

Bernard Aumont

Professor - Laboratoire Interuniversitaire des Systemes Atmospheriques, CNRS

Speaker Bio: Bernard Aumont is a professor of atmospheric and chemical sciences at the University Paris Est Creteil. His research interests concern atmospheric evolution of volatile organic compounds, with a focus on the development of chemical mechanisms for airshed models, SOA formation and multiphase evolution of semi-volatile organic species.

Kelley Barsanti

Assistant Professor - University of California Riverside

Speaker Bio: Kelley Barsanti earned her Ph.D. in Environmental Science and Engineering from the OGI School of Science & Engineering in Portland, OR. She then served as an Advanced Study Program Postdoctoral Fellow at the National Center for Atmospheric Research and a Senior Research Scientist at Portland State University. Currently she is an Assistant Professor in the Department of Chemical & Environmental Engineering and Center for Environmental Research and Technology at UC Riverside. Dr. Barsanti's research focuses on the development of mechanistic models for the prediction of atmospheric particulate matter ("aerosols"). Her primary research tools include comprehensive two-dimensional gas chromatography and mechanistic models to elucidate chemical and physical transformations of organic compounds as they evolve from gaseous emissions to particulate constituents. Current research projects include improving speciation of organic compounds in emissions inventories for biomass burning and other combustion sources; improving model representation of secondary organic aerosol in biomass burning plumes; and developing models of new particle formation.

Torsten Berndt

Senior scientist - Institut for Tropospheric Research, Leipzig

Speaker Bio: Torsten received his Ph.D. in Physical Chemistry from the Technical University of Leuna-Merseburg in 1992. He is a research chemist at the Leibniz Institute for Tropospheric Research in Leipzig. His work is focused on laboratory studies in the field of gas-phase oxidation of organic compounds including kinetics and chemical mechanisms. Of particular interest are the reactions of Criegee intermediates and RO₂ radicals.

Fernanda Bononi

PhD Student - UC Davis

Speaker Bio: Graduated with a Bachelor's degree in Pharmacy and Biochemistry by the University of São Paulo in Brazil. Following that, obtained my MSc degree in Organic Chemistry and Molecular Imaging at the University of Western Ontario in Canada, where the research focused on the synthesis of peptide libraries to be used as molecular imaging probes for cancer diagnostics. Currently a PhD student

at UC Davis in Davide Donadio's group, where the current research is on modelling the absorption spectra of organic molecules in the ice surface.

Eleanor Browne

Asst. Professor - University of Colorado Boulder

Speaker Bio: University of California Berkeley Ph.D. 2012 Postdoctoral Fellow, Massachusetts Institute of Technology, 2012-2015 Asst. Professor, Dept. of Chemistry University of Colorado Boulder Fellow, Cooperative Institute for Research in Environmental Sciences, University of Colorado Boulder

Benjamin Brown-Steiner

Staff Scientist - Atmospheric and Environmental Research (AER)

Speaker Bio: Dr. Benjamin Brown-Steiner is a Scientist at Atmospheric and Environmental Research (AER). He has nearly 10 years of experience in the atmospheric sciences. His research interests include atmospheric chemistry, emissions, meteorology, and climatology with a focus on uncertainty quantification, model complexity, and variability. At Cornell University he studied the influence of Asian emissions on air quality within the United States and uncertainties associated with the selection of model parameters. He also worked with an interdisciplinary team of scientists and economists to develop a Black Carbon emissions inventory for trucks and trains. As MIT, he studied the variability of surface ozone and the uncertainties associated with identifying signals based on the selection of spatial and temporal scales. He also compared chemical mechanisms of different complexities and developed strategies for using simplified chemical mechanisms. At AER, he is working on emissions inventory development and supports a variety of projects, including testing and updating chemical mechanisms (e.g. furans) and studying the impact of biomass burning on US air quality.

Mixtli Campos-Pineda

Assistant Project Scientist - University of California, Riverside

Speaker Bio: Mixtli Campos-Pineda is an Assistant Project Scientist in Jingsong Zhang's group in the Department of Chemistry at the University of California, Riverside. His main focus is the study of the kinetics of the ozonolysis reaction of alkenes and the formation of Criegee Intermediates using Cavity Ring-Down Spectroscopy.

Marie Camredon

Associate Professor - Laboratoire Interuniversitaire des Systemes Atmospheriques

Speaker Bio: Marie Camredon obtained her PhD in atmospheric chemistry from the University of Paris-Est Creteil (UPEC) in 2007. She was a postdoctoral researcher at the University of Birmingham from 2008 to 2010, and is an associate professor of chemistry and atmospheric sciences from UPEC since 2010 at

the Laboratoire Interuniversitaire des Systemes Atmospheriques (LISA). Her main research interest concerns the multiphase oxidation of organic compounds in the atmosphere, using and developing chemical mechanisms, from reduced to totally explicit chemical schemes. Her recent research activities have mainly focused on the evaluation of our understanding of secondary organic aerosol (SOA) formation, comparing explicit models with chamber experiments, simulating the influence of chamber wall loss on SOA formation and exploring the sensitivity of SOA formation to environmental parameters.

Lucy Carpenter

Professor - University of York

Speaker Bio: Lucy Carpenter is Deputy Head of Department (Research) in Chemistry at the University of York. Lucy studied Chemistry at the University of Bristol and then carried out her PhD in experimental atmospheric chemistry at the University of East Anglia. She moved to York as a lecturer in 2000 and was promoted to Professor in 2009. Her group studies the complex interaction between the oceans and the atmosphere, in particular the chemistry of reactive halogens, organic carbon, and reactive nitrogen. She helped establish and is Director of the Cape Verde Atmospheric Observatory and was a lead chapter author of the WMO/UNEP 2014 and 2018 Scientific Assessments of Ozone Depletion. Her research has been recognised by a Philip Leverhulme Prize (2006), the Royal Society Rosalind Franklin Award (2015), a Royal Society of Chemistry Tilden Prize (2017) and a Royal Society Wolfson Merit Award (2018).

John Crouse

Staff Scientist - Caltech

Speaker Bio: John is a Staff Scientist with the Division of Geological and Planetary Sciences at the California Institute of Technology. His research has focused on understanding oxidative mechanisms of organic compounds in the atmosphere through a combination of field and laboratory observations, closely coupled with theoretically-based insights. Of particular interest are the unimolecular reactions of RO₂ radicals, reactions of RO₂ with HO₂ radicals, and RO₂ self and cross reactions. John received a BS from Andrews University and PhD in Chemistry from Caltech.

Gabriel da Silva

Senior Lecturer - The University of Melbourne

Speaker Bio: Gabriel received his PhD in Chemical Engineering from the University of Newcastle in 2006, before undertaking a postdoc in Chemistry and Environmental Science at the New Jersey Institute of Technology. He joined the University of Melbourne in the Department of Chemical Engineering in 2008.

Emma D'Ambro

Graduate Student - University of Washington, Seattle

Speaker Bio: Emma D'Ambro is a graduate student in Prof. Joel Thornton's group at the University of Washington studying the formation mechanisms and properties of secondary organic aerosol from biogenic volatile organic compounds. She utilizes a high-resolution time-of-flight chemical ionization mass spectrometer (HR-ToF-CIMS), coupled to a Filter Inlet for Gases and AEROSols (FIGAERO) for real-time chemically speciated measurements of both the gas and aerosol phases as part of laboratory, chamber, and field studies focusing on SOA formation from isoprene and monoterpenes. She has also developed a dynamic gas-particle partitioning module for use with explicit mechanistic models to interpret the role of radical concentrations and speciation in the formation of isoprene SOA. Recently she has been utilizing computational methods to identify the initial steps of Δ -3-carene oxidation by OH.

Daniel Ellis

PhD student in Atmospheric Chemistry - University of York

Speaker Bio: I started my career doing a Masters in Theoretical physics looking at Exploring the use of Gaussian Process Emulation as a cheaper alternative to simulation for a Complex Chemical System, at the University of York. On completing this, I changed departments, beginning a PhD with the Atmospheric Chemistry group at York (WACL) of which this presentation is part of. PhD title: Novel visualisation and analysis techniques for Atmospheric Chemistry Models

Louisa Emmons

Senior Scientist - National Center for Atmospheric Research

Speaker Bio: Louisa is a Senior Scientist in the Atmospheric Chemistry Observations and Modeling (ACOM) laboratory of NCAR where she uses the global chemistry model CAM-chem, in conjunction with satellite and aircraft observations, to better understand atmospheric composition and the factors that control it. Louisa is the CESM Chemistry-Climate Working Group co-chair. She holds a BS in Physics from Haverford College and a PhD in Physics from the State University of New York at Stony Brook.

Hendrik Fuchs

Investigation of the oxidation of methyl vinyl ketone (MVK) by OH radicals in the atmospheric simulation chamber SAPHIR - Forschungszentrum Juelich

Speaker Bio: since 2008: Researcher at Forschungszentrum Juelich, Germany 2007/08: Research fellow at NOAA, Boulder, CO 2003-2006: Ph.D. work at Forschungszentrum Juelich, Germany

Rodrigo Gibilisco

Postdoctoral researcher - Institute for Atmospheric and Environmental Research - Bergische Universität Wuppertal

Speaker Bio: Rodrigo Gibilisco obtained his PhD in Chemistry at the National University of Córdoba, Argentina in 2016. He is currently doing a postdoctoral stay at the University of Wuppertal studying the degradation of oxygenated organic compounds in the troposphere and its impact on air quality. His scientific interests are focused on the study of atmospheric pollution generated by the burning of open-air biomass at different scales using atmospheric simulation chambers and real-time monitoring methods.

David Hanson

Assistant Professor - Augsburg University

Speaker Bio: Mass spectrometers and particle detectors. Flow reactors and simulations.

Lea Hildebrandt Ruiz

Assistant Professor - The University of Texas at Austin

Speaker Bio: Dr. Lea Hildebrandt Ruiz is an Assistant Professor in at the University of Texas at Austin. She received her B.S. in Chemical Engineering from the California Institute of Technology and Ph.D. in Chemical Engineering and in Engineering and Public Policy from Carnegie Mellon University. Her research interests lie in atmospheric chemistry and the effects of physicochemical processing of pollutants on human exposure and health. More specifically, current areas of focus in her research group include the tropospheric chemistry of chlorine atoms, outdoor air quality measurements in New Delhi, India, the chemistry of indoor environments and air pollution health effects (through human lung cell exposures). Dr. Hildebrandt Ruiz has over a decade of experience in using state-of-the-science mass spectrometric instrumentation to conduct fundamental and policy-relevant chemical research, and she has participated in the development and refinement of mass spectrometric techniques.

Taekyu Joo

PhD candidate - Georgia Institute of Technology

Speaker Bio: I am currently PhD candidate in Earth and Atmospheric Sciences at Georgia Tech. My prior research interest is to understand SOA formation from biomass burning precursors, focusing on the furans. I am also working on the source apportionment analysis using AMS and instrument characterization of CV-ACSM. I received my bachelor's and master's degree in Earth and Environmental Sciences at Korea University. My master's research topic was identifying the cause of seasonal haze in Korea and the source apportionment of carbonaceous aerosol using carbon isotope analysis. During my

master's, I was in part of KORUS-AQ mission, sampling aerosol on the R/V over the Yellow Sea.

Ajith Kaduwela

Senior Scientist - California Air Resources Board/University of California at Davis

Speaker Bio: Ajith's research interests include atmospheric photochemical mechanisms, air quality modeling, climate change, low-cost air sensors, indoor air quality, air-quality management in developing countries, photoelectron spectroscopy, and youth STEM education. He has an earned Ph.D. in chemical physics.

Jennifer Kaiser

Assistant Professor - Georgia Institute of Technology

Speaker Bio: Jennifer joined Georgia Tech in the Fall of 2018 as an Assistant Professor of Civil and Environmental Engineering and Earth and Atmospheric Sciences. She received a PhD in chemistry from the University of Wisconsin-Madison, where she developed and deployed instrumentation for aircraft-based measurements of formaldehyde. During her postdoctoral work at Harvard's School of Engineering and Applied Sciences, Dr. Kaiser expanded her focus to include satellite-based observations and global chemical-transport modeling. A common thread throughout her research is a focus on the chemistry of volatile organic compounds from emission through oxidation to removal. Her current work is grounded in insights from field, and applies remote observations and global models to probe atmospheric composition and air quality at broad spatial and temporal scales.

Sungah Kang

Ms. - Forschungszentrum Juelich, Institut für Energie und Klimaforschung Troposphäre (IEK-8)

Speaker Bio: I am currently PhD student in Forschungszentrum Juelich. My focus is to investigate the formation of Highly Oxidized Multifunctional Molecules(HOM). Before joining FZJ, I did my master degree in inorganic chemistry in Sungkyunkwan University, South Korea. My master thesis was about synthesis of organic-inorganic microporous nano particle and its application. I graduated Sungkyunkwan university at 2012, majoring in Chemistry.

Theo Kurten

Academy Research Fellow - University of Helsinki

Speaker Bio: Theo is a University Lecturer and Academy Research Fellow at the Department of Chemistry at the University of Helsinki. He is a computational chemist studying reactive sulfur, nitrogen and carbon compounds in the atmosphere, with a focus on the formation, degradation and clustering of condensing vapors. His group uses quantum chemical tools to study both reaction mechanisms, detection of reaction product by chemical ionisation, and thermodynamic properties. Theo obtained his

PhD from the Department of Physics at the University of Helsinki, and has also worked as a post-doctoral researcher at the University of Copenhagen.

Michael Link

Graduate Student - Colorado State University

Speaker Bio: As a 4th year graduate student in Delphine Farmer's group, I'm currently studying the mechanisms by which carboxylic acids are formed in the gas-phase in forested environments. My interests in atmospheric chemistry include biosphere-anthrosphere interactions, impacts on air pollution from oxidation chemistry and aqueous-phase processing in the atmosphere. I'm also interested in the intersections of policy and science with respect to air quality and climate. With a background in analytical chemistry, I've used methods of chromatography and mass spectrometry to measure VOCs, aerosols and--more recently--oVOCs in laboratory studies and field campaigns.

Yuhan Liu

Assistant Researcher - College of Environmental Sciences and Engineering, Peking University

Speaker Bio: 2011-2017, Environment Science, PhD, Peking University 2017-now, Postdoctor, Peking University

Keding Lu

Associate Professor - Peking University

Speaker Bio: A central goal of the research in my group is to elucidate the formation mechanism of the secondary air pollutants from the oxidation of primary pollutants caused by atmospheric radicals such as HOx/ROx and NO₃. So far, three major progresses have been made on this topic: (1) high sensitivity optical instruments were developed for the detection of OH/HO₂, NO₂/NO₃/N₂O₅ and HONO; (2) an unclassical OH regeneration mechanism was discovered based on a closure study approach on the radical budget and generalized in a global perspective; (3) the study of reactive nitrogen chemistry further shed light on the primary sources of HOx and ROx radicals as well as the production mechanism of particulate nitrate. These new findings on atmospheric oxidation mechanism showed strong implications on causes of the secondary air pollution. In my group, continuous efforts will be put on the instrument and chemical mechanism development iteratively. Technique and knowledge advancement are expected to be performed on various cutting-edge platforms.

Thomas Mentel

Head of the Aerosol Section - Institute for Energy and Climate Research: Troposphere

Speaker Bio: Thomas is at Forschungszentrum Jülich GmbH, Institute of Energy and Climate Research (IEK-8), Germany, where he is head of the "Heterogeneous Reactions" group and the "Aerosols" section.

He has an appointment as adjunct Professor for Aerosol Chemistry at the Gothenburg University. Thomas works on atmospheric chemistry of plant emitted VOC, formation of highly oxidized molecules and secondary organic aerosol formation as well as on aerosol microphysical properties. His studies are mostly performed in simulation chambers (JPAC, SAPHIR) applying mass spectrometric methods. Thomas led the Zeppelin campaigns 2012-2013 in the European PEGASOS project.

Kristian Holten Møller

PhD-student - University of Copenhagen

Speaker Bio: Kristian is a PhD-student in Professor Henrik G. Kjaergaard's group at the University of Copenhagen, from where he has also received his B.Sc. and M.Sc. His work focuses on theoretical determination of reaction rates and mechanisms for autoxidation of biogenic species in the atmosphere. He develops cost-effective theoretical approaches that allow for comparison with experimental results. Funded by a Danish Elite Research travel grant, he has spent 3 months in Professor Paul O. Wennberg's laboratory at Caltech working on experimental determination of hydrogen shift reaction rate constants using GC-CIMS.

Camille Mouchel-Vallon

Postdoctoral Researcher - National Center for Atmospheric Research

Speaker Bio: Camille obtained his PhD in atmospheric chemistry from the Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA) of the Paris-Est Créteil University in 2013, where he developed a cloud chemistry module for GECKO-A. He then went on to be a postdoc in the Laboratoire de Météorologie Physique (LaMP) of the Blaise Pascal University of Clermont-Ferrand (France) where he developed the explicit clouds organic chemistry mechanism CLEPS. He then moved to the Wolfson Atmospheric Chemistry Laboratories of the University of York (UK) where he worked on updating the Criegee chemistry protocol for the upcoming MCM-GECKO-A mechanism. He is now working in the Atmospheric Chemistry Observations and Modelling Laboratory of the National Centre for Atmospheric Research (Boulder, CO) where he is applying GECKO-A to real case scenarios.

Mike Newland

Post-doctoral Researcher - Wolfson Atmospheric Chemistry Laboratories, Department of Chemistry, University of York

Speaker Bio: Mike Newland completed his PhD at the University of East Anglia in 2013, modelling emissions of long lived ozone depleting and greenhouse gases, and investigating changes to the historic oxidative capacity of the northern hemisphere using ice core records of alkanes and alkyl nitrates. He then moved to the University of Birmingham to work on the REACT-SCI project investigating the role of stabilised Criegee intermediates as atmospheric oxidants through experiments at the large outdoor simulation chamber, EUPHORE, Spain. He returned to UEA to further investigate the research question of trends in the oxidative capacity of the atmosphere. He then moved to the Wolfson Atmospheric

Chemistry Laboratories at the University York where he is currently working on updating the Master Chemical Mechanism through evaluation against chamber experiments with a focus on aromatic chemistry. He also continues to work on the chemistry of alkene ozonolysis, returning to EUPHORE this year for further experiments. Mike is also working on the EUROCHAMP-2020 project, a project to integrate European atmospheric simulation chambers for research and innovation.

Anna Novelli

Postdoctoral researcher - Forschungszentrum Jülich

Speaker Bio: I studied Chemistry at the University of Torino, in Italy and obtained a Master degree in Environmental chemistry with a thesis focusing on degradation of pollutants in marine water. I moved to Germany where I worked at the Max Plank Institute for Chemistry in the Radical Measurement group focusing on Criegee intermediates chemistry. I obtained my PhD from the Johannes Gutenberg University Mainz. Currently I hold a Postdoctoral position at the Forschungszentrum Jülich where I focus on investigating the degradation of biogenic volatile organic compounds by oxidants to understand the radicals budget and the ozone production.

LAVINIA ONEL

Research fellow - University of Leeds

Speaker Bio: I received my PhD. from the University of Iasi, Romania. My thesis was the result of a collaboration that I initiated with Budapest University of Technology and Economics, Hungary. Since 2011 I have carried out postdoctoral research at the University of Leeds, UK. My research has been focused on studies of the kinetics and mechanisms of the atmospheric reactions of amines relevant for Carbon Capture and Storage and their potential atmospheric impacts, development of a method for the selective detection of RO₂ radicals and application of the new method in kinetic studies of RO₂ reactions in the Leeds atmospheric simulation chamber HIRAC and kinetic studies of atmospheric representative Criegee intermediates reactions.

John Orlando

Senior Scientist - Atmospheric Modeling and Observations Laboratory, National Center for Atmospheric Research

Speaker Bio: John Orlando is a Senior Scientist in the Atmospheric Chemistry Observations and Modeling Laboratory at the National Center for Atmospheric Research (Boulder, CO). He received his Ph.D degree in Physical Chemistry at McMaster University (Hamilton, Ontario, Canada) in 1987, and then completed a two year stint as a post-doctoral fellow at the NOAA Aeronomy Laboratory under the supervision of C. J. Howard and A. R. Ravishankara. He moved to NCAR in 1989 where he has been ever since. The primary focus of Dr. Orlando's research is on the study of the mechanisms of the atmospheric oxidation of volatile organic species, including oxygenated and halogenated species, with a special interest in the chemistry of alkoxy and peroxy radicals. Dr. Orlando is also actively involved in

maintaining and updating chemical mechanisms in various atmospheric models in use at NCAR, and in the development of field campaigns.

Bernhard Reischl

Postdoctoral Researcher - Institute for Atmospheric and Earth System Research / Physics, University of Helsinki

Speaker Bio: Bernhard is a computational physicist with a background in computational statistical mechanics and materials science. He is currently working in the computational aerosol physics group at the University of Helsinki, investigating collisions of atmospherically relevant molecular clusters, as well as heterogeneous ice nucleation, by means of molecular dynamics simulations and free energy calculations.

Zhonghua Ren

PhD Candidate - Department of Chemical and Biomolecular Engineering at The University of Melbourne

Speaker Bio: Research Interest: Use theoretical and computational methods to investigate the mechanism of amines degradation in troposphere and study the kinetics by reaction rate theory.

Andrew Rickard

NCAS Research Scientist - Wolfson Atmospheric Chemistry Laboratories, University of York

Speaker Bio: Andrew has a broad range of research interests that span mechanistic chemistry of complex gas- and condensed- phase systems, kinetic modelling of complex processes and the chemistry of reactive radical intermediates. His group is primarily responsible for the update and implementation of the international benchmark Master Chemical Mechanism (<http://mcm.leeds.ac.uk/MCM>), which is extensively used by the science community in a wide variety of science and policy applications where chemical detail is required to assess issues related to air quality and climate. Other research areas include the application of the MCM in detailed chemical models, development and automatic generation of new mechanisms and the evaluation of mechanisms through the design and coordination of large smog chamber studies.

Michael Rolletter

PhD Student - Forschungszentrum Jülich, Institute of Energy and Climate Research: Troposphere (IEK-8)

Speaker Bio: Third year PhD in the Institute for Energy- and Climate Research: Troposphere (IEK-8) at the Forschungszentrum Jülich, Germany. The PhD research focuses on the development of a new cavity

ring-down instrument for the detection of ambient HO₂ radicals. Experience with kinetic experiments of OH and HO₂ radicals. Furthermore evaluating results from experiments performed in the atmosphere simulation chamber SAPHIR (Simulation of Atmospheric PHotochemistry In a Large Reaction Chamber).

S. Mani Sarathy

Associate Professor - King Abdullah University of Science and Technology

Speaker Bio: Dr. Mani Sarathy is an Associate Professor of Chemical Engineering and Associate Director of the Clean Combustion Research Center (CCRC) at KAUST. Dr. Sarathy was previously a Postdoctoral Researcher in the Combustion Chemistry group at the U.S. Department of Energy Lawrence Livermore National Laboratory. He received his PhD and M.A.Sc. degrees in Environmental and Chemical Engineering at the University of Toronto and his B.A.Sc. in Environmental Engineering Chemical Specialization from the University of Waterloo. Since 2015, Dr. Sarathy has been consistently named a Clarivate Analytics Highly Cited Researcher. His research interest is in developing sustainable energy technologies with decreased net environmental impact. A major thrust of his research is using chemical kinetic simulations to design fuels, engines, and reactors.

Rishabh Shah

PhD candidate - Carnegie Mellon University

Speaker Bio: Doctoral thesis title: pre-existing and potential particulate pollution patterns in populous places.

Anna Shcherbacheva

PhD - Institute for Atmospheric and Earth System Research (INAR)

Speaker Bio: My background is mostly in Applied Mathematics and statistics, although I work for the moment in the group of chemical physicists. I completed my Bachelor studies in Southern Federal University, Russia in 2010. After that I was studying at double-degree program and got my Master degree in Lappeenranta University of Technology, Finland. I have been pursuing a Doctoral degree in Applied Mathematics for several years and currently I'm anticipating the decision regarding my dissertation. I'm planning to continue the research of formation mechanisms of molecular clusters by applying statistical data analysis to combinations of mathematical models and empirical data which enables to characterize the mechanisms of molecular cluster formation in the atmosphere.

Heather Simon

Physical Scientist - United States Environmental Protection Agency

Speaker Bio: Dr. Heather Simon received a BS from Stanford University and an MSE and PhD in Environmental Engineering from the University of Texas at Austin before joining the Environmental

Protection Agency. In her current position, she performs photochemical modeling and ambient air quality data analysis to support national air pollution regulatory efforts. Her scientific interests include: ambient ozone trends, ozone impacts on human health and ecosystems, ClNO₂ chemistry, organic aerosols, NO_y budgets, and emissions inventories.

Jim Smith

Professor of Chemistry - University of California, Irvine

Speaker Bio: Jim Smith joined the Department of Chemistry at UC Irvine in 2015. Prior to that he was a scientist and head of the Ultrafine Aerosols Research Group in the Atmospheric Chemistry Observations and Modeling Laboratory at the National Center for Atmospheric Research (NCAR) in Boulder, CO. Jim received his Ph.D. in Environmental Science and Engineering at the California Institute of Technology in 2000. Jim's research focuses on performing laboratory and field measurements in order to understand and quantify the mechanisms of atmospheric nanoparticle formation and growth.

William R. Stockwell

Research Professor - Department of Physics, University of Texas at El Paso

Speaker Bio: William R. Stockwell is a research professor at the University of Texas at El Paso and an affiliated faculty with the Desert Research Institute. He has authored or co-authored 200 scientific publications on atmospheric chemistry, physics and education. Dr. Stockwell's research interests include the development of atmospheric chemistry mechanisms, air quality modeling, field measurements for model evaluation and research on the effects of toxic environmental agents on biologically important molecules. Dr. Stockwell is the editor for atmospheric chemistry of the Bulletin of the American Meteorological Society.

Craig Stroud

Research Scientist - Environment Canada

Speaker Bio: Dr. Craig Stroud graduated from the University of Colorado with a Ph.D. in Environmental Chemistry. He has worked for the last 15 years as a research scientist in the Air Quality Research Division within Environment Canada. He has expertise in chemical transport modeling, VOC emissions processing, SOA schemes, air toxics, biogenic VOCs, Mie theory and cloud nucleation modeling.

Mads Sulbaek Andersen

Assist. Professor - California State University, Northridge

Speaker Bio: Mads Sulbaek Andersen received his Ph.D. in atmospheric chemistry from the University of Copenhagen in 2006. While pursuing his graduate studies, he conducted research at the Research & Advanced Engineering Laboratory at Ford Motor Company in Dearborn, Michigan. He also worked as a

visiting scientist at NASA Ames Research Center in Mountain View, California before receiving a Comer Research Foundation Postdoctoral Fellowship and moving to University of California – Irvine to conduct research under the mentorship of Professor and Nobel Laureate F. Sherwood Rowland. He then joined the Laboratory Studies and Modeling Group at the Jet Propulsion Laboratory (JPL) as a NASA postdoctoral research fellow. At the end of this program he and his family went to Denmark for a year where he worked as a visiting professor at the University of Copenhagen. He remains an adjunct associate professor at University Copenhagen. In 2014 joined the Chemistry and Biochemistry faculty at CSUN in a tenure track position. His current research investigates the kinetics and mechanisms of peroxy radical chemistry, and the environmental fate of a vast range of halogenated organic species.

Jabir Syed

Assistant Professor - COMSATS University Islamabad

Speaker Bio: Dr. Jabir H. Syed is an Environmentalist holding a position of Assistant Professor at Department of Meteorology, COMSATS University Islamabad. His research interests are mainly focused on atmospheric chemistry and to study the impacts of aerosols on environment and climate. Furthermore, he has also worked in the field of ecotoxicology in order to establish a baseline data for all the major environmental contaminants in the environment of Pakistan. In addition, monitoring and analysis of organic pollutants has been remained his forte which has gained him national as well international recognition.

Carmen Maria Tovar Ramos

PhD student - Bergische Universität Wuppertal

Speaker Bio: Carmen Tovar is currently PhD student at the University of Wuppertal, Germany where she is studying the degradation of partially oxygenated hydrocarbons under simulated atmospheric conditions. Her work is supported by a FANTEL scholarship, granted by the government of El Salvador to the most talented researchers of her home country. She received her Bachelor of Chemistry at El Salvador University in Central America. During her thesis, she worked on the design of a cryogenic pre-concentration trap for the determination of volatile organic compounds in air, in cooperation with the Center for Environmental Research and Training (CENICA) in Mexico City. After completing her Bachelor, Carmen accepted a position as coordinator of the Department of Sciences at the Pedagogical University of El Salvador, where she developed teaching and research work. Shortly after, she won the SECYT scholarship in Córdoba, Argentina, which she obtained third place in merit order. There, as part of her investigation, she performed several studies on the kinetics and atmospheric degradation mechanisms of fluorinated acrylates and methacrylates and hydrofluorolefins (HFO's), using atmospheric simulation chambers with Fourier Transform Infrared Spectroscopy (FTIR), in addition to Gas Chromatography for two years. This research in cooperation between Bergische University of Wuppertal and National University of Córdoba, Argentina. During this time, she has managed to publish her work in international refereed journals and participated in various international conferences. She likes sports and marine life, as well as traveling and science fiction books.

Geoff Tyndall

Senior Scientist - National Center for Atmospheric Research

Speaker Bio: Geoff Tyndall is a Senior Scientist in the Atmospheric Chemistry Observations and Modeling Lab at NCAR. His interests center on the reactions of peroxy and oxy radicals derived from organic compounds present in the atmosphere.

Rasmus V. Otkjær

Ph.D. Student - University of Copenhagen

Speaker Bio: I am a Ph.D. Student in the research group of Henrik G. Kjaergaard. I obtained my B.Sc. and M.Sc. in the same group in 2014 and 2016, respectively. My work centers on the calculation of rate constants for unimolecular reactions, with particular focus on the autoxidation of VOCs.

Krystal Vasquez

Graduate Student - California Institute of Technology

Speaker Bio: I am a Ph.D candidate in Prof. Paul Wennberg's group at the California Institute of Technology. As both an analytical and atmospheric chemist, my research uses mass spectrometry in order to observe the chemistry of oxygenated volatile organic compounds. Most recently, I helped develop a high-resolution chemical ionization mass spectrometer with a GC interface to study the fate of the first generation isoprene hydroxy nitrates isomers. Before joining Caltech, I obtained my bachelors from UC Riverside where I majored in chemistry with a minor in environmental science.

Hanna Vehkamäki

professor - University of Helsinki

Speaker Bio: Hanna Vehkamäki is a professor in computational aerosol physics in the Division of Atmospheric Sciences, Department of Physics at the University of Helsinki. She leads a research group of around 10 people, and their research focuses on molecular level modeling of atmospheric cluster and particle formation as well as ice nucleation. She has a MSc (1994) and PhD (1998) in Theoretical Physics from the University of Helsinki, Hanna was a Research Fellow at the University College London 1998-1999, and has received an ERC starting grant 2009 and an ERC advanced grant 2015. She has also been awarded for her equal opportunities and work well being work in academia.

Luc Vereecken

Group Leader - Forschungszentrum Jülich GmbH

Speaker Bio: Luc Vereecken did his PhD at the Katholieke Universiteit Leuven, Belgium, in 1999, where he also stayed for several postdoc periods. In 2010, he moved to the Max Planck Institute for Chemistry in Mainz, Germany, where he was a group leader for theoretical atmospheric chemistry. Since 2015, he is active at the Forschungszentrum Jülich, Germany, where he does theoretical studies on atmospheric processes. His current research interests include carbonyl oxide chemistry, alkoxy and alkylperoxy radical chemistry, and SAR development and validation. Much of his research involves larger terpenoids, where he is active in developing kinetic models based on SARs and explicit quantum chemical and theoretical kinetic calculations.

Aleksandra Volkova

Graduate Student - California State University, Northridge

Speaker Bio: I am a current masters student studying atmospheric chemistry. I obtained my bachelors from UC San Diego in environmental chemistry and hope to continue my education by pursuing my PhD in atmospheric chemistry as well. I am interested in all things climate related and hope to have a career in helping mitigate the effects of anthropogenic climate change.

Haichao Wang

Postdoctoral - Peking University

Speaker Bio: My research focus on the development of high sensitivity optical instrumentation for laboratory and field studies of atmospheric trace gases; the field measurements of reactive nitrogen species (such as nitrate radical and dinitrogen pentoxide); the study of chemical behaviors and atmospheric impacts of nitrate radical and dinitrogen pentoxide.

Ningxin Wang

Correlating aerosol chemical composition and optical properties using 7-year co-located measurements at the ARM Southern Great Plains (SGP) site - University of California, Davis

Speaker Bio: I am currently a postdoc researcher at UC Davis, and my work involves characterization of atmospheric particles from ambient measurements using aerosol mass spectrometry. I got my PhD from Carnegie Mellon University at the end of 2017, and my thesis is multi-generational chemical aging of alpha-pinene ozonolysis secondary organic aerosol under low-/high- initial NO_x conditions.

Zixu Zhao

Graduate student - University of California - Riverside

Speaker Bio: Zixu (Tiffany) Zhao received her Bachelor's degree in Chemistry from Washington State University, where she performed undergraduate research examining the chemistry of the long-lived radioactive materials created as byproducts of nuclear fission to the damage of the environment. Currently, Tiffany is a beginning second-year Ph.D. student in the Chemistry Department at the University of California, Riverside. She studies heterogeneous oxidation of organic aerosol particles and focuses on identifying gas- and particle-phase products using various mass spectrometry techniques. Her research also aims at developing a better understanding of chemical mechanisms occurring at aerosol particle interface based on the compositional characterization.

Paul Ziemann

Professor - University of Colorado Boulder

Speaker Bio: Paul Ziemann is currently a professor in the Department of Chemistry and a fellow of the Cooperative Institute for Research in the Environmental Sciences (CIRES) at the University of Colorado at Boulder. He earned his Ph.D. in Chemistry from Penn State and was a postdoc at the University of Minnesota. From 1996–2013 he was a professor in the Department of Environmental Sciences at the University of California, Riverside. While there he also served as Director of the Air Pollution Research Center. Since 1996 he has conducted laboratory studies of the atmospheric chemistry of biogenic and anthropogenic organic compounds and the processes that form secondary organic aerosol particles. More recently he has also become involved in studies of the chemistry of indoor air.
