Japan)

PA16 **Interplay between bulk and interfacial proton transport in micellar alcohol-water mixtures**
Christin Maria Anna Waldorf and Johannes Hunger (Molecular Spectroscopy Department, Max-Planck-Institute for Polymer Research, Germany)

PA17 **A structural 2D-IR study of CRBN^{midi}: Towards the discovery of the next generation of Cereblon based therapeutics**
Barbara Procacci, Daniel J Shaw, Sabina Gurung, Oliver Durrant, and Neil T. Hunt (University of York, UK, and UCB Pharma, UCB Biopharma, UK)

PA18 **Observation of the Initial Process in the CO_2 Photoreduction Reaction of a Dyad Metal Complex Using Time-Resolved Infrared Spectroscopy**
Teruyuki Honda, Ren Sato, Takumi Ehara, Yusuke Kuramochi, Akiharu Satake, Kiyoshi Miyata, and Ken Onda (Department of Chemistry, Kyushu University, Japan, Graduate School of Sciences, Tokyo University of Science, Japan, and Institute of Industrial Science, The University of Tokyo, Japan)

PA19 **Structural Dynamics Evolution of Hemoglobin Revealed by Time-resolved Resonance Raman Spectroscopy**
Yu Iritani, Haruto Ishikawa, and Yasuhisa Mizutani (The University of Osaka, Japan)

PA20 **Detection of coherent anti-Stokes hyper-Raman scattering (CAHRS) signals**
Kazuki Inoue and Masanari Okuno (The University of Tokyo, Japan)

PA21 **Exploring Vibronic Coupling in Ultrafast Excited-State Dynamics of a High-Symmetry Molecular Assembly Using Coherent Vibrational Spectroscopy**
Takumi Ehara, Yusuke Yoneda, Yuto Konishi, Toshikazu Ono, Atsuya Muranaka, Hikaru Kuramochi, Kiyoshi Miyata, and Ken Onda (Department of Chemistry, Kyushu University, Japan, Research Center of Integrative Molecular Systems, Institute for Molecular Science, Japan, Department of Engineering, Kyushu University, Japan, and Molecular Structure Characterization Unit, RIKEN Center for Sustainable Resource Science, Japan)

PA22 **Ab-initio Molecular Dynamics Simulation of Angstrom-scale Confined Water**
Tatsuhiko Ohto, Fujie Tang, Yongkang Wang, Xiaoqing Yu, Kuo-Yang Chiang, Chun-Chieh Yu, Yunfei Chen, Yuki Nagata, and Mischa Bonn (Nagoya University, Japan, Xiamen University, China, IKKEM, China, Max Planck Institute for Polymer Research, Germany, and Southeast University, China)

PA23 **Photothermal Conversion in a *de novo* Multiheme Protein and Application to Molecular Heater**
Mao Ito, Haruto Ishikawa, and Yasuhisa Mizutani (The University of Osaka, Japan)

PA24 **Label-Free Identification of Tumor Tissues by Coherent Nonlinear Vibrational Mode Imaging**
Chun-Chieh Yu, Bin Yang, Jianyu Ren, Zixuan Wang, Minghui Cao, Shizhen Wang, and Wei Xiong (Department of Chemistry and Biochemistry, UC San Diego, USA, Department of Anesthesiology, School of Medicine, University of California, USA, Department of Pathology, University of California, USA, Moores Cancer Center, University of California, USA, Materials Science and Engineering Program, UC San Diego, USA, and Department of Electrical and Computer Engineering, UC San Diego, USA)

PA25 **Resolving Bulk Vibrational Dephasing by Coherent IR-Hyper-Raman Spectroscopy**
Ryan McDonnell, Daniel D. Kohler, and John C. Wright (University of Wisconsin, USA)

PA26 **Exploring interface-specific solute dynamics using time-resolved heterodyne-detected electronic sum frequency generation (TR-HD-ESFG) spectroscopy**
Subhadip Roy, Mohammed Ahmed, Satoshi Nihonyanagi, and Tahei Tahara (RIKEN, Japan, and RIKEN Centre for Advanced Photonics, Japan)

PA27 **Chromophore structure of the *Gloeobacter* rhodopsin–canthaxanthin complex studied by resonance Raman spectroscopy**
Mizuki Kawano, Taito Urui, and Yasuhisa Mizutani (The University of Osaka, Japan)

PA28 **Probing the Effect of Phonons in Charge Transport Characteristics of All Inorganic and Hybrid Perovskite Nanocrystals**
Prajit Kumar Singha, Kaoru Ohta, Ankit Kumar, Anindya Datta, and Keisuke Tominaga (Kobe University, Japan, and Indian Institute of Technology Bombay, India)

PA29 **Amyloid and Non-Amyloid aggregation pathway for β-lactoglobulin: evidence of two distinct molten-globule intermediate conformational states.**
Sara Venturi, Barbara Rossi, Alessandro Ricci, Paolo Foggi, Renato Torre, Mariagrazia Tortora, Marco Paolantoni, Sara Catalini, and Andrea Lapini (European Laboratory for Non-Linear Spectroscopy (LENS), Italy, Elettra-Sincrotrone Trieste, Italy, Dipartimento di Scienze Chimiche, della Vita e della Sostenibilità Ambientale (SCVSA), Università degli Studi di Parma, Italy, Dipartimento di Chimica, Biologia e Biotecnologie, Università di Perugia, Italy, and Dipartimento di Fisica e Geologia, Università di Perugia, Italy)

PA30 **Time-Resolved Impulsive Stimulated Raman Spectroscopy for Unraveling the Origin of Vibrational Coherences Surviving the Conical Intersection**
Keisuke Ochiai, Yusuke Yoneda, and Hikaru Kuramochi (Research Center of Integrative Molecular Systems, Institute for molecular science, Japan, and SOKENDAI, Japan)

PA31 **Exploring the Impact of Carotenoid Excited States on Orange Carotenoid Protein Activation**
Petra Chrupkova, Ivo van Stokkum, Thomas Friedrich, Marcus Moldenhauer, Nediljko Budisa, Hsueh-Wei Tseng, Tomáš Polívka, Dmitry Cherepanov, Eugene Maksimov, and Miroslav Kloz (Extreme Light Infrastructure ERIC, Czech Republic, University of South Bohemia, Czech Republic, Vrije Universiteit Amsterdam, Netherlands, Technical University of Berlin, Germany, University of Manitoba, Canada, and Lomonosov Moscow State University, Russia)

PA32 **Investigation of the Photochemical Reaction Mechanism Using Time-Resolved Resonance Raman Spectroscopy**
Jiani Ma (Shaanxi Normal University, China)

PA33 **Tip-enhanced Raman study of adsorption dynamics of a pentacene derivative at the single molecular level**
Norihiro Aiga and Satoshi Takeuchi (University of Hyogo, Japan)

PA34 **Rigidity of lipid phases in POPC/DPPC liposome bilayers assessed at various depths with aznAC probes**
Shakil Shahriar Efty, Md Muhaiminul Islam, Sithara U. Nawagamuwage, and Igor V. Rubtsov (Department of Chemistry, Tulane University, USA)

PA35 **Signal Propagation in the Multidomain Proteins YF1 and PAL from Picoseconds to Seconds**
Raoul Emanuel Herzog, Philipp Janke, Paul Fischer, Philipp J. Heckmeier, Sina J. Hartmann, Matthias Mulder, Jörg Standfuss, and Peter Hamm (University of Zurich, Switzerland, and Paul Scherrer Institute, Switzerland)

PA36 **Tracking the photoisomerization reaction using multiscale simulations**
Maria Castro and Igor Schapiro (Technical University of Dortmund, Germany)

PA37 **Probing specific intra- and inter-molecular relaxation pathways using broadband time-resolved impulsive stimulated Raman spectroscopy**
Sakshi Chawla, Amit Kumar, and Arijit K. De (IISER Mohali, India)

PA38 **Using spectrally resolved Spontaneous parametric down-conversion in function of coherent spectroscopy**
Cesar Bernardo, Beáta Plaskurová, Pavel Malý, and Miroslav Kloz (Extreme Light Infrastructure ERIC, Czech Republic, ELI Beamlines, Czech Republic, and Charles University, Czech Republic)

PA39 **Femtosecond Time-Resolved Near-IR Absorption and Stimulated Raman Studies of β-Carotene Bound to Bovine Serum Albumin in Water**

Tomohisa Takaya, Shunrou Tokonami, and Koichi Iwata (Toyama Prefectural University, Japan, and Gakushuin University, Japan)

PA40 **Enhancement of Near-Field Infrared Transient of Electron-Hole Pairs through Surface Phonon Resonance in hBN/WS_2/hBN Heterostructure**

Kazuki Kamada, Masahiro Shibuta, Haonan Wang, Kazunari Matsuda, Kenji Watanabe, Takashi Taniguchi, Jun Nishida, and Takashi Kumagai (Department of physics and electronics, Graduate school of Engineering, Osaka Metropolitan University, Japan, Institute of Advanced Energy, Kyoto University, Japan, Research Center for Electronics and Optical Materials, National Institute for Materials Science, Japan, Research Center for Materials Nanoarchitectonics, National Institute for Materials Science, Japan, and Institute for Molecular Science, Japan)

PA41 **Creation and Observation of Rotational Wave Packets at Vibrationally Excited States with Mid-Infrared Femtosecond Pulses**

Hiroki Tsusaka, Ikki Morichika, and Satoshi Ashihara (Institute of Industrial Science, The University of Tokyo, Japan)

PA42 **Unveiling the Activation Pathway of the CO_2 reduction catalyst trans(Cl)-[Ru(X,X'-dimethyl-2,2'-bipyridine)$(CO)_2Cl_2$] by Direct Spectroscopic**

Sergio Aranda, Luka Tatarashvili, Kerstin Oppelt, and Peter Hamm (University of Zurich, Switzerland)

PA43 **Ultrafast Broadband Strong-Field Tunneling in Asymmetric Nanogaps for Time-Resolved Nanoscopy**

Haoqing Ning, Marios Maimaris, Longren Li, Jiewen Wei, Emilie Gérouville, Evangelos Moutoulas, Zhu Meng, Clement Ferchaud, Dmitry Maslennikov, Navendu Mondal, Tong Wang, Colin Chow, Aleksandar Ivanov, Joshua Edel, Saif Haque, Misha Ivanov, Jon Marangos, and Dimitra G. Georgiadou (Department of Chemistry and Centre for Processible Electronics, Imperial College London, UK, Electronics and Computer Science & Optoelectronics Research Centre, University of Southampton, UK, Department of Chemistry, Imperial College London, UK, Department of Physics, Blackett Laboratory, Imperial College London, UK, and Max Born Institute, Berlin, Germany)

May 27 (Tuesday)
19:45–21:15

PB01 **Investigating the allosteric effect of ligand binding to DNA with temperature-jump IR spectroscopy**
Sophie Kendall-Price, Ryan Nichol, Gregory Greetham, Glenn Burley, and Neil Hunt (University of York, UK, University of Strathclyde, UK, and STFC Central Laser Facility, Research Complex at Harwell, UK)

PB02 **Thermal diffusivity of ternary lipid bilayer membranes estimated with picosecond time-resolved Raman spectroscopy**
Chiaki Hiraoka, Tsukasa Tokita, Akira Takakado, and Koichi Iwata (Gakushuin University, Japan)

PB03 **Structural basis for FTIR study of proton transporting heliorhodopsin, V2HeR3**
Ritsu Mizutori, Nipawan Nuemket, Jacopo D'Ascenzi, Shoko Hososhima, Luo Fangjia, Sayaka Ohashi, Rei Abe-Yoshizumi, Riccardo Palombo, Satoshi Tsunoda, Yuji Furutani, Oded Béjà, Massimo Olivucci, Eriko Nango, Kota Katayama, and Hideki Kandori (Department of Life Science and Applied Chemistry, Nagoya Institute of Technology, Japan, Japan Synchrotron Radiation Research Institute, Japan, RIKEN SPring-8, Japan, Department of Biotechnology, Chemistry and Pharmacy, University of Siena, Italy, OptoBioTechnology Research Center, Nagoya Institute of Technology, Japan, Faculty of Biology, Technion-Israel Institute of Technology, Israel, Department of Chemistry, Bowling Green State University, USA, and Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan)

PB04 **Generation and Characterization of Sub-5 fs Ultraviolet Pulse for Ultraviolet Impulsive Stimulated Raman Spectroscopy**
Masafumi Koga, Keisuke Ochiai, Yusuke Yoneda, and Hikaru Kuramochi (Institute for Molecular Science, Japan, and Graduate Institute for Advanced Studies, SOKENDAI, Japan)

PB05 **Ultrafast Proton Transfer Mechanism in 2-Naphthol and Azide Anion Tight Contact Reaction Pairs in DMSO: Probing with UV pump mid-IR Spectroscopy**
Debkumar Rana, Marc-Oliver Winghart, Anna Luisa Upterworth, Daniel Sebastiani, and Erik T. J. Nibbering (Max Born Institute for Nonlinear Optics & Short Pulse Spectroscopy, Germany, and Martin-Luther-Universitat Halle-Wittenberg, Germany)

PB06 **Intermolecular Dynamics in Aqueous Solutions of Aromatics: Charge Effect of Side Group**
Masako Shimizu and Hideaki Shirota (Chiba University, Japan)

PB07 **Unprecedented Isotope Effect on the Schiff Base Stretching Vibration Common to Sodium Ion-Pumping Rhodopsins**
Taiki Nakamura, Yuka Shinozaki, Akihiro Otomo, Taito Urui, Misao Mizuno, Rei Abe-Yoshizumi, Manami Hashimoto, Keiichi Kojima, Yuki Sudo, Hideki Kandori, and Yasuhisa Mizutani (The University of Osaka, Japan, Nagoya Institute of Technology, Japan, and Okayama University, Japan)

PB08 **Practical Considerations for Heterodyne Amplification of Electro-Optically Detected THz Signals**
Christopher Jon Stromberg and Edwin J. Heilweil (Hood College, USA, and National Institute of Standards and Technology, USA)

PB09 **Fluctuation Dynamics Observed by Two-Dimensional Fluorescence Excitation Cross-Correlation Spectroscopy**
Yusuke Yoneda and Hikaru Kuramochi (Institute for Molecular Science, Japan, and SOKENDAI, Japan)

PB10 **Exploring the long-lived excited states of backbone substituted copper(I) sensitizers by temperature-dependent step-scan FTIR spectroscopy**
Katharina Rediger, Felix Drexlmeier, Mohammad Deeb Mandourah, Max Wolf, Kurt Haselhoff, Michael Karnahl, Stefanie Tschierlei, Gereon Niedner-Schatteburg, and Maria Wächtler (Chemistry Department and State Research OPTIMAS, University of Kaiserslautern-Landau, Germany, and Department of Energy Conversion, Institute of Physical and Theoretical Chemistry, TU Braunschweig, Germany)

PB11 **Time-resolved FTIR study on an inward anion pumping variant converted from an outward** sodium pumping rhodopsin by replacing three amino acid residues
Masahiro Yamamoto, Hideki Kandori, and Yuji Furutani (Nagoya Institute of Technology, Japan, and OptoBioTechnology Research Center, Japan)

PB12 **Investigating the activation pathway of earth-abundant metal complexes that are used in CO_2** reduction as precatalysts
Luka Tatarashvili, Sergio Aranda, and Peter Hamm (University of Zurich, Switzerland)

PB13 **Depth Resolved Investigation of Hydrophobic Region of Liposomes using Vibrational Spectroscopy**
Sithara U.P. Nawagamuwage, Shakil Shahriar Efty, Md Muhaiminul Islam, and Igor V Rubtsov (Tulane University, USA)

PB14 **Temperature Dependence of Free OH Rotational Lifetime at the Water-Air Interface Studied by Density Functional Theory and Machine Learning Force Field Molecular Dynamics Simulations**
Hyuga Kato, Tatsuhiko Ohto, and Hajime Kimizuka (Nagoya university, Japan)

PB15 **Elucidation of the conversion mechanism for a proton-pumping protein that changes the pumping direction by amino acids substitutions**
Taito Urui, María del Carmen Marín, Keiichi Inoue, and Yasuhisa Mizutani (The University of Osaka, Japan, and The University of Tokyo, Japan)

PB16 **Ultrafast lasing dynamics of BSBCz thin films**
Tatsuya Yoshida, Kiyoshi Miyata, Yusei Kaya, Nobuhiro Takeishi, Chihaya Adachi, and Ken Onda (Kyushu University, Department of Chemistry, Japan, and Kyushu University, Center for Organic Photonics and Electronics Research (OPERA), Japan)

PB17 **Room-Temperature Polaron Dynamics in a Lead-free Double-Perovskite Nanocrystals**
Amit Kumar, Sakshi Chawla, and Arijit Kumar De (Condensed Phase Dynamics Group, Department of Chemical Sciences, Indian Institute of Science Education and Research Mohali., India)

PB18 **2D-IR analysis of blood serum with machine learning enables classification of relapse risk in melanoma patients**
Kelly Brown, Sabina Gurung, Any Farmer, Matthew J. Baker, Ruth Board, and Neil T. Hunt (Department of Chemistry and York Biomedical Research Institute, University of York, UK, School of Medicine and Dentistry, University of Central Lancashire, UK, and Department of Oncology, Lancashire Teaching Hospitals NHS Trust, Preston, UK)

PB19 **The unique inward proton transport mechanism in a microbial rhodopsin *Ns*XeR**
Yuma Ito, Tatsuro Nishikino, Hideki Kandori, and Yuji Furutani (Nagoya institute of technology, Japan, and OptoBioTechnology Research Center, Japan)

PB20 **Visualization of amyloidosis in human cardiac tissue using CARS spectroscopic imaging**
Koki Ota, Wataru Yamamoto, Takanori Yamaguchi, Toyokazu Otsubo, Yusuke Murakami, Zuliang Hu, and Hideaki Kano (Faculty of Science and Technology, Keio University, Japan, Faculty of Science, Kyushu University, Japan, Department of Cardiovascular Medicine, Saga University, Japan, and Ph.D. Program in Humanics, University of Tsukuba, Japan)

PB21 **First-principles Anharmonic Vibrational Spectrum Simulations for Organic-inorganic Hybrid Perovskite Compounds**
Houng-Wei Wang, Chih-Sheng Hsu, and Michitoshi Hayashi (National Taiwan University, Taiwan)

PB22 **Ultrafast Molecular Dynamics of Sulfuric Acid: Optical Kerr Effect Experiments and *Ab Initio* Molecular Dynamics Simulations**
Laura Kacenauskaite, Sijia Chen, Max Moncada Cohen, Gregory A.Voth, and Michael David Fayer (University of Copenhagen, Denmark, University of Chicago, USA, and Stanford University, USA)

PB23 **Structural Evolutions of the Retinal Chromophore in a Microbial Rhodopsin Functionally Converted by a Single Amino Acid Substitution**
Futa Nishimori, Taito Urui, and Yasuhisa Mizutani (The University of Osaka, Japan)

PB24 **Transient Grating Technique for Enhanced FSRS Signal Detection**
Shilpa Kurupath Bhavadas and Miroslav Kloz (ELI Beamlines, Czech Republic)

PB25 **2D-IR Spectroscopy reveals structural heterogeneity in GLFG-rich hydrogels as models for the nuclear pore complex**
Avinash Chettri, Till Stensitzki, Simone Techert, and Henrike Müller-Werkmeister (University of Potsdam, Institute of Chemistry, Germany, and DESY, Hamburg, Germany)

PB26 **Illuminating Single- and Multi-Branched Donor–Acceptor Systems with Multidimensional** Spectroscopies: Intrinsic Asymmetry, Torsional Disorder and their Redox Dependence
Joseph Kölbel and Ricardo J. Fernández-Terán (University of Geneva, Switzerland)

PB27 **Retinal chromophore structure in ancestral microbial rhodopsins**
Kaho Ikeda, Haruto Ishikawa, Taito Urui, and Yasuhisa Mizutani (The University of Osaka, Japan)

PB28 **Mapping structural heterogeneity in poly(3-hexylthiophene) in the excited state by transient two-dimensional electronic spectroscopy**
Garima Bhutani, Korenobu Matsuzaki, and Tahei Tahara (Molecular Spectroscopy Laboratory, RIKEN, Japan, and Ultrafast Spectroscopy Research Team, RIKEN Centre for Advanced Photonics (RAP), Japan)

PB29 **Photoactivation of human green cone opsin studied by stimulated Raman spectroscopy**
Miroslav Kloz, Sarah Luise Schmidt, and Polina Isaikina (Department of structural dynamics, The Extreme Light Infrastructure ERIC, Czech Republic, and Laboratory of Biomolecular Research, Paul Scherrer Institute PSI, Switzerland)

PB30 **Ultrafast Spectroscopy of Transparent Conducting Oxide La-doped $BaSnO_3$ Exhibits Long Lived Charge Carrier Dynamics**

Sara Gebre, Heungsoo Kim, Evgeniya Lock, Daniel Ratchford, Jeffrey Owrutsky, and Adam Dunkelberger (NRC Postdoctoral Associate, Chemistry Division, US Naval Research Laboratory, USA, Chemistry Division, US Naval Research Laboratory, USA, Materials Science and Technology Division, US Naval Research Laboratory, USA, and Precise Systems, Inc., USA)

PB31 **Time-Resolved Infrared Studies of Riboflavin and Porphyrin Derivatives**

Meiyue Liu, Jacob Felix Jones, Somnath M. Kashid, Juno Underhill, Aditya G. Rao, Ethan L. Bungay, J. L. Ross Anderson, Adrian J. Mulholland, and Thomas A. A. Oliver (University of Bristol, UK)

PB32 **2D Raman-THz Spectroscopy of Imidazolium-Based Ionic Liquids**

Saurabh Shukla, Andrey Shalit, and Peter Hamm (University of Zurich, Switzerland)

PB33 **Dynamics of α-Synuclein During Liquid-Liquid Phase Separation**

Asger Berg Thomassen, Akriti Mishra, Steven Joop Roeters, and Tobias Weidner (Aarhus University, Denmark, and Amsterdam University Medical Center, Netherlands)

PB34 **Time-Resolved Infrared Spectroscopy of Cyclopentane-1,3-diyl Diradicals**

Masato Kondoh, Shunsuke Kuboki, Hidetaka Kume, Eriku Oda, Manabu Abe, and Taka-aki Ishibashi (Nara Women's University, Japan, University of Tsukuba, Japan, and Hiroshima University, Japan)

PB35 **Time-resolved infrared study on the reaction mechanism of the secondaryplastoquinone Q_B in photosystem II**

Yuki Kato, Honami Ito, and Takumi Noguchi (Nagoya University, Japan)

PB36 **Time-resolved electronic and vibrational spectroscopy unravelling complete photoswitching cycle in fluorescent protein Dreiklang**

Anam Fatima, YongLe He, James N. Luliano, Gregory M. Greetham, Partha Malakar, Andras Lukacs, Peter J. Tonge, and Stephen R. Meech (University of East Anglia, UK, Stony Brook University, USA, Central Laser Facility, Research Complex at Harwell, Rutherford Appleton Laboratory, UK, and University of Pecs, Hungary)

PB37 **A new analytical method using two-dimensional correlation spectroscopy: counting spectra and application to the attribution of gas-phase cluster species**

Kazunori Ban, Daisuke Miyata, Yoshiteru Matsumoto, Hiroaki Takahashi, Shin-ichi Morita, and Takakazu Nakabayashi (Grad. Sch. Pham. Sci. Tohoku Univ., Japan, Fac. Sci. Shizuoka Univ., Japan, and Grad. Sch. Sci. Tohoku Univ., Japan)

PB38 **Vibrational Labels for the Multidomain Photosensor Protein YF1**
Philipp Janke, Raoul E. Herzog, Paul Fischer, Philipp J. Heckmeier, and Peter Hamm (University of Zurich, Switzerland)

PB39 **Theoretical Development in Hybrid QM/MM for Calculating Anharmonic Vibrational Signatures of Catalytic Systems**
Jingcheng Guan (University College London, UK)

PB40 **Unveiling the Role of Dynamic Disorder in the Slowing Down of Supercooled Water Dynamics**
Shinji Saito (Institute for Molecular Science, Japan)

PB41 **Stereoelectronic Effects on Collagen Thermal Stability: Insights from Two-Dimensional Infrared Spectroscopy of Hydroxyproline Diastereomers**
Fumiki Matsumura, Pablo Gomez Argudo, Giulia Giubertoni, Johannes Hunger, and Mischa Bonn (Max Planck Institute for Polymer Research, Germany, and Van 't Hoff Institute for Molecular Sciences, Netherlands)

PB42 **Determining the Relative Population of Dark Modes and Polaritonic States in a Vibrational Strong Coupling System**
Harsh H. Bhakta and Wei Xiong (Department of Chemistry and Biochemistry, University of California San Diego, USA, Materials Science and Engineering Program, University of California San Diego, USA, and Department of Electrical and Computer Engineering, University of California San Diego, USA)

Timetable

May 25	May 26	May 27	May 28	May 29	May 30
	Breakfast 7:00-8:00	Breakfast 7:00-8:00	Breakfast 7:00-8:00	Breakfast 7:00-8:00	Breakfast 7:00-8:00
	Opening address	Oral presentations 8:30-10:00	Oral presentations 8:30-10:00	Oral presentations 8:30-10:00	Oral presentations 8:30-9:40
	Oral presentations 8:50-10:00				
	Break 10:00-10:30	Break 10:00-10:30	Break 10:00-10:30	Break 10:00-10:30	Break 9:40-10:10
	Oral presentations 10:30-12:00	Oral presentations 10:30-12:00	Oral presentations 10:30-11:30	Oral presentations 10:30-12:10	Oral presentations 10:10-11:20
					Closing address
	Lunch 12:05-13:05	Group photo	Lunch 11:35-12:35	Lunch 12:15-13:15	
		Lunch 12:10-13:10			
	Free discussion and/or relaxation	Free discussion and/or relaxation	Excursion 13:00-17:30	Free discussion and/or relaxation	
	Oral presentations 14:00-15:30	Oral presentations 14:00-15:40		Oral presentations 14:00-15:30	
Registration 15:00-	Break 15:30-16:00	Break 15:40-16:10		Break 15:30-16:00	
	Oral presentations 16:00-17:30	Oral presentations 16:10-17:40		Oral presentations 16:00-17:40	
Reception 18:00-20:00	Dinner 18:00-19:30	Dinner 18:00-19:30	Dinner 18:00-19:30	Banquet 18:20-20:20	
	Poster presentations 19:45-21:15	Poster presentations 19:45-21:15		Award speech	