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GORDON RESEARCH CONFERENCES *frontiers of science*
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Nancy Ryan Gray, Ph.D.
Director

**2012 GORDON RESEARCH CONFERENCE & SEMINAR
on ATOMIC & MOLECULAR INTERACTIONS**

FINAL PROGRESS REPORT

DEPARTMENT OF ENERGY
GRANT NO. DE-SC0007766

The Gordon Research Conference on ATOMIC & MOLECULAR INTERACTIONS was held at Stonehill College Easton, Massachusetts, July 15-20, 2012. The Conference was well-attended with 121 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 121 attendees, 64 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 64 respondents, 11% were Minorities – 2% Hispanic, 9% Asian and 0% African American. Approximately 20% of the participants at the 2012 meeting were women.

The Gordon Research SEMINAR on ATOMIC & MOLECULAR INTERACTIONS was held at Stonehill College Easton, Massachusetts, July 14 - 15, 2012. The Conference was well-attended with 42 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 42 attendees, 20 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 20 respondents, 10% were Minorities – 0% Hispanic, 10% Asian and 0% African American. Approximately 29% of the participants at the 2012 meeting were women.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

Thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,
Timothy S. Zwier, Conference Chairperson
PURDUE UNIVERSITY

Atomic & Molecular Interactions
July 15-20, 2012
Stonehill College
Easton, MA
Chair:
Timothy S. Zwier

Vice Chair:
Sharon Hammes-Schiffer

Related Meeting Information

The Atomic & Molecular Interactions Gordon Research Conference was held in conjunction with the **Atomic & Molecular Interactions Gordon Research Seminar**. Please refer to the Atomic & Molecular Interactions GRS web page for more information.

The Atomic and Molecular Interactions Gordon Conference is justifiably recognized for its broad scope, touching on interactions occurring in isolated molecules, bimolecular collisions, clusters, aerosols, interfaces, and complex systems. The meeting has traditionally involved scientists engaged in fundamental research in gas and condensed phases and those who apply these concepts to systems of practical chemical and physical interest. A key tradition in this meeting is the strong mix of experiment and theory. The program for 2012 conference continues these traditions. At the 2012 AMI GRC, there will be talks in several broadly defined and partially overlapping areas:

- Intramolecular and single-collision reaction dynamics
- Photophysics and photochemistry of excited states
- Clusters, aerosols and solvation
- Interactions at interfaces
- Conformations and folding of large molecules
- Interactions under extreme conditions of temperature and pressure

These topics touch on a wide range of disciplines, grounded in physical chemistry, but reaching into biology, molecular physics, energy-related science, and astrochemistry, to name a few. The Conference will bring together a collection of investigators who are at the forefront of the field, and will provide opportunities for junior scientists and graduate students to present their work in poster format and exchange ideas with leaders in the field. Those wishing to present a poster should submit a brief abstract to the conference vice-chair. Some poster presenters will be selected for short talks. The collegial atmosphere of this Conference, with programmed discussion sessions as well as opportunities for informal gatherings in the afternoons and evenings, provides an avenue for scientists from different disciplines to brainstorm and promotes cross-disciplinary collaborations in the various research areas represented.

Contributors



SUNDAY

2:00 pm - 9:00 pm Arrival and Check-in (Office Closed 6:00 pm - 7:00 pm)

6:00 pm Dinner

7:30 pm - 7:35 pm Welcome / Introductory Comments by GRC Site Staff

7:35 pm - 9:30 pm **Single-collision and Intramolecular Dynamics I**

 Discussion Leader: **Timothy Zwier** (Purdue)

Arthur Suits (Wayne State)
 "What don't we know and when didn't we know it: Are roaming reactions the Tectonic Plates of our field?"

 Discussion

Kopin Liu (IAMS, Academia Sinica)
 "Controlling a chemical reaction by mode-, bond-excitations, and reactant alignment"

 Discussion

Laurie Butler (Univ. Chicago)
 "Imaging and Scattering Studies of Radical Intermediates"

 Discussion

 9:30 pm Opening Reception

MONDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **Clusters and Solvation**

 Discussion Leader: **David W. Pratt** (Univ. Pittsburgh)

Marsha Lester (Univ. Pennsylvania)
 "Dynamical Outcomes of Quenching: Reflections on a Conical Intersection"

9:30 am - 9:40 am	Discussion
9:40 am - 10:10 am	Joel Bowman (Emory) "Full dimensional <i>ab initio</i> potentials and quantum vibrational dynamics of water clusters and hydrated ions"
10:10 am - 10:20 am	Discussion
10:20 am	Group Photo / Coffee Break
10:45 am - 11:15 am	Gary Douberly (Univ. Georgia) "Laser Spectroscopy of Metastable Open-Shell Clusters in Helium Nanodroplets"
11:15 am - 11:25 am	Discussion
11:25 am - 11:55 am	Dor Ben-Amotz (Purdue) "Vibrational spectroscopic detection of water structure changes in hydrophobic hydration shells"
11:55 am - 12:05 pm	Discussion
12:05 pm - 12:20 pm	Hot Topic Talk #1: Amir Golan (UC-Berkeley) "Post-ionization Relaxation in Hydrated Dimethyluracil"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 6:00 pm	Free Time
6:00 pm	Dinner
7:30 pm - 9:30 pm	Single-collision and intramolecular interactions II Discussion Leader: Takayuki Ebata (Hiroshima Univ.)
7:30 pm - 8:00 pm	Hanna Reisler (Univ. Southern California) "Dynamical signatures of isomerization and dissociation in photoinitiated reactions of hydroxyalkyl radicals"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:40 pm	Martin Head-Gordon (UC-Berkeley) "Energy decomposition analysis methods for intermolecular interactions: theory and applications"
8:40 pm - 8:50 pm	Discussion
8:50 pm - 9:20 pm	Andrew Orr-Ewing (Univ. Bristol, UK) "Chemical reaction dynamics from isolated collision to liquid solutions"
9:20 pm - 9:30 pm	Discussion
9:30 pm	<u>Poster Session I</u>

TUESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Excited State interactions Discussion Leader: Wolfgang Domcke (Technical Univ. Munich)
9:00 am - 9:30 am	Samuel Leutwyler (Univ. Berne)

	"Excitonic Interactions in Molecular Dimers: Experimental Splittings and Why Ab Initio Calculations Cannot Match Them"
9:30 am - 9:40 am	Discussion
9:40 am - 10:10 am	Spiridoula Matsika (Temple Univ.) "Non-adiabatic events in interacting chromophores"
10:10 am - 10:20 am	Discussion
10:20 am	Coffee Break
10:45 am - 11:15 am	Anne Zehnacker-Rentien (Université Paris XI) "Stereochemistry effects in the gas-phase photophysics of quinine derivatives"
11:15 am - 11:25 am	Discussion
11:25 am - 11:55 am	Todd Martinez (Stanford) "New Perspectives in Excited state dynamics"
11:55 am - 12:05 pm	Discussion
12:05 pm - 12:20 pm	Hot Topic Talk #2: Nadia Doslic (Boskovic Institute, Croatia) "Mechanisms of Non-radiative Deactivation in Model Peptides"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 6:00 pm	Free Time
6:00 pm	Dinner
7:30 pm - 9:30 pm	Charges and excited states in solution and on ice
	Discussion Leader: Sharon Hammes-Schiffer (Penn State)
7:30 pm - 8:00 pm	David McCamant (Univ. Rochester) "Ultrafast condensed phase photochemistry probed with femtosecond stimulated Raman spectroscopy"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:40 pm	David VandenBout (Univ. of Texas-Austin) "Single molecule spectroscopy of chain-chain interactions in conjugated polymers"
8:40 pm - 8:50 pm	Discussion
8:50 pm - 9:20 pm	Bruce Kay (PNNL) "Beakers without walls: Using nanoscale amorphous solid films to create and study deeply supercooled liquids"
9:20 pm - 9:30 pm	Discussion
9:30 pm	<u>Poster Session II</u>

WEDNESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Interactions at Interfaces, Surfaces, and Aerosols

Discussion Leader: **David Nesbitt** (JILA)

9:00 am - 9:30 am	Alec Wodtke (Univ. Gottingen) "Chemical Dynamics at Surfaces"
9:30 am - 9:40 am	Discussion
9:40 am - 10:10 am	Ruth Signorell (Univ. British Columbia) "Characterization of Clusters and Ultrafine Aerosols by Ultraviolet Photoionization"
10:10 am - 10:20 am	Discussion
10:20 am	Coffee Break
10:45 am - 11:15 am	John Tully (Yale) "Excited State Dynamics at Surfaces"
11:15 am - 11:25 am	Discussion
11:25 am - 11:55 am	Gil Nathanson (Univ. Wisconsin-Madison) "Non-Maxwellian Evaporation of Helium from Liquid Hydrocarbons, Ethylene Glycol, and Water"
11:55 am - 12:05 pm	Discussion
12:05 pm - 12:20 pm	Hot Topic Talk #3: Joseph Subotnik (Penn) "Multiple, Consecutive Scattering Events and Curve-Crossings"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 6:00 pm	Free Time
6:00 pm	Dinner
7:00 pm - 7:30 pm	<u>Business Meeting</u> <i>Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair</i>
7:30 pm - 9:30 pm	Conformations and Folding Discussion Leader: Philippe Dugourd (Univ. Lyon, France)
7:30 pm - 8:00 pm	Tom Rizzo (EPFL) "Metastable conformations of electrosprayed peptides revealed by IR and UV spectroscopy"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:40 pm	William Noid (Penn State) "Specific and nonspecific effects of glycosylation upon a disordered peptide"
8:40 pm - 8:50 pm	Discussion
8:50 pm - 9:20 pm	Ashok Deniz (Scripps Research Institute) "Single-Molecule Dynamics and Binding-Coupled Folding of Intrinsically Disordered Proteins"
9:20 pm - 9:30 pm	Discussion
9:30 pm	<u>Poster Session III</u>

THURSDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Interactions under Extreme Conditions
	Discussion Leader: Stephen Klippenstein (Argonne)
9:00 am - 9:30 am	Gerard Meijer (Fritz Haber Institute, Germany) "Taming Molecular Beams"
9:30 am - 9:40 am	Discussion
9:40 am - 10:10 am	Ian R. Sims (Univ. Rennes) "Experimental investigations of radical-molecule reactions using low temperature supersonic flows"
10:10 am - 10:20 am	Discussion
10:20 am	Coffee Break
10:45 am - 11:15 am	Craig Taatjes (Combustion Research Facility) "Fundamental Autoignition Chemistry at High Pressure"
11:15 am - 11:25 am	Discussion
11:25 am - 11:55 am	Tim Strobel (Carnegie Institute) "Intermolecular Interactions at Extreme Pressures"
11:55 am - 12:05 pm	Discussion
12:05 pm - 12:20 pm	Hot Topic Talk #4: Vasilios Stavros (Warwick, UK) "Pre-biotic earth: Comparing the ultraviolet photostability of azole chromophores"
12:20 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 6:00 pm	Free Time
6:00 pm	Dinner
7:30 pm - 9:30 pm	Longer (range), shorter (timescales), stronger (fields), weaker (interactions)
	Discussion Leader: Martin Quack (ETH-Zurich)
7:30 pm - 8:00 pm	Ken Jordan (Univ. Pittsburgh) "On the Role of Long-range Interactions in $(H_2O)_n$ - Clusters: From Many-body Theory to Model Potentials"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:40 pm	Steve Leone (UC-Berkeley) "X-ray investigations of electron dynamics toward the attosecond limit"
8:40 pm - 8:50 pm	Discussion
8:50 pm - 9:20 pm	Tim Softley (Oxford) "Sub-Kelvin chemistry using laser-cooled ions"
9:20 pm - 9:30 pm	Discussion

FRIDAY

7:30 am - 8:30 am Breakfast

9:00 am Departure

Atomic & Molecular Interactions

Gordon Research Seminar

July 14-15, 2012

Stonehill College

Easton, MA

Chair:

Amanda S. Case

Associate Chair:

Julia H. Lehman

Related Meeting Information

The Atomic & Molecular Interactions Gordon Research Seminar was held in conjunction with the **Atomic & Molecular Interactions Gordon Research Conference**. Please refer to the Atomic & Molecular Interactions GRC web page for more information.

The Gordon Research Seminar on Atomic & Molecular Interactions is a unique forum for graduate students, post-docs, and other scientists with comparable levels of experience and education to present and exchange new data and cutting edge ideas.

The theme of this meeting, in keeping with the tradition of the Atomic and Molecular Interactions Gordon Research Conference, is far-reaching and involves fundamental research in the gas and condensed phases along with application of these ideas to practical chemical fields. The oral presentations, which will contain a combination of both experiment and theory, will focus on four broad categories:

- Ultrafast Phenomena
- Excited States, Photoelectrons, and Photoions
- Chemical Reaction Dynamics
- Biomolecules and Clusters

Contributors



SATURDAY

1:00 pm - 5:00 pm	Arrival and Check-in
3:30 pm - 3:50 pm	Introductory Comments by GRC Site Staff / Welcome by the GRS Conference Chair
3:50 pm - 4:30 pm	Ultrafast Phenomena
3:50 pm - 4:05 pm	Fawzi Abou-Chahine (University of Bristol) "Chemical Reaction and Vibrational Relaxation in Solution: The HCl Story"
4:05 pm - 4:10 pm	Discussion
4:10 pm - 4:25 pm	Jeremy Viau Trudel (Laval University) "Molecular Ionization by an Intense Attosecond XUV Pulse: Is a Franck-Condon Approximation Acceptable?"
4:25 pm - 4:30 pm	Discussion
4:30 pm - 6:00 pm	<u>Poster Session I</u>
6:00 pm	Dinner
7:30 pm - 9:30 pm	Biomolecules and Clusters
	Discussion Leader: Ruth Signorell (University of British Columbia)
7:30 pm - 8:00 pm	Keynote Speaker: Kenneth Jordan (University of Pittsburgh) "Accommodation of Excess Electrons and Protons by Water Clusters"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:25 pm	Andrew Deblase (Yale University) "Characterization of Charged Intramolecular Hydrogen Bonds in Protonated Proton Sponges by Vibrational Predissociation Spectroscopy"
8:25 pm - 8:30 pm	Discussion
8:30 pm - 8:45 pm	Philipp Marquetand (University of Vienna) "The Role of Intersystem Crossing in the Photorelaxation of the DNA Nucleobase Cytosine: a Surface Hopping Study"
8:45 pm - 8:50 pm	Discussion
8:50 pm - 9:05 pm	Jacob Dean (Purdue University) "Mixed Helices in the Gas Phase: Conformation-specific UV and IR Spectroscopy of Polyglycine Z-(Gly) _n (n=1,3,5)"
9:05 pm - 9:10 pm	Discussion
9:10 pm - 9:25 pm	Dominik Pentlehner (University of Aarhus) "Laser Induced Alignment of Molecules in Helium Droplets"
9:25 pm - 9:30 pm	Discussion

SUNDAY

7:30 am - 8:30 am	Breakfast
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9:00 am - 11:00 am	Excited States, Photoelectrons, and Photoions
	Discussion Leader: Julia Lehman (University of Pennsylvania)
9:00 am - 9:40 am	<u>Panel Discussion</u> : "Making Yourself Standout as a Scientist" Kenneth Jordan (University of Pittsburgh), Andrew Orr-Ewing (University of Bristol), Ruth Signorell (University of British Columbia), and Timothy Zwier (Purdue University)
9:40 am - 9:55 am	Andrew Petit (Ohio State University) "Exploring the Effects of Rotation-vibration Coupling in Highly Fluxional Molecules Using Diffusion Monte Carlo"
9:55 am - 10:00 am	Discussion
10:00 am - 10:15 am	Joseph Beames (University of Pennsylvania) "A New Spectroscopic Window on Hydroxyl Radicals Using UV+VUV Resonant Ionization"
10:15 am - 10:20 am	Discussion
10:20 am - 10:35 am	Bernadette Broderick (Wayne State University) "The Dynamic Stark Effect and Ozone: Control Over Electronic State Branching"
10:35 am - 10:40 am	Discussion
10:40 am - 10:55 am	Lori Culberson (University of Arizona) "Electronic Structure and Relative Stability of Heterocyclic Radicals via Anion Photoelectron Imaging"
10:55 am - 11:00 am	Discussion
11:00 am - 12:30 pm	<u>Poster Session II</u> <i>Coffee will be served in the poster area from 11:00 am - 11:30 am</i>
12:30 pm	Lunch
1:30 pm - 2:30 pm	Chemical Reactions Dyanamics
	Discussion Leader: Andrew Orr-Ewing (University of Bristol)
1:30 pm - 1:45 pm	Monika Gruetter (JILA, CU Boulder) "Quantum State-resolved Reactive and Inelastic Scattering at Gas-liquid and Gas-solid Interfaces"
1:45 pm - 1:50 pm	Discussion
1:50 pm - 2:05 pm	Amit Kumar Samanta (University of Southern California) "Imaging the Vibrational Predissociation of Water Dimers"
2:05 pm - 2:10 pm	Discussion
2:10 pm - 2:25 pm	Amit Sharma (Argonne National Lab) "The Role of Radical-complex Intermediates in High-pressure Chemistry"
2:25 pm - 2:30 pm	Discussion
2:30 pm - 3:00 pm	<u>Evaluation Period</u> <i>Fill out GRS Evaluation Forms</i>

3:00 pm

Gordon Research Seminar ends. For those attending the associated Gordon Research Conference, please check in at the GRC Office beginning at 4:00 pm.

Atomic & Molecular Interactions (2012)

Name	Organization	Participation	Status
ABEYSEKERA, CHAMARA S	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
ABOU-CHAHINE, FAWZI	UNIVERSITY OF BRISTOL	Poster Presenter	Registered
BEAMES, JOSEPH M	UNIVERSITY OF PENNSYLVANIA	Poster Presenter	Registered
BEDRANE, ZEYNEB	TLEMCEN UNIVERSITY	Poster Presenter	Registered
BEN-AMOTZ, DOR	PURDUE UNIVERSITY	Speaker	Registered
BERRIOS, EDUARDO	UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN	Poster Presenter	Registered
BOWMAN, JOEL	EMORY UNIVERSITY	Speaker	Registered
BRODERICK, BERNADETTE M	WAYNE STATE UNIVERSITY	Attendee	Registered
BUCHANAN, EVAN G	PURDUE UNIVERSITY	Poster Presenter	Registered
BUTLER, LAURIE J	UNIVERSITY OF CHICAGO	Speaker	Registered
CASE, AMANDA S	UNIVERSITY OF COLORADO	Poster Presenter	Registered
CHOI, JONG-HO	KOREA UNIVERSITY	Poster Presenter	Registered
COLE-FILIPPIAK, NEIL C	UNIVERSITY OF CALIFORNIA, BERKELEY	Poster Presenter	Registered
COOPER, RUSSELL	AFRL	Poster Presenter	Registered
CULBERSON, LORI	UNIVERSITY OF ARIZONA	Poster Presenter	Registered
DEAN, JACOB C	PURDUE UNIVERSITY	Poster Presenter	Registered
DEBLASE, ANDREW F	YALE UNIVERSITY	Poster Presenter	Registered
DENIZ, ASHOK	SCRIPPS RESEARCH INSTITUTE	Speaker	Registered
DILLON, JOSEPH J	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
DOMCKE, WOLFGANG	TECHNICAL UNIVERSITY MUNICH	Discussion Leader	Registered
DOSLIC, NADJA	RUDJER BOSKOVIC INSTITUTE	Poster Presenter	Registered
DOUBERLY, GARY	UNIVERSITY OF GEORGIA	Speaker	Registered
DOYLE, MICHAEL B	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
DUCHOVIC, RONALD J	INDIANA UNIVERSITY PURDUE UNIVERSITY FORT WAYNE	Poster Presenter	Registered
DUGOURD, PHILIPPE	UNIVERSITY OF LYON - CNRS	Discussion Leader	Registered
EBATA, TAKAYUKI	HIROSHIMA UNIVERSITY	Discussion Leader	Registered
FANG, YIGANG	QUEENS COLLEGE, CUNY	Poster Presenter	Registered
FLEISHER, ADAM J	JILA, UNIVERSITY OF COLORADO	Poster Presenter	Registered
GAO, HONG	UCDAVIS	Poster Presenter	Registered
GOLAN, AMIR	LAWRENCE BERKELEY NATIONAL LAB	Poster Presenter	Registered
GOLDBERG, NOAH T	AGILENT LABORATORIES	Poster Presenter	Registered
GORDON, ROBERT J	UNIVERSITY OF ILLINOIS AT CHICAGO	Poster Presenter	Registered
GRUETTER, MONIKA	JILA, UNIVERSITY OF COLORADO AT BOULDER	Poster Presenter	Registered
GUNAWARDENA, MEVAN	STONEHILL COLLEGE	Poster Presenter	Registered
HAMMES-SCHIFFER, SHARON	UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN	Vice Chair	Registered
HAPKA, MICHAL J.	UNIVERSITY OF WARSAW	Poster Presenter	Registered
HAUSE, MICHAEL L	AIR FORCE RESEARCH LABORATORY	Poster Presenter	Registered
HEAD-GORDON, MARTIN	UNIVERSITY OF CALIFORNIA, BERKELEY	Speaker	Registered

HEID, CORNELIA G.	UNIVERSITY OF WISCONSIN-MADISON	Poster Presenter	Registered
HOMAYOON, ZAHRA	EMORY UNIVERSITY	Poster Presenter	Registered
JACOBSON, LEIF D	YALE UNIVERSITY	Poster Presenter	Registered
JIA, BEIKE	GORDON COLLEGE	Attendee	Registered
JOALLAND, BAPTISTE	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
JOBBINS, MATTHEW M	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
JOHNSON, CHRISTOPHER J	YALE UNIVERSITY	Poster Presenter	Registered
JORDAN, KENNETH D	UNIVERSITY OF PITTSBURGH	Speaker	Registered
KAY, BRUCE D	PACIFIC NORTHWEST NATIONAL LABORATORY	Speaker	Registered
KLIPPENSTEIN, STEPHEN	ARGONNE NATIONAL LABORATORIES	Discussion Leader	Registered
KOEHLER, SVEN P K	UNIVERSITY OF MANCHESTER	Poster Presenter	Registered
KOH, CHRISTINE J	UNIVERSITY OF CALIFORNIA, BERKELEY	Poster Presenter	Registered
KOPLITZ, BRENT D	TULANE UNIVERSITY	Attendee	Registered
KUMAR, AJITESH	IIT KANPUR INDIA	Poster Presenter	Registered
LAM, CHOW-SHING	JAMES FRANCK INSTITUTE, UNIVERSITY OF CHICAGO	Poster Presenter	Registered
LAYFIELD, JOSHUA P	PENN STATE UNIVERSITY	Poster Presenter	Registered
LEAVITT, CHRISTOPHER	YALE UNIVERSITY	Poster Presenter	Registered
LEHMAN, JULIA H	UNIVERSITY OF PENNSYLVANIA	Poster Presenter	Registered
LEONE, STEPHEN	UNIVERSITY OF CALIFORNIA, BERKELEY	Speaker	Registered
LESTER, MARSHA I	UNIVERSITY OF PENNSYLVANIA	Speaker	Registered
LEUTWYLER, SAMUEL	UNIVERSITY OF BERN	Speaker	Registered
LITMAN, JESSICA H	UNIVERSITY OF BRITISH COLUMBIA	Poster Presenter	Registered
LIU , KOPIN	INSTITUTE OF ATOMIC AND MOLECULAR SCIENCES (IAMS)	Speaker	Registered
LIU, HANCHAO	EMORY UNIVERSITY	Poster Presenter	Registered
LOCKYEAR, JESSICA F	LAWRENCE BERKELEY NATIONAL LABORATORY	Poster Presenter	Registered
LU, ZHEN	TEMPLE UNIVERSITY	Poster Presenter	Registered
LUCAS, BRUNO	CNRS	Poster Presenter	Registered
MA, QIANLI	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered
MARQUETAND, PHILIPP	UNIVERSITY OF VIENNA	Poster Presenter	Registered
MARTINEZ, TODD J	STANFORD UNIVERSITY	Speaker	Registered
MATSIKA, SPIRIDOULA	TEMPLE UNIVERSITY	Speaker	Registered
MATSUMOTO, YOSHITERU	UNIVERSITY OF HYOGO	Poster Presenter	Registered
MCBANE, GEORGE C	GRAND VALLEY STATE UNIVERSITY	Poster Presenter	Registered
MCCAMANT, DAVID W	UNIVERSITY OF ROCHESTER	Speaker	Registered
MCGLYNN, SHANE J	TUALNE	Poster Presenter	Registered
MCGURK, STEPHEN J	HERIOT-WATT UNIVERSITY	Poster Presenter	Registered
MEIJER, GERARD	FRITZ-HABER-INSTITUT DER MAX-PLANCK-GESELLSCHAFT	Speaker	Registered
MIYABE, SHUNGO	STANFORD UNIVERSITY	Poster Presenter	Registered
NATHANSON, GILBERT M	UNIVERSITY OF WISCONSIN-MADISON	Speaker	Registered
NEGRU, BOGDAN	UNIVERSITY OF CALIFORNIA BERKELEY	Poster Presenter	Registered
NESBITT, DAVID J	UNIVERSITY OF COLORADO AT BOULDER	Discussion	Registered

		Leader	
NOID, WILLIAM G	PENNSYLVANIA STATE UNIVERSITY	Speaker	Registered
OLDHAM, JAMES M	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
ORR-EWING, ANDREW	UNIVERSITY OF BRISTOL	Speaker	Registered
PENTLEHNER, DOMINIK	UNIVERSITY OF AARHUS	Poster Presenter	Registered
PETERS, MICHEL	UNIVERSITY LAVAL	Poster Presenter	Registered
PETIT, ANDREW S	OHIO STATE UNIVERSITY	Poster Presenter	Registered
PETROVIC, VLADIMIR S	STANFORD UNIVERSITY	Poster Presenter	Registered
PRATT, DAVID	UNIVERSITY OF VERMONT	Discussion Leader	Registered
QU, CHEN	EMORY UNIVERSITY	Poster Presenter	Registered
QUACK, MARTIN	ETH ZURICH	Discussion Leader	Registered
REISLER, HANNA	UNIVERSITY OF SOUTHERN CALIFORNIA	Speaker	Registered
RIZZO, THOMAS R	ECOLE POLYTECHNIQUE FEDERALE LAUSANNE	Speaker	Registered
ROBERTS, GARETH M	UNIVERSITY OF WARWICK	Poster Presenter	Registered
ROY, SHARANI	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SAMANTA, AMIT KUMAR	UNIVERSITY OF SOUTHERN CALIFORNIA	Poster Presenter	Registered
SCHNITZER, CHERYL S	STONEHILL COLLEGE	Poster Presenter	Registered
SCHUURMAN, MICHAEL S	NATIONAL RESEARCH COUNCIL OF CANADA	Poster Presenter	Registered
SHARMA, AMIT R	ARGONNE NATIONAL LAB	Poster Presenter	Registered
SIGNORELL, RUTH	UNIVERSITY OF BRITISH COLUMBIA	Speaker	Registered
SIMS, IAN R	UNIVERSITE DE RENNES 1	Speaker	Registered
SMITH, DANIEL G	AUBURN UNIVERISTY	Poster Presenter	Registered
SOFTLEY, TIMOTHY P	UNIVERSITY OF OXFORD	Speaker	Registered
SRIVASTAVA, RAJESH R	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	Poster Presenter	Registered
SRIVASTAVA, SAURABH	INDIAN INSTITUTE OF TECHNOLOGY KANPUR	Poster Presenter	Registered
STAVROS, VASILIOS G	UNIVERSITY OF WARWICK	Poster Presenter	Registered
STEARNS, JAIME A	AIR FORCE RESEARCH LAB	Attendee	Registered
STROBEL, TIMOTHY	CARNEGIE INSTITUTION OF WASHINGTON	Speaker	Registered
SUBOTNIK, JOSEPH E	UNIVERSITY OF PENNSYLVANIA	Attendee	Registered
SUITS, ARTHUR G	WAYNE STATE UNIVERSITY	Speaker	Registered
TAATJES, CRAIG	SANDIA NATIONAL LABORATORY	Speaker	Registered
TIWARI, VIVEK	UNIVERSITY OF COLORADO, BOULDER	Poster Presenter	Registered
TULLY, JOHN C	YALE UNIVERSITY	Speaker	Registered
VANDEN BOUT, DAVID A	UNIVERSITY OF TEXAS AT AUSTIN	Speaker	Registered
VIAU TRUDEL, JEREMY	LAVAL UNIVERSITY	Poster Presenter	Registered
WANG, XIAOHONG	EMORY UNIVERSITY	Poster Presenter	Registered
WEST, ADAM H C	SIGNORELL GROUP	Poster Presenter	Registered
WODTKE, ALEC	MAX PLANCK INSTITUTE FOR BIOPHYSICAL CHEMISTRY	Speaker	Registered
YAN, LU	WAYNE STATE UNIVERSITY	Poster Presenter	Registered
ZEHNACKER-RENTIEN, ANNE	CNRS UNIVERSITY PARIS SUD	Speaker	Registered
ZHELDAKOV, IGOR L.	UNIVERSITY OF KANSAS	Poster Presenter	Registered
ZHU, XIAOLEI	JOHNS HOPKINS UNIVERSITY	Poster Presenter	Registered

ZWIER, TIMOTHY S
121 Attendees

PURDUE UNIVERSITY

Chair

Registered

Atomic & Molecular Interactions (GRS) (2012)

Name	Organization	Participation	Status
ABOU-CHAHINE, FAWZI	UNIVERSITY OF BRISTOL	Speaker	Registered
BEAMES, JOSEPH M	UNIVERSITY OF PENNSYLVANIA	Speaker	Registered
BEDRANE, ZEYNEB	TLEMCEN UNIVERSITY	Poster Presenter	Registered
BRODERICK, BERNADETTE M	WAYNE STATE UNIVERSITY	Speaker	Registered
BUCHANAN, EVAN G	PURDUE UNIVERSITY	Poster Presenter	Registered
CASE, AMANDA S	UNIVERSITY OF COLORADO	Chair	Registered
COOPER, RUSSELL	AFRL	Poster Presenter	Registered
CULBERSON, LORI	UNIVERSITY OF ARIZONA	Speaker	Registered
DEAN, JACOB C	PURDUE UNIVERSITY	Speaker	Registered
DEBLASE, ANDREW F	YALE UNIVERSITY	Speaker	Registered
FANG, YIGANG	QUEENS COLLEGE, CUNY	Poster Presenter	Registered
FLEISHER, ADAM J	JILA, UNIVERSITY OF COLORADO	Poster Presenter	Registered
GRUETTER, MONIKA	JILA, UNIVERSITY OF COLORADO AT BOULDER	Speaker	Registered
HAPKA, MICHAL J.	UNIVERSITY OF WARSAW	Poster Presenter	Registered
HEID, CORNELIA G.	UNIVERSITY OF WISCONSIN-MADISON	Poster Presenter	Registered
JACOBSON, LEIF D	YALE UNIVERSITY	Poster Presenter	Registered
JOBBINS, MATTHEW M	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
JOHNSON, CHRISTOPHER J	YALE UNIVERSITY	Poster Presenter	Registered
JORDAN, KENNETH D	UNIVERSITY OF PITTSBURGH	Speaker	Registered
LAYFIELD, JOSHUA P	PENN STATE UNIVERSITY	Poster Presenter	Registered
LEAVITT, CHRISTOPHER	YALE UNIVERSITY	Poster Presenter	Registered
LEHMAN, JULIA H	UNIVERSITY OF PENNSYLVANIA	Chair	Registered
LI, WEILI	BROWN UNIVERSITY	Poster Presenter	Registered
LITMAN, JESSICA H	UNIVERSITY OF BRITISH COLUMBIA	Poster Presenter	Registered
LIU, HANCHAO	EMORY UNIVERSITY	Poster Presenter	Registered
LU, ZHEN	TEMPLE UNIVERSITY	Poster Presenter	Registered
MARQUETAND, PHILIPP	UNIVERSITY OF VIENNA	Speaker	Registered
MCGLYNN, SHANE J	TUALNE	Poster Presenter	Registered
MCGURK, STEPHEN J	HERIOT-WATT UNIVERSITY	Poster Presenter	Registered
MIYABE, SHUNGO	STANFORD UNIVERSITY	Poster Presenter	Registered
ORR-EWING, ANDREW	UNIVERSITY OF BRISTOL	Discussion Leader	Registered
PENTLEHNER, DOMINIK	UNIVERSITY OF AARHUS	Speaker	Registered
PETERS, MICHEL	UNIVERSITY LAVAL	Poster Presenter	Registered
PETIT, ANDREW S	OHIO STATE UNIVERSITY	Speaker	Registered
QU, CHEN	EMORY UNIVERSITY	Poster Presenter	Registered
ROY, SHARANI	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
SAMANTA, AMIT KUMAR	UNIVERSITY OF SOUTHERN CALIFORNIA	Speaker	Registered
SIGNORELL, RUTH	UNIVERSITY OF BRITISH COLUMBIA	Discussion Leader	Registered
VIAU TRUDEL, JEREMY	LAVAL UNIVERSITY	Speaker	Registered
WANG, XIAOHONG	EMORY UNIVERSITY	Poster Presenter	Registered
WEST, ADAM H C	SIGNORELL GROUP	Poster Presenter	Registered
ZWIER, TIMOTHY S	PURDUE UNIVERSITY	Poster Presenter	Registered

42 Attendees