**Division of Chemical Physics** 

The American Physical Society

### A Message from the Chair, Mark Ratner

Congratulations to our new Vice-Chair Will Castleman, and to our new Member-at-Large Gil Nathanson! We thank them for their willingness to bring their insight and energy to serving our community, the Division of Chemical Physics, in the years ahead. In addition, I want to thank Mike Duncan (outgoing Member-at-Large) for his service to the DCP and to our community. I am also pleased to announce the list of new APS Fellows in DCP for 2006 (see below) and wish to congratulate them on their scientific achievements, which range from spectroscopy to nanostructures. The breadth and depth of the research areas that these new Fellows represent reflect the enduring vitality and self-renewing of Chemical Physics.

Note that although the on-line pre-registration deadline has passed to register for the APS March Meeting in Baltimore, you will be able to register on site. As described below, Hai-Lung Dai & Co. have pulled together an impressive set of focus sessions on a broad set of topics – it should be exciting and riveting. Baltimore is the home of Orioles and food, aquariums and soups and a great cathedral, so the ambience should be fine. My chaotic time as DCP Chair ends at the March Meeting. Hai-Lung will be the next chair, and so we know DCP will thrive.

Finally, I suggest that you look at the new NAS report on The Gathering Storm. It deals with science, and with science education, in 2006. It is elegant and targeted, and provides food both for thought and for action. As a community, the APS has been an effective champion for science in the society – this document shows how much such advocacy is needed, and illustrates some of the current challenges and opportunities.

## March APS Meeting, Baltimore, March 13-17, 2006

Information about the March 2006 meeting is available at <a href="http://www.aps.org/meet/MAR06/index.cfm">http://www.aps.org/meet/MAR06/index.cfm</a>. Hai-Lung Dai is the DCP program chair and is responsible for coordinating all the special focus topics and contributed sessions at the meeting. There are 8 special focus topics sponsored by the DCP scheduled for the March Meeting:

- <u>Promises and Challenges in Chemical Dynamics (informal memorial of Richard Bersohn),</u> organized by Laurie Butler (U. Chicago) and Louis Brus (Columbia U.)
- Aerosols, Clusters and Droplets: Physics and Chemistry of Nanoobjects (informal memorial of Roger Miller), organized by Roger Miller (deceased), Frank Stienkemeier (U. Freiburg) and Michael Duncan (U. Georgia)
- <u>Ultrafast and Ultrahigh Field Chemistry</u>, organized by Robert Levitz( Temple U.) and Kenji Ohmori (Inst. Mol. Sci. Okazaki)
- <u>Frontiers in Computational Chemical Physics</u>, organized by Andrew Rappe (U. Pennsylvania) and Jeffrey Saven (U. Pennsylvania)
- <u>Chemical and Spectroscopic Applications of Nonlinear Optics</u>, organized by Nancy Levinger (Colorado St. U.) and Hongfei Wang (U. Sci. Tech. China)
  - DCP annual business meeting
  - Nominations for APS prizes administered by DCP

March 14, 2006

July 1, 2006

- Physical Chemistry of Nanoscale Systems, organized by Tim Lian (Emory U.) and Jin Zhang (UC Santa Cruz)
- <u>Surface and Interfaces in Electronic Materials and Electrochemical Processes</u>, organized by Eric Borguet (Temple U.) and Yuh-Lin Wang (Inst. Atomic Mol. Sci. Taipei)
- Spectroscopy of Biomolecules: From Isolated Molecules to the Cell Environment (cosponsored with the Division of Biological Physics), organized by Feng Gai (U. Pennsylvania) and David Pratt (U. Pittsburgh)

Additional information about the DCP Special Focus Topics for the March 2006 meeting is available from the DCP web site at <a href="http://www.aps.org/units/dcp/otherapsmeetings.cfm">http://www.aps.org/units/dcp/otherapsmeetings.cfm</a>. Programs for the DCP sessions will be posted on the DCP web site before the meeting. Onsite registration begins at 2 PM on Sunday, March 12.

The annual DCP business meeting is scheduled for Tuesday, March 14, 2006 at 5:30 PM and is open to all DCP members. The business meeting will include short reports of DCP activities, presentation of Certificates of Fellowship to new APS Fellows who are DCP members, introduction of student travel fellowship awardees, and an invitation to suggest special focus session topics for the 2007 meeting to the 2006 program chair, Dan Neumark.

### **Graduate Student Travel Awards**

Congratulations to this year's winners of Graduate Student Travel Awards: **Heather Abbott**, University of Virginia; **Elizabeth Carroll**, University of Michigan; **Chong Fang**, University of Pennsylvania; **Jamie Gengler**, Arizona State University; **John Glennon**, Washington University; **Shih-Hui Jen**, University of Pennsylvania; **Brandon McNaughton**, University of Michigan; **Hongxia Ning**, University of Missouri-Rolla; **Xiaoying Sun**, Polytechnic University.

# **Congratulations to 2005 APS Fellows**

The Division of Chemical Physics extends its congratulations to the following individuals who were nominated by the Division of Chemical Physics and elected to Fellowship in the American Physical Society. Only 1/2 of 1% of the total APS membership is selected for Fellowship in the Society each year.

#### Scott Law Anderson, University of Utah

For contributions to understanding chemical dynamics of ion-molecule reactions, size-selected model catalysts, and gas-phase clusters.

#### Andrew James Fisher, University College London

For his contributions to the theory of electronic phenomena at the nanoscale.

#### Nancy Ellen Levinger, Colorado State University

For pioneering work on dynamics in the condensed phase, especially molecular assemblies, molecules at liquid interfaces and in confined environments by ultrafast spectroscopic techniques and neutron scattering.

#### Robert J. Levis, Temple University

For the pioneering development of the area of strong field chemistry in which ultrafast and intense laser pulses are used to modify, manipulate and detect the reactions of complex molecules.

#### Todd J. Martinez, University of Illinois

Martinez has revolutionized the way we view molecular photochemistry, especially cis-transisomerization around a C=C bond, through his development of new methods in ab initio quantum dynamics.

#### Jayendran Cumaraswamy Rasaiah, University of Maine

For pioneering contributions to fundamental electrolyte theory, the thermodynamics of polarfluids, the transport of ions in polar solvents and water through carbon nanotubes, and studies of water in nonpolar cavities

#### John (Jack) Peter Simons, University of Utah

For development of theoretical methods for and applications to electron-molecule interactions as well as contributions to education in theoretical chemistry.

#### Sotiris S. Xantheas, Pacific Northwest National Laboratory

For fundamental contributions to the understanding of molecular interactions in aqueous systems.

#### Xiao Cheng Zeng, University of Nebraska

For his original contributions to the study of vapor-liquid nucleation and discoveries of novel nanostructures of twodimensional silicon clusters and single-walled silicon nanotubes.

### **DCP Awards Nominations**

Nominations for the three awards administered by the Division of Chemical Physics – the Herbert P. Broida Prize, the Irving Langmuir Prize in Chemical Physics, and the Earle K. Plyler Prize for Molecular Spectroscopy – are due in early July 2006. Instructions for submitting a nomination are included on the APS web site at <a href="http://www.aps.org/praw/index.cfm#prizes">http://www.aps.org/praw/index.cfm#prizes</a>

### **DCP Election Results**

Congratulations to Will Castleman (Pennsylvania State University), who will assume the role of Vice-Chair, and Gil Nathanson (University of Wisconsin), who becomes the new Member-at-Large. The terms of the new positions begin at the conclusion of the March 2006 Meeting. We are indebted to outgoing officers Mark Ratner (Chair) and Mike Duncan (Member-at-Large) for their service to the division.

## **DCP Membership**

Membership in the American Physical Society's Division of Chemical Physics allows you to support a primary forum for chemical physics research. The status and influence of the DCP within the APS is dependent on the number of DCP members. Increasing DCP membership is crucial to preserving this important professional asset. If you are not a DCP member, we encourage you to join on the web (<a href="http://www.aps.org/memb/unitapp.cfm">http://www.aps.org/memb/unitapp.cfm</a>) or by phone (301-209-3280).

## **Meetings of Possible Interest to DCP Members**

# Gordon Research Conference on Atomic and Molecular Collisions

July 9-14, 2006

Colby-Sawyer College, New London, NH

Chair: David R. Yarkony
Vice Chair: Arthur G. Suits
Email: YARKONY@JHU.EDU,

Ellian. <u>TARKON T@JITO.EDU</u>,

ARTHUR.SUITS@SUNYSB.EDU

URL: http://www.grc.org/programs/2006/atomic.htm

# **Gordon Research Conference on Chemistry at Interfaces**

July 9-14, 2006

University of New England, Biddeford, ME

Chair: Nicholas D. Spencer Vice Chair: Scott S. Perry

Email: NICHOLAS.SPENCER@MAT.ETHZ.CH,

PERRY@UH.EDU

URL: http://www.grc.org/programs/2006/interfac.htm

# **Gordon Research Conference on Water & Aqueous Solutions**

July 30 - August 4, 2006

Holderness School, Plymouth, NH

Chair: Branka M Ladanyi Vice Chair: Alan K Soper

Email: BL@LAMAR.COLOSTATE.EDU,

A.K.SOPER@RL.AC.UK

URL: http://www.grc.uri.edu/programs/2006/water.htm

#### Workshop on Attosecond Science

July 31 – September 15, 2006

Kavli Institute for Theoretical Physics, UC-Santa

Barbara

Organizers: André Bandrauk, Nat Fisch, and Anthony

Starace

Email: astarace1@unl.edu

URL: http://www.kitp.ucsb.edu/activities/auto2/?id=333

# **Summer School on Techniques of Surface Science** and Catalysis

August 13-26, 2006

University of California, Santa Barbara Organizers: Horia Metiu and Susannah Scott

URL: http://pire-ecci.ucsb.edu/Summer%20Schools.htm