

PRELIMINARY
1/28/10

27th Informal Symposium on Kinetic and Photochemical Processes in the Atmosphere (27ISKPPA)

12 February 2010

Robert Paine Scripps Forum (8610 Kennel Way)
Scripps Institution of Oceanography
University of California, San Diego

Sponsored by: California Air Resources Board and Scripps Center for Atmospheric Sciences

Start	End	
7:30	8:30	Continental Breakfast
8:30	8:35	Welcome Remarks (Lynn Russell)
8:35	9:05	Mark Thiemens, University of California, San Diego Recent Measurements of Tropospheric Carbon Dioxide: isotope effects and applications to climate studies and evolution of life
9:05	9:45	1-Minute Madness (AM posters)
9:45	10:45	Posters and Beverages
10:45	11:15	Paula Hudson, California State University, Fullerton Examining Particle Phase Transitions using a Quartz Crystal Microbalance
11:15	12:00	Posters
12:00	13:00	Lunch (provided on patio)
13:00	13:30	Richard Flagan, California Institute of Technology Probing the Formation and Properties of Atmospheric Aerosols
13:30	14:00	1-Minute Madness (PM posters)
14:00	15:00	Posters and Beverages
15:00	15:30	Daniel Harris, Naval Air Systems Command, China Lake Charles David Keeling and the Story of Atmospheric CO ₂ Measurements
15:30	16:30	Posters
16:30	16:35	Closing Remarks (Lynn Russell)
16:35		<i>Late</i> SIO TGIF Reception, Sunset, and "Waiting Out the Merge"

27ISKPPA Posters (Preliminary 1/28/10)
 Alphabetical by First Author's Last Name

Authors	Titles
Sukon Aimanant and Paul Ziemann	Development and Application of Functional Group Analysis for Secondary Organic Aerosol
Jasimene Alammari, Zhuangjie Li;	Kinetic Study of the Reaction of OH Radical with Ethyl Benzene Using the Relative Rate/Discharge Flow/Mass Spectrometry Technique
Ault, Andrew P., Zhu, A., Ramanathan, V, Prather, K.A.	Investigations into the Chemically-Resolved Optical Properties of Transported Asian Outflow Particles at Gosan, Korea
R. Bahadur, T. Uplinger, L.M. Russell, B.C. Sive, S.S. Cliff, D.B. Millet, A. Goldstein, and T.S. Bates	Phenol Groups in Northeastern U.S. Submicron Aerosol Particles Produced from Seawater Sources
Sigrid Barklund, Kana Takematsu, Nathan Eddingsaas, Mitchio Okumura	Cavity ringdown studies of the reaction of ozone and ethene: Indications of a channel producing the hydroxyl radical
Adam Bateman	Analysis of Organic Aerosol Samples Collected with a Particle into Liquid Sampler (PILS) using High-Resolution Electrospray Ionization Mass Spectrometry
Timothy Bertram, Joel Thornton, Becky Alexander, Ann Middlebrook, Roya Bahreini, Tim Bates, and Patricia Quinn	Direct Observations of N ₂ O ₅ Reactivity on Ambient Particles
David Bones	Slow Aging in Secondary Organic Aerosol Observed by Liquid Chromatography Coupled with High-Resolution Mass Spectrometry
Emily A. Bruns, Veronique Perraud, Alla Zelenyuk, Michael J. Ezell, Stanley N. Johnson, Yong Yu, Dan G. Imre, Barbara J. Finlayson-Pitts, M. Lizabeth Alexander	Can Particle Mass Spectrometry Be Used to Measure Particulate Organic Nitrates?
Karen M. Callahan, John Promlap, Jennie L. Thomas, Nicole K. Richard, Lisa M. Wingen, Barbara J. Finlayson-Pitts, Douglas J. Tobias	Nitrate Availability for Photolysis Near the Interface of Sea Salt Aerosols
Dan Chen, Qinbin Li, Zhijin Li, Yi Chao, Robert Fovell, Jose Jimenez, Chenxia Cai, and Kuo-Nan Liou	WRF-Chem simulation of PM _{2.5} in the Los Angeles Basin
Puneet S. Chhabra, Richard C. Flagan, John H. Seinfeld	Elemental Composition of Chamber Secondary Organic Aerosol Using a High Resolution Time-of-Flight Aerosol Mass Spectrometer
Ashley L. Corrigan, Satoshi Takahama, Lynn M. Russell, Puneet S. Chhabra, Arthur Chan, and John H. Seinfeld	Organic Hydroxyl, Ketone, and Alkane Functional Groups in Glyoxal Secondary Organic Aerosol Using FTIR Spectroscopic Analysis and Single Particle Microscopy
JD Crouse, F Paulot, H Kjaergaard, JH Seinfeld, PO Wennberg	Hydroperoxide yields from HO ₂ + RO ₂ for several atmospherically important alkenes
Daniel Curtis	Size measurements of atmospheric biomass burning particles from several Southern California wildfires
Kevin Dath, Zhuangjie Li	Kinetics Study of Reaction of Naphthalene with Hydroxyl Radical at 1–5 Torr and 240–340 K Using the Relative Rate/Discharge Flow/Mass Spectrometry Technique
Douglas A. Day, Shang Liu, Lynn M. Russell, Paul J. Ziemann	Organonitrate group concentrations in submicron particles with high nitrate and organic fractions in coastal southern California
David De Haan, Stephanie Wood, Jacob Turley, Jose Jimenez, Margaret Tolbert	Aerosol oligomer production from alpha-dicarbonyls and methylamine
Christopher W. Dilbeck and Barbara J. Finlayson-Pitts	Oxidation of Unsaturated Phospholipid Coatings on Sea Salt Particles
Nathan C. Eddingsaas, Arthur W. H. Chan, Jason D. Surratt, John H. Seinfeld, Paul O. Wennberg	Gas phase and particle phase reactions and kinetics of epoxydiols from the photooxidation of isoprene
Amanda A. Frossard, Patrick M. Shaw, Lynn M. Russell, Jesse H. Kroll, Patricia K. Quinn, and Tim S. Bates	Combustion Source Contributions to Organic Mass and Organosulfates in Submicron Arctic Aerosol During ICEALOT 2008
Dejian Fu, Stanley P. Sander, Jochen Stutz, Thomas Pongetti, Yuk L. Yung, MaxWong, Vijay Natraj, King-Fai Li, Run-Lie Shia	Spectropolarimetric Measurements of Scattered Sunlight in the Huggins Bands: Retrieval of Tropospheric Ozone Profiles
Cassandra Gaston, Jack Cahill, Doug Collins, Kaitlyn Suski, Kim Prather	Real-time, single-particle insights into marine particle chemistry at a coastal, urban environment
Aline Gratien, Stanley N. Johnson, Michael J. Ezell, Matt Dawson, Raffaele Bennett, Barbara J. Finlayson-Pitts	Is p-Cymene Generated from the Atmospheric Oxidation of α-Pinene?
James Hargrove, Jim Gundersen, and John Hargrove	ALTI CARDS NO ₂ / Ozone Analyzer for Air Pollution Monitoring
Hatch, L., Creamean, J., Ault, A., Prather, KA	Single particle measurements of organic aerosols in Atlanta, GA
L. N. Hawkins and L. M. Russell	Oxidation of ketone groups in transported biomass burning aerosol from the 2008 Northern California Lightning Series fires
Akinori Ito and Yan Feng	Role of dust alkalinity in the ocean supply of bioavailable iron - a chemical transport model study
Joshua Klobas	Characterization of Secondary Organic Aerosol Photolysis by Quartz Crystal Microbalance
Qinbin Li, Li Zhang, and Duncan T. Fairlie	Long-range transport of black carbon and dust to the Western U.S. mountain ranges
Shang Liu, Douglas A. Day, and Lynn M. Russell	Afternoon Increase of Oxygenated Organic Functional Groups at a Coastal Site in Southern California
Yingdi Liu, David Medina, and Jingsong Zhang	Cavity Ringdown Spectroscopy Measurements of the HO ₂ Radicals via Conversion to the OH Radicals

27ISKPPA Posters (Preliminary 1/28/10)
 Alphabetical by First Author's Last Name

Aiko Matsunaga and Paul Ziemann	Organic Nitrate Analysis Using HPLC Coupled to a Thermal Desorption Particle Beam Mass Spectrometer
David Medina, Yingdi Liu, and Jingsong Zhang	Detection of Nitrate Radical using Broadband Cavity Enhanced Absorption Spectroscopy (BBCEAS)
A.K. Mollner, B.E. Casterline, L.C. Ch'ng, H. Reisler	Vibrational Predissociation Dynamics of Water-Containing Hydrogen-Bonded Complexes
Anthony Montenegro, Jacob S.A. Ishibashi, Phuong Lam, Zhuangjie Li	Kinetics Study of Reaction of Pinenes with Hydroxyl Radical at 1-3 Torr and 240-340 K Using the Relative Rate/Discharge Flow/Mass Spectrometry Method
Meagan J.K. Moore, Ryan C. Sullivan, Ying Wang, Melanie D. Zauscher, Greg C. Roberts, and Kimberly A. Prather	A comparison of single particle composition and CCN activity during the 2007 and 2008 San Diego Wildfires
Shunsuke Nakao, Li Qi, Ping Tang, David Cocker III	Secondary organic aerosol formation from m-xylene photooxidation: the role of the phenolic product
Noriko Nishino, Janet Arey, and Roger Atkinson	Formation of Glyoxal and Methylglyoxal from the Gas-Phase OH Radical-Initiated Reactions of Toluene, Xylenes, and Trimethylbenzenes
Herbe Pech, Ruth Montes, Anthony Obisesan and Krishna Foster	Photooxidation of PAHs in solution
Veronique Perraud, Emily A. Bruns, Michael J. Ezell, Stanley N. Johnson, Yong Yu, M. Elizabeth Alexander, Alla Zelenyuk, Dan G. Imre, Barbara J. Finlayson-Pitts	Role of Ozone in Particle Formation and Growth From the Nitrate Radical-Initiated Oxidation of α -Pinene
Olga Pikelnaya, Dejian Fu, Catalina Tsai,, Jochen Stutz	Imaging of formaldehyde emissions using Differential Optical Absorption Spectroscopy
Thomas Pongetti, Shuhui Wang, Stanley Sander	Remote sensing of NO ₂ from direct sun measurements using the ground-based high resolution FTS at Table Mountain, California : Absolute retrieval method and comparison to OMI
Havala O. T. Pye, Arthur W. H. Chan, Kathryn E. Kautzman, John H. Seinfeld	A global perspective on aerosol from low volatility organic compounds
Li Qi, Shunsuke Nakao, Ping Tang, David Cocker III	Can Secondary Organic Aerosol formed in an atmospheric simulation chamber be continuously aging?
Michael Radunsky, James Calladine, Michael George, Sam Crivello, and Timothy Day	Kinetic Studies of Transient Species Using Time Resolved Infrared Spectroscopy
Jonathan D. Raff, János Szanyi, Barbara J. Finlayson-Pitts	Photooxidation of Organic-Coated Particles by Surface-Adsorbed NOx
Nicole K. Richards, Lisa M. Wingen, Karen M. Callahan, Douglas J. Tobias, Barbara J. Finlayson-Pitts	Halide Ion Enhancement of Nitrate Ion Photolysis
Ahmad Salam, Zhuangjie Li	Kinetics Study of n-Undecane with ·OH at 240-340 K Using the Relative Rate/Discharge Flow/Mass Spectrometry Technique
R. E. Schwartz, L. M. Russell, S. J. Sjosted, A. Vlasenko, J. G. Slowik, J. P. D. Abbatt, A. M. Macdonald, S. M. Li, J. Liggi, D. Toom-Sauntry, W. R. Leatch	Biogenic Oxidized Organic Functional Groups from a Mid-Mountain Forest at Whistler, BC, and their Similarities to Laboratory Chamber Products
P. M. Shaw, L. M. Russell, A. Jefferson, and P. K. Quinn	Arctic organic aerosol measurements reveal mixed combustion particles from spring haze and ocean-derived particles in winter
Yu Song, Xianfeng Zheng, Jingze Wu, and Jingsong Zhang	Near-UV Spectroscopy and Photochemistry of the CH ₃ S Radical
Kathleen M. Spencer, John D. Crounse, Jason M. St. Clair, C. Andreas Kuerten, Robert E. Stickel, Anne T. Case Hanks, L. Gregory Huey, Michael J. Cubison, Jose L. Jimenez, Eric Scheuer, Jack E. Dibb, Glen W. Sachse, Glenn S. Diskin, Stephanie A. Vay, John S. Holloway, David D. Parrish, Thomas B. Ryerson, Paul O. Wennberg	Changes in the South Coast Air Basin Atmospheric Sulfur Budget Between 2002 and 2008
Christen Strollo and Paul Ziemann	Formation of Secondary Organic Aerosol from the Oxidation of m-xylene and 3-methylfuran under Variable Conditions
Satoshi Takahama and Lynn M. Russell	Molecular dynamics simulation of mass accommodation on aqueous surface coated by organic films
Kana Takematsu, Nathan Eddingsaas, Sigrid Barklund, Mitchio Okumura	Cavity ringdown studies of the oxidation of alkenes by NO ₃
Kevin H. Weber, Jessy M. Lemieux, and Jingsong Zhang	First Aromatic Ring Formation in the Pyrolysis of Cyclopentadiene and Methyl-cyclopentadiene as Monitored by Vacuum Ultraviolet Single Photon Ionization Mass Spectrometry
Kam Weng Wong, Catalina Tsai, Olga Pikelnaya, Jochen Stutz	HONO Vertical Gradients during the 2006 TRAMP and the experiments in Houston, TX 2009 SHARP
Li Zhang, Qinbin Li, Jianjun Jin, Hongyu Liu, Nathaniel Livesey	Impacts of 2006 Indonesia fires on tropical upper tropospheric pollution
Kathryn Zimmermann, Janet Arey, Roger Atkinson	Quantification of Select Nitro-PAHs in a NIST Diesel SRM and Ambient Particulate Matter and Their Isomer Distributions from Gas-Phase Radical-Initiated Chamber Reactions