

Organizers: Thomas L. C. Jansen and Munira Khalil

TSRC Host: Mark Kozak, 970-708-4426

Venue: Telluride Elementary School (447 W Columbia Ave)

MONDAY, JULY 27 2015

Session 1, Chair: Thomas L. C. Jansen (University of Groningen)

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| 7:30 AM | Breakfast at TSRC meeting site |
| 8:00 AM | Opening Remarks by Thomas L.C. Jansen (University of Groningen) |
| 8:05 AM | Munira Khalil (University of Washington): <i>2D Vibrational-Electronic Spectroscopy</i> |
| 8:50 AM | Andrew Moran (University of North Carolina, Chapel Hill): <i>Femtosecond Stimulated Raman Spectroscopy by Six-Wave Mixing</i> |
| 9:35 AM | Jeffery Cina (University of Oregon): The Role of Vibrations in Energy Transfer and Light-Harvesting Systems |
| 10:20 AM | Coffee Break |
| 10:50 AM | Anouk Rijs (Radboud University): Understanding Soft Vibrational Modes by Combining Far-IR Action Spectroscopy and Born-Oppenheimer Molecular Dynamics |
| 11:35 AM | Anne McCoy (University of Washington): Spectral Signatures of Large Amplitude Motions in Water Clusters and Charged Systems |
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| 12:20 PM | Lunch at TSRC meeting site |

Session 2, Chair: David Leitner (University of Reno, Nevada)

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| 1:30 PM | Gerhard Stock (University of Freiburg): <i>Vibrational and Conformational Dynamics of Allosteric Communication</i> |
| 2:15 PM | Karin Hauser (Universität Konstanz): <i>Biomolecular Dynamics Studied with Time-Resolved IR Spectroscopy</i> |
| 3:00 PM | Coffee Break |
| 3:30 PM | Sebastian Westenhoff (University of Gothenburg): <i>Site-Selective Isotope Labelling of Proteins for Infrared Spectroscopy</i> |
| 4:15 PM | Kevin Kubarych (University of Michigan): <i>Biomolecule Hydration Probed with 2D-IR Spectroscopy: From Crowding to Preferential Co-solvation</i> |

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TUESDAY, JULY 28 2015

Session 3, Chair: Judy Kim (University of California, San Diego)

- 1:30 PM Markus Meuwly (University of Basel): *Vibrationally Induced Reactivity in Atmospheric Reactions*
- 2:15 PM Lauren Webb (University of Texas, Austin): *Origin and Function of Electrostatic Fields in Lipid Bilayer Membranes Measured With Vibrational Spectroscopy*
- 3:00 PM Coffee Break
- 3:30 PM Etienne Garand (University of Wisconsin, Madison): *Vibrational Spectroscopy of Isolated Transition Metal Complexes and Reaction Intermediates*
- 4:15 PM Alexander Schubert (Université de Toulouse III): *Atomistic Simulation of Dissipative Processes and Direct Decoherence Observation via Non-linear Spectroscopy*

6:00 PM TSRC Town Talk at the Conference Center in Mountain Village

WEDNESDAY, JULY 29 2015

Session 4, Chair: Yoshitaka Tanimura (Kyoto University)

- 1:30 PM Ellen Backus (Max Planck Institute for Polymer Research): *Ultrafast Structural Dynamics of Membrane-Bound Water Molecules Revealed by Two-Dimensional Surface-Specific Vibrational Spectroscopy*
- 2:15 PM Akihito Morita (Tohoku University): *Recent Computational Studies on Surface Vibrations And Sum Frequency Generation Spectroscopy*
- 3:00 PM Coffee Break
- 3:30 PM Peter Hamm (University of Zurich): *2D-ATR IR Spectroscopy of Organic Monolayers at Metal-Liquid Interfaces*
- 4:15 PM Tõnu Pullerits (Lund University): *Excited State Dynamics - Unraveling Mixing of Electronic and Vibronic Coherences.*

6:00 PM TSRC Picnic @ Telluride Elementary School at 447 W Columbia Ave

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THURSDAY, JULY 30 2015

Session 5, Chair: Jeff Cina (University of Oregon, Eugene)

- 7:30 AM Breakfast at TSRC meeting site
- 8:00 AM Minhaeng Cho (Korea University): *Water H-Bonding Network and Ion Aggregate Structures in High Salt Solutions*
- 8:45 AM Keisuke Tominaga (Kobe University): *THz Spectroscopy and IR Nonlinear Spectroscopy on Water, Aqueous Solutions, and Proteins*
- 9:30 AM Coffee Break
- 10:00 AM Yoshitaka Tanimura (Kyoto University): *Simulating, Modeling, and Analyzing Two-Dimensional THz-Raman Spectroscopies*
- 10:45 AM Jens Bredenbeck (Johann Wolfgang Goethe-Universität): *TBD*
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11:30 AM Lunch

Session 6, Chair: Munira Khalil (University of Washington)

- 1:30 PM David Leitner (University of Reno, Nevada): *Controlling the Direction of Vibrational Energy Flow in Molecules: Alkane Chains, Alkyl Benzenes and Proteins*
- 2:15 PM Judy Kim (University of California, San Diego): *Tryptophan Radicals in Proteins*
- 3:00 PM Coffee Break
- 3:30 PM Sebastian Buchenberg (University of Freiburg): *Pathways of Vibrational Energy in Biomolecules*
- 4:00 PM Thomas Jansen (University of Groningen): *Vibrational Dynamics in Solids*
- 4:45 PM Closing Remarks
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6:00 PM Workshop Dinner, TBD

FRIDAY, JULY 31 2015: FREE DAY FRIDAY!