

Agenda

Friday, February 1st

8:30 am — Morning session begins in the Pelican Room

Barbara Finlayson-Pitts

Welcome and Announcements

Session Chair: *Craig Murray Presiding*

8:35 to 9:15 — Barbara Wyslouzil; “Freezing of Nanodroplets”

9:15 to 9:55 — Heather Allen; “Ions, Lipids and Water: Organization and Electric Fields at the Air/Liquid Interface”

9:55 to 11:00 — Break and poster session

Session Chair: *Douglas Tobias Presiding*

11:00 to 11:20 — Kathryn Perrine, Marijke Van Spyk, Alexandria Margarella, Manfred Faubel, Hendrik Blum, Bernd Winter and John Hemminger; “Nitrile Behavior and Ion Effects at the Aqueous Interface”

11:20 to 12:00 — Collin Wick; “Computational Investigation of Ion and Acid Propensity and Dissociation at the Air-Water Interface”

12:00 to 1:30 — Catered lunch on the 15FiftyFive Terrace

Session Chair: *Filipp Furche Presiding*

1:30 to 1:50 — Martina Roeselová; “Molecular Simulations of Aqueous and Ice Surfaces with Ions and Organics Present”

1:50 to 2:10 — Christopher Mundy; “The Structure of Concentrated HCl: The Persistent Nature of a Zundel-Like Contact Ion Pair and its Implications for Surface Reactivity”

2:10 to 2:30 — Will Kuo; “First Principles Investigation into the Interconversion of Carbon Dioxide, Bicarbonate and Carbonic Acid in Aqueous Environments”

2:30 to 2:50 — Marcel Baer; “Strong Acids: Molecular View of the Degree of Dissociation”

2:50 to 3:10 — Carla Kidd, Veronique Perraud and Barbara Finlayson-Pitts; “To Bounce or Not to Bounce, That is the Question”

3:10 to 3:35 — Matt Dawson, Mychel Varner, Andrew Martinez, Donald Dabdub and Barbara Finlayson-Pitts; “New Particle Formation from Methanesulfonic Acid and Amines in Air”

3:35 to 3:40 — Concluding remarks; Zeev Rosenzweig

3:40 — Close of workshop; Barbara Finlayson-Pitts



Collaborative Workshop in Chemistry at Interfaces

Ninth Annual Workshop

Surf and Sand Hotel

Laguna Beach, California

January 31 – February 1, 2013



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Agenda

Thursday, January 31st

9:00 am — Opening session begins in the Pelican Room

Barbara Finlayson-Pitts

Welcome and Introduction

Session Chair: *John Hemminger Presiding*

9:10 to 9:50 — Kimberly Prather; “Bridging Lab and Field Studies Through ‘Ocean in the Beaker’ Measurements”

9:50 to 10:10 — Alex Laskin; “Understanding Chemistry of Atmospheric Brown Carbon”

10:10 to 10:30 — Scott Epstein, Enrico Tapavicza, Filipp Furche, Sergey Nizkorodov; “Direct Photolysis of Atmospheric Organic Compounds Dissolved in Cloud Water: Glyceraldehyde as a Surrogate for Water-Soluble Oxidized Organic Aerosol”

10:30 to 10:45 — Poster summaries

10:45 to 11:45 — Break and poster session

Session Chair: *Martina Roeselová Presiding*

11:45 to 12:05 — Sandra Blair, Dorit Shemesh, R. Benny Gerber, Scott Epstein, Sergey Nizkorodov; “Photolysis of Aldehydes in Organic Matrices as a Model for Photolytic Processing of Organic Aerosols”

12:05 to 12:25 — Sotiris Xantheas; “A Fresh Look at Biradicals of Atmospheric Importance”

12:30 to 2:00 — Catered lunch on the 15FiftyFive Terrace

Session Chair: *Sergey Nizkorodov Presiding*

2:00 to 2:40 — Ruth Signorell; “Interaction of Light with Weakly Bound Ultrafine Aerosols”

2:40 to 3:00 — Craig Murray; “What is the Problem with HOOO?”

3:00 to 3:20 — Alla Zelenyuk, Daniel Imre, Josef Beranak, Jacqueline Wilson, Evan Abramson; “Phase, Viscosity, Morphology and Room Temperature Evaporation Rates of SOA Particles at Low and High Relative Humidities”

3:20 to 4:30 — Break and poster session

Session Chair: *Donald Dabdub Presiding*

4:30 to 4:50 — M. Lizabeth Alexander, Matthew Newburn, Vanessa Bailey, Douglas Day, Jose Jimenez, Manjula Canagaratna, Douglas Worsnop; “Laser Ablation Aerosol Mass Spectrometry for Molecular Analysis of Biological Materials”

4:50 to 5:05 — Leon Phillips; “Atmospheric Reactions on Electrically Charged Surfaces”

6:00 pm — Dinner for invited speakers, faculty, international and DOE lab collaborators, and invited guests at Las Brisas Restaurant, located at 361 Cliff Drive (at the corner of Pacific Coast Highway)

AFFILIATIONS OF COLLABORATORS, GUESTS, AND INVITED SPEAKERS

- M. Lizabeth Alexander: Pacific Northwest National Laboratory
- Heather Allen: Ohio State University
- Donald Baer: Pacific Northwest National Laboratory
- Marcel Baer: Pacific Northwest National Laboratory
- Allison Campbell: Pacific Northwest National Laboratory
- Fleming Crim: University of Wisconsin, National Science Foundation
- Jean Futrell: Pacific Northwest National Laboratory
- Vicki Grassian: University of Iowa
- Dave Koppenaal: Pacific Northwest National Laboratory
- Will Kuo: Lawrence Livermore National Laboratory
- Alexander Laskin: Pacific Northwest National Laboratory
- Theresa Longin: University of Redlands
- Christopher Mundy: Pacific Northwest National Laboratory
- Steven Neshyba: University of Puget Sound
- Paul Nissenon: California State Polytechnic University, Pomona
- Leon Phillips: University of Canterbury, New Zealand
- Kimberly Prather: University of California, San Diego
- Martina Roeselová: Academy of Sciences, Czech Republic
- Zeev Rosenzweig: National Science Foundation
- Ruth Signorell: University of British Columbia, Swiss Federal Institute of Technology
- Collin Wick: Louisiana Tech University
- Barbara Wyslouzil: Ohio State University
- Sotiris Xantheas: Pacific Northwest National Laboratory
- Alla Zelenyuk: Pacific Northwest National Laboratory