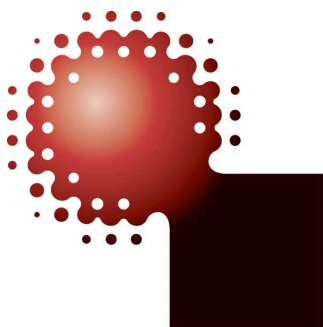


# New Frontiers in Advanced Spectroscopy of Complex Systems: Dynamics in Liquids, Interfaces and Biological Systems

August 31, 2008  
Clock Tower Centennial Hall,  
Kyoto University

Program



KYOTO UNIVERSITY  
Global COE Program

**INTEGRATED**  
MATERIALS SCIENCE



Supported by Kyoto University Global COE program “Integrated Material Sciences”

## Program

9:30-9:40 Opening Remarks

### Session 1

9:40-10:00 "Characterization of Mid-Infrared Pulses"  
**Kevin F. Lee** (Ecole Polytechnique)

10:00-10:20 "Recent Advances on Automated Multidimensional Infrared Spectroscopy"  
**Wei Xiong** (University of Wisconsin)

10:20-10:40 "Applications of Electronic-Vibration-Vibration 2DIR Spectroscopy"  
**Paul M. Donaldson** (Imperial College, London)

10:40-11:00 Coffee Break

### Session 2

11:00-11:20 "Nonadiabatic Effects on the Amide I Vibrations of Solvated Peptides"  
**Maja Kobus** (Goethe University)

11:20-11:40 "Coherences Lifetimes in Systems of Excitons"  
**Leah Zimmerman** (Technical University Munich)

11:40-12:00 "Vibrational Energy Transport in the Amide I and II Modes of Model Peptides"  
**Arend G. Dijkstra** (University of Groningen)

12:00-13:30 Lunch

### Session 3

- 13:30-13:50 "The Phasing Problem in 2D and 3D Spectra"  
**Sean Garrett-Roe** (University of Zürich)
- 13:50-14:10 "Simulations of the Nonlinear Vibrational Response of Coupled Systems"  
**Alexander Paarmann** (University of Toronto)
- 14:10-14:30 "Generation of Reliable Theoretical 2DIR Spectra: Application and Challenges"  
**Rui Guo** (Imperial College, London)
- 14:30-15:00 Coffee Break

### Session 4

- 15:00-15:20 "Solvation Dynamics of p-Terphenyl and Tryptophan Studied by UV Photon Echo and Fluorescence Up-Conversion"  
**Ahmad Ajdarzadeh Oskouei** (Ecole Polytechnique Fédérale de Lausanne)
- 15:20-15:40 "Dynamics and Structure of Water at the Lipid Interface"  
**Artem A. Bakulin** (University of Groningen)
- 15:40-16:00 "Ultrafast 2D-IR Vibrational Echo Spectroscopy of Heme Proteins"  
**Haruto Ishikawa** (Osaka University)
- 16:00-16:30 Coffee Break

## Session 5

- 16:30-16:50 "Intra-Molecular and Energy Relaxations in Molecular Systems probed with fs Time-Resolved Fluorescence"  
**Andrea Cannizzo** (Ecole Polytechnique Fédérale de Lausanne)
- 16:50-17:10 "Frequency Resolved Three Pulse Photon Echoes"  
**Niklas U. Christensson** (Lund University)
- 17:10-17:30 "UV Spectroscopies as a Tool to Study Protein Functionality"  
**Cristina Consani** (Ecole Polytechnique Fédérale de Lausanne)
- 17:30-17:50 "Are Excitons Localized in Spatially Separated Islands in Semiconductor Quantum Wells Coupled? New Experimental Evidence from 2D Spectroscopy"  
**Thomas Jarvis** (University of Texas-Austin)
- 17:50-18:00 Concluding Remarks
- 19:00- Party at Japanese Style Bar