ACM 2010 CONFERENCE PROGRAM

Wednesday – December 8th

8:00-8:45  REGISTRATION & CONTINENTAL BREAKFAST

8:45-9:00  WELCOME & INTRODUCTIONS
  Anthony Wexler, UC Davis
  Deborah Luecken, U.S. EPA & Ian Barnes, Bergische Universität Wuppertal

9:00-9:40  PLenary Lecture I
  POLICY FORMATION
  Ajith Kaduwela, California Air Resources Board (CARB)

9:40  SESSION ONE
  CHEMICAL MECHANISM EVALUATION & POLICY IMPLICATIONS
  CHAIR: Ajith Kaduwela, California Air Resources Board (CARB)
  CO-CHAIR: James Kelly, California Air Resources Board (CARB)

9:40-10:00  Current Issues in Evaluation of Chemical Mechanisms Using Environmental Chamber Data
  WILLIAM CARTER, University of California, Riverside

10:00-10:20  BREAK

10:20-10:40  The Utility of the Ozone Monitoring Instrument (OMI) HCHO & NO₂ in Air Quality Decision-Making Activities
  Bryan Duncan, NASA

10:40-11:00  Development and the Relative Policy Importance of Ozone and PM Formation in Europe
  Dick Derwent, rdsscientific

11:00-11:20  Influence of Reaction Rate Uncertainties on Pollutant-Emission Sensitivities
  Daniel S. Cohan, Rice University

11:20-11:40  An Intercomparison of Chemical Mechanisms for Aromatic VOCs using Data From UNC Outdoor Chambers
  Harshal M. Parikh, University of North Carolina, Chapel Hill

11:40-12  Poster Descriptions for Sessions 1 & 8

12:00-1:00  LUNCH

1:00  SESSION TWO
  PHOTOCHEMISTRY OF OH, HO₂, RO₂
  CHAIR: William H. Brune, Penn State University
  CO-CHAIR: Jörg Kleffman, Bergische Universität Wuppertal

1:00-1:20  Some Strategies for Thinking About HOX Chemistry
  Ron Cohen, University of California, Berkeley

1:20-1:40  OH Recycling via Reactions of Organic Peroxy Radicals
  Terry J. Dillon, Max-Planck-Institut für Chemie

1:40-2:00  Investigating the Impacts of HOX Recycling in the Oxidation of Isoprene: Sensitivity Studies of Past, Present and Future Atmospheres Using the UKCA Model
  Alex Archibald, University of Bristol

2:00-2:20  HOX Radical Chemistry Above and Below a Forest Canopy: Measurements and Theory
  Phil Stevens, Indiana University

2:20-2:40  Radical Production from Alkene Ozonolysis
  William J. Bloss, University of Birmingham

2:40-3:00  Sensitivity Analysis of the RACM Chemical Mechanism Based on TRAMP-2006 Field Data
  Shuang Chen, Pennsylvania State University

3:00-3:15  BREAK

3:15-3:35  Seasonal Dependence of the Oxidation Capacity of the City of Santiago de Chile
  Yasin F. Elshorbany, Bergische Universität Wuppertal

3:35-3:55  Heterogeneous Uptake of HO₂ Radicals onto Atmospheric Aerosols
  Ingrid J. George, University of Leeds

3:55-4:05  Poster Descriptions for Session 2

4:05  SESSION THREE
Nitrous Acid (HONO) - An Atmospheric OH Radical Source of Increasing Importance

Chair: Christian George, IRCELYON
Co-chair: Rainer Volkamer, University of Colorado, Boulder

4:05-4:25 Vertical Profiles of HONO in Urban Areas: Field Measurements and Model Calculations
Jochen Stutz, University of California, Los Angeles

4:25-4:45 Daytime Sources of HONO: Lab and Field Results
Jörg Kleffmann, Bergische Universität Wuppertal

4:45-5:05 Formal Intercomparison of Observations of Nitrous Acid (FIONA): Campaign and Open Experiment Results
Milagros Ródenas, Fundación Centro de Estudios Ambientales del Mediterráneo

5:05-5:25 Simultaneous Hourly Measurements of HONO and Water-Soluble PM2.5 Composition: Investigating the Role of Partitioning and Aerosol Composition in the Heterogeneous Production of HONO
Trevor C. VandenBoer, University of Toronto

5:25-5:45 Photoenhanced NO2 Loss on Simulated Urban Grime
Rachid Ammar, IRCELYON, CNRS

5:45-5:55 Poster Descriptions for Session 3

6:00-7:00 Poster Viewing and Reception

Thursday – December 9th

7:30-8:10 Continental Breakfast

8:10-8:50 Plenary Lecture II
Tools for Developing Chemical Mechanisms for the Tropospheric Oxidation of Aromatic Compounds
Michael Pilling, University of Leeds

8:50 Session Four
Aromatic Hydrocarbon Photo-Oxidation – A Mechanism Defying Model Description
Chair: Ian Barnes, Bergische Universität Wuppertal
Co-chair: William Carter, University of California, Riverside

8:50-9:10 Recent Experimental Studies of Aromatic Hydrocarbon Atmospheric Degradation
Roger Atkinson, University of California, Riverside

9:10-9:30 The Role of Bicyclic Species in the Oxidation Mechanism of Aromatics
Matthew Elrod, Oberlin College

9:30-9:50 The Photolysis of Different Nitroaromatics: A Daytime Source of HONO
Iustinian Bejan, Bergische Universität Wuppertal

9:50-10:00 Poster Descriptions for Session 4

10:00-10:15 Break

10:15 Session Five
Reactive Halogen Chemistry and Chemistry at the Ocean-Atmosphere Interface
Chair: Steven S. Brown, NOAA
Co-chair: Peter Wiesen, Bergische Universität Wuppertal

10:15-10:35 Halogen Activation by N2O5 in Continental and Marine Environments: Mechanistic Insights from Field Observations and Expected Impacts on Oxidant Budgets
Joel Thornton, University of Washington

10:35-10:55 A Heterogeneous Open Ocean Source for Glyoxal and Iodine Oxide
Rainer Volkamer, University of Colorado

10:55-11:15 Formation and Processing of Biogenic Organic Aerosol in the MBL: Blurring the Distinction Between Primary and Secondary Aerosol
Cristina Facchini, Istituto di Scienze dell’Atmosfera e del Clima

Johannes Ofner, Universität Bayreuth

11:35-11:45 Poster Descriptions for Session 5

11:45-12:45 Lunch
12:45  **SESSION SIX**
NOx: Dark Chemistry and Photochemistry  
Chair: **Jochen Stutz**, University of California, Los Angeles  
Co-chair: **Ron Cohen**, University of California, Berkeley

12:45-1:05  **Measurements of NO₃ and N₂O₅ in the Residual Boundary Layer**  
**Steven S. Brown**, NOAA

1:05-1:25  **N₂O₅ Reactivity: From in situ Observations to Global Models**  
**Tim Bertram**, University of California, San Diego

1:26-1:45  **Constraining NOx Oxidation Based on Observations and Modeling of D¹⁷O of Nitrate**  
**Meredith G. Hastings**, Brown University

1:45-2:05  **Contributions of Individual Biogenic Volatile Organic Compounds to Secondary Organic Aerosol and Organic Nitrate Formation Above a Mixed Forest**  
**Kerri A. Pratt**, Purdue University

2:05-2:25  **Development of a New Structure-Activity Relationship (SAR) for Gas-Phase Reactions of NO₃ Radicals with Organic Compounds**  
**Benedicte Picquet-Varrault**, Université Paris

2:25-2:45  **Sensitivity of Ozone Production to Organic Nitrate Formation in Sacramento and Los Angeles**  
**Eleanor C. Browne**, UC Berkeley

2:45-3:05  **The Chemical Composition of Organic Nitrogen in Marine Rainwater and Aerosols**  
**Katy Altieri**, Princeton University

3:05-3:20  **BREAK**

3:20-3:40  **Understanding the Impact of Isoprene Nitrates and OH Reformation on Regional Air Quality Using Recent Advances in Isoprene Photooxidation Chemistry**  
**Ying Xie**, U.S. EPA

3:40-3:50  **Poster Descriptions for Sessions 6 & 7**

3:50-4:30  **Meeting To LAUNCH ISACK – International Society of Atmospheric Chemical Kinetics**

4:30-5:30  **POSTER VIEWING**

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**Friday – December 10th**

7:30-8:00  **CONTINENTAL BREAKFAST**

8:00-8:40  **PLENARY LECTURE III**  
Gas-Phase & Condensed-Phase Mechanisms Involved in SOA Formation  
**Paul Ziemann**, UC Riverside

8:40  **SESSION SEVEN**  
**THE FATE OF OXIDIZED VOC**  
Chair: **Paul Wennberg**, Caltech  
Co-chair: **Hartmut Herrmann**, Liebniz Institute for Tropospheric Research

8:40-9:00  **Photoenhanced Seposition of Trace Gases at the Interface of Organic Surfaces**  
**Christian George**, Université Lyon

9:00-9:20  **Recent Advances in the Determination of the Mechanisms Involved in the Oxidation of Isoprene and its By-Products**  
**John Orlando**, National Center for Atmospheric Research

9:20-9:40  **The Impact of Aqueous Phase Chemistry on the Fate of Carbonyl Compounds**  
**Barbara Ervens**, CIRES, University of Colorado, and NOAA/ESRL/CSD Boulder

9:40-10:00  **Are Gas Phase Chemical Mechanisms Adequate for SOA Prediction? Evaluation of CMAQ-Predicted SOA VOC Precursors**  
**Annemarie Carlton**, Rutgers University

10:00-10:15  **BREAK**

10:15-10:35  **Importance of Secondary Sources in the Atmospheric Budgets of Formic and Acetic Acids**  
**Fabien Paulot**, Caltech

10:35-10:55  **Contribution of Glyoxal to Secondary Organic Aerosol Formation in**
11:00-11:20 Second Generation Di- and Tricarboxylic Acids from a-Pinene Oxidation
Rebecca A. Washenfelder, University of Colorado, Boulder / NOAA

Josef Dommen, Paul Scherrer Institut

11:40-12:00 Parameterization of Global Monoterpene SOA Formation and Water Uptake, Based on an Explicit Mechanism
Barbara Nozière, Stockholm University

12:00-1:00 LUNCH

1:00 SESSION EIGHT
ADVANCES IN CHEMICAL MECHANISMS
Chair: Dick Derwent, rdscientific
Co-chair: Deborah Luecken, U.S. EPA

1:00-1:20 MCMv3.2 – The New and Improved Master Chemical Mechanism
Jenny C. Young, University of Leeds

1:20-1:40 MCM – Title TBA
Bernard Aumont, Université Paris

1:40-2:00 Combining MCM and CAPRAM: First Results and Outlook
Hartmut Herrmann, Leibniz-Institut fur Troposphärenforschung

2:00-2:15 SAPRC Developments
William Carter, University of California, Riverside

2:15-2:30 CB05 Developments
Greg Yarwood, ENVIRON Corporation

2:30-2:45 The Use of a Reduced Chemical Scheme (CRI-v2-R5) to Simulate SOA in a Global Model and Some Preliminary Results of its Use in WRF-CHEM
Steven Utembe, University of Manchester

2:45-3:00 RACM Developments
William Stockwell, Howard University

3:00-3:15 BREAK

3:15-3:35 Modeling the Multiday Evolution and Aging of Secondary Organic Aerosol During MILAGRO 2006
Katja Dzepina, University of Colorado Boulder / NCAR, Boulder

3:35-5:00 CONFERENCE OVERVIEW – GENERAL DISCUSSION
Deborah Luecken, U.S. EPA & Ian Barnes, Bergische Universität Wuppertal