The Physical Chemistry Division has organized the following topical oral symposia, consisting of both invited and contributed papers, and also topical and general poster sessions. The abstract deadline is March 21, 2011. For those interested in an oral presentation, please submit abstracts to the appropriate symposium. For each symposium, the organizers (listed below) will select some contributed papers for oral presentation; contributions not selected for oral presentation will be assigned to the poster session.

**ADVANCES IN SERS AND MOLECULAR PLASMONICS**
Molecular plasmonics is an emerging field of excitonic interactions of molecules with collective electronic excitations (plasmons) in noble metal films and nanoparticles. The rapidly growing interest in plasmonics stems from the ability to control, manipulate, and amplify light on the nanoscale. This approach has many potential applications, including nanoscale optical spectroscopy, surface-enhanced Raman scattering (SERS), and surface plasmon resonance sensing. This symposium will highlight recent experimental and theoretical advances in the field of SERS and molecular plasmonics.

Lasse Jensen, Pennsylvania State University, jensen@chem.psu.edu
Richard P. Van Duyne, Northwestern University, vandyue@northwestern.edu

**SYMPOSIUM IN HONOR OF 100TH ANNIVERSARY OF MARIE CURIE’S NOBEL PRIZE FOR INTERNATIONAL YEAR OF CHEMISTRY**
This symposium will be a celebration of the current research in physical chemistry conducted by women scientists. The speakers will represent the diverse nature of physical chemistry. The sessions will cover experimental and theoretical research on topics such as surfaces and interfaces, polymers and macromolecules, gas phase ions and clusters, energy and the environment, and biophysics. For more information, go to http://oachoach.oregon.edu and click on the “Go Physical” button.

Geri Richmond, University of Oregon, richmond@oregon.edu
Ellen Stechel, Sandia National Laboratories, es@stechel.sandia.gov
Jeanne M. Robinson, Los Alamos National Laboratory, jeanne.robinson@lanl.gov

**PHYSICAL CHEMISTRY POSTER SESSION**
Contributions from all areas of physical chemistry are highly encouraged for the poster session to be held on Wednesday evening, August 31, 2011. See announcement below for information about the Physical Chemistry Student Poster Awards.

Sharon Hammes-Schiffer, Pennsylvania State University, sha@chem.psu.edu

**EXCITED STATE DYNAMICS: THEORY AND EXPERIMENT**
This symposium will explore experimental and computational efforts to elucidate the dynamics of small molecules, clusters, nanoparticles, and macromolecular systems in excited electronic states, in both gaseous and condensed phase environments. Recent advances in quantum chemistry have enhanced our ability to calculate electronic excitation energies and electronic couplings in large molecules, and to perform excited-state molecular dynamics simulations. At the same time, developments in both time- and frequency-domain spectroscopies continue to push the envelope of what is accessible experimentally, revealing new aspects of molecular photophysics and photochemistry. This symposium will report new experimental results for theorists to rationalize, as well as new theoretical predictions to be tested experimentally, on topics that include nonequilibrium dynamics, photochemistry, ab initio molecular dynamics, excitation energy transfer, and exciton dynamics.

John M. Herbert, The Ohio State University, herbert@chemistry.ohio-state.edu
Stephen Bradford, University of Southern California, stephen.bradford@usc.edu

**ADVANCED MICROSCOPY TECHNIQUES FOR BIOPHYSICAL QUESTIONS**
In recent years tremendous progress has been made in the development of optical microscopy techniques. Many of these techniques represent promising approaches to address outstanding questions in biology and biophysical chemistry. The transition from a prototype technique for biological research tool, however, is challenging. This symposium aims to sketch a picture of the latest achievements in the application of advanced microscopy techniques to solve challenging biological and physical questions. In addition to highlighting the applications of advanced microscopy techniques, this symposium will also focus on emerging methods in microscopy with particular relevance to biological applications, including non-linear vibrational imaging, three-dimensional tracking, super-resolution imaging, and ultrafast imaging.

Christine K. Payne, Georgia Institute of Technology, christine.payne@chemistry.gatech.edu
Eric O. Potma, University of California, Irvine, epotma@uci.edu

**REDUCED DENSITY MATRICES IN QUANTUM CHEMISTRY AND PHYSICS**
The symposium aims to provide a forum for the exchange of the latest developments in the theory and applications of reduced density matrices (RDMs) as a lens to view recent advances in quantum chemistry and physics. The following topics will be covered: (a) the description of strong electron correlation and entanglement in systems that are critical to our understanding of chemical and biological processes and reactivity as well as material science; (b) new methodologies in density functional theory and wavefunction methods and their connections to RDM methods; and (c) the use of RDMs in the study of molecular reactivity and light harvesting, non-Born-Oppenheimer nuclear motion, and quantum information and quantum molecular control. The symposium will provide a unique forum for participants to explore the important roles of RDMs throughout various areas of chemical and theoretical chemistry.

David A. Mazzotti, The University of Chicago, damazz@uchicago.edu
Herschel A. Rabitz, Princeton University, hrabbit@princeton.edu
Neil Shenvi, Duke University, neil.shenvi@duke.edu

**POSTDOCTORAL RESEARCH AWARDS**
The PHYS Division plans to highlight leading research by postdoctoral fellows at the Fall National ACS meeting in Denver through a series of special awards. Award recipients will be announced during the PHYS executive dinner on Monday evening, September 5, 2011. Details on the award and applications procedure may be found at http://phys.acs.org.

**PHYSICAL CHEMISTRY SYMPOSIUM WORKSHOP FOR UNDERGRADUATE CHEMISTRY MAJORS**
The Workshop for Undergraduate Chemistry Majors is targeted for current junior chemistry majors. Students are encouraged to stay the entire meeting. Up to 25 outstanding undergraduate chemistry students will be selected for a series of undergraduate-focused talks and social events during the Denver meeting. In addition, they will be expected to present posters on their research as part of the PHYS poster session. More information and application materials can be found at http://www.phys.acs.org/UGworkshop11.html. The deadline is February 11, 2011.

George Shields, Bucknell University, george.shields@bucknell.edu

On-Line Abstract Submission Deadline: March 21, 2011
http://abstracts.acs.org