

Users' Meeting 2011

*Synchrotron Radiation Center
University of Wisconsin-Madison*



AGENDA

FRIDAY, September 16, 2011

- 8:00–8:30am** *Breakfast & Registration, KRC Meeting Room (Room formerly known as PSL Library)*
- Opening**
- 8:30–8:35am** **Welcome** by Kathleen M. Gough, Meeting Organizer, University of Manitoba
- 8:35–9:00am** **SRC Update** by Joe Bisognano, SRC Director
- 9:00–9:15am** **Transformational Science at the SRC** by Tai C. Chiang, SRC Scientific Director, University of Illinois at Urbana-Champaign
- Session 1** **Session Chair: Kathleen M. Gough**
- 9:15–9:45am** **Synchrotron Infrared Spectromicroscopy and the Gulf of Mexico Deep-Sea Oil Plume**
Hoi-Ying N. Holman, Lawrence Berkeley Laboratory (*Invited*)
- 9:45–10:15am** **Topological Surface States in Topological Insulators & Superconductors: Discovery and New Frontiers**
M. Zahid Hasan, Princeton University (*Invited*)
- 10:15–10:30am** *Coffee Break, KRC Meeting Room (Room formerly known as PSL Library)*
- Session 2** **Aladdin Lamp Presentations (random order)** **Session Chair: Joe Bisognano**
- 10:30–11:00am** **Photochemical Bond Breaking in Proteins and Related Molecules**
Phillip S. Johnson, University of Wisconsin-Madison
- 11:00–11:30am** **Emergence of High Temperature Superconductivity from a Strange Metal Phase via Two Crossovers**
Junjing Zhao, University of Illinois at Chicago
- 11:30–12:00noon** **Formation, Structure, and Dynamics of Graphene Monoxide/Graphene Thin Films**
Eric C. Mattson, University of Wisconsin-Milwaukee
- 12:00–12:45pm** *Lunch, KRC Meeting Room (Room formerly known as PSL Library)*
- Session 3** **Poster Session I**
- 12:45–1:45pm** **Poster Session I (SRC Vault)**

AGENDA

Session 4

Session Chair: Adam Kaminski

- 1:45–2:15pm** **The X-ray View of Ultrafast Magnetism**
Hermann A. Durr, SLAC National Accelerator, *(Invited)*
- 2:15–2:35pm** **Investigating Barnacle Cement: The Composition of Underwater Glue**
Rebecca Metzler, Colgate University
- 2:35–2:55pm** **The Effects of Plasma and VUV Exposure on the Time Dependent Dielectric Breakdown of Low-k Porous Organosilicate Glass**
Michael T. Nichols, University of Wisconsin-Madison

2:55–3:15pm **Coffee Break, KRC Meeting Room (Room formerly known as PSL Library)**

Session 5

Session Chair: John Joyce

- 3:15–3:45pm** **The Surface Science of Adsorption on Crystalline Ferroelectric Polymer Surfaces**
Peter Dowben, University of Nebraska-Lincoln *(Invited)*
- 3:45–4:05pm** **IRENI – Latest Developments in Spatial Resolution**
Carol Hirschmugl, University of Wisconsin-Milwaukee
- 4:05–4:35pm** **Chemical Imaging Live Cell Conversion of Biomass to Bioplastics**
Barbara Illman, US Forest Service, Forest Products Lab

Session 6

- 4:35–4:45pm** **Presentation of Aladdin Lamp and Poster Session 1 Awards by Joe Bisognano**
- 4:45–5:45pm** **Business Meeting, Chaired by Tomasz Durakiewicz**

Days End

- 6:15pm** **Cocktails at Top of the Park (Cash Bar will remain open during dinner.)**
7:15pm **Banquet at Top of the Park**

**Driving directions from SRC to Top of the Park located in the Inn on the Park
22 S. Carroll Street, Madison, Phone 608-257-5995**

- Take a right out of the SRC parking lot onto Schneider DR. At the bottom of the Hill turn left onto US51 N.
- Go north on US 51 for 6.3 miles. As you approach US12/US18 get into the left lane.
- Merge onto US12/US18 West (Beltline) via the ramp on the left.
- In 3.1 miles you will exit at exit #263 and merge onto John Nolan Dr going north and travel 2.1 miles.
- Turn left onto S. Broom Street. Travel four blocks to West Washington and turn right
- Then proceed four more blocks to Carroll Street and turn right.
- On Carroll Street proceed one block to the BEST WESTERN PLUS/Inn on the Park.

(SEE DETAILED MAP AND DIRECTIONS IN NEXT SECTION)

AGENDA

SATURDAY, SEPTEMBER 17, 2011

8:30–9:00am *Continental Breakfast & Registration, KRC Meeting Room (Room formerly known as PSL Library)*

Session 7

Session Chair: Carol Hirschmugl

9:00–9:30am

Molecular Mechanisms of Biostabilization

Alptekin Aksan, University of Minnesota-Twin Cities (*Invited*)

9:30–9:50am

Assessing the Impact of Unobserved Branches on Transition Probabilities of Neutral Neodymium Using Synchrotron Radiation

Mark H. Stockett, University of Wisconsin-Madison

9:50–10:20am

Coffee Break, KRC Meeting Room (Room formerly known as PSL Library)

Session 8

Session Chair: Tomasz Durakiewicz

10:20–10:50am

Toward High Resolution Chemical Imaging to Characterize Microbial Biofilms: Integration of Synchrotron IR Imaging

Matthew J. Marshall, Pacific Northwest National Laboratory (*Invited*)

10:50–11:10am

Cooper Pair Formation in Acenes

Tim Hartman, University of Wisconsin

11:10–11:40am

Uranium Compounds: A Frontier for Condensed Matter Physics

Peter S. Riseborough, Temple University (*Invited*)

11:40–12:30pm

Lunch, KRC Meeting Room (Room formerly known as PSL Library)

Session 9

Poster Session II

12:30--1:30pm

Poster Session II (SRC Vault)

Session 10

Session Chair: Barbara Illman

1:30–1:50pm

Field Enhanced Photoemission: A New Technique for the Direct Determination of the Quasi-Free Electron Energy in Dense Fluids

Yevgeniy Lushtak, Queens College

1:50–2:10pm

VUV Photoemission Spectroscopy Characteristics of Graphene on SiO₂

Wenjie Lu, University of Wisconsin-Madison

2:10–2:30pm

Equivalent-Circuit Model for VUV Irradiation of Dielectric Films

J. Leon Shohet, University of Wisconsin-Madison

2:30–2:35pm

Presentation of Poster Session II Awards by Joe Bisognano

2:35–2:40pm

Adjournment by Kathleen M. Gough

2:40pm

Coffee and Open Discussion, KRC Meeting Room (Room formerly known as PSL Library)

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