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BIOSKETCH

Sergey Nizkorodov was born in 1971 in Almaty, Kazakhstan. He received his undergraduate degree in biochemistry from Novosibirsk State University, Russia, in 1993 and graduate degree in physical chemistry from Basel University, Switzerland, in 1997. After doing his postdoctoral research in chemical kinetics and reaction dynamics at the University of Colorado at Boulder, and in atmospheric chemistry at the California Institute of Technology, he joined the faculty of the Department of Chemistry, University of California, Irvine (UCI) in 2002. He teaches general, analytical, physical, and atmospheric chemistry courses at UCI, and does research on chemistry of particulate matter in the ambient atmosphere and in indoor environments using state-of-the-art spectroscopic and mass-spectrometric techniques. His primary areas of expertise are molecular spectroscopy, high resolution mass spectrometry, chemical reaction dynamics, and photochemistry. He has been a research mentor to 79 graduate, undergraduate, high-school, and postdoctoral students with female researchers accounting for about 60% of this group. His research, education, and public outreach work have been recognized by several awards including Camille Dreyfus Teacher-Scholar Award, AGU Ascent Award, Coblentz Award, and UCI Chancellor's Award for Excellence in Fostering Undergraduate Research.

EDUCATION

Ph.D. in Chemistry (September 1993–June 1997; Summa Cum Laude)

University of Basel, Basel, Switzerland

Ph.D. Thesis: “Vibrational Predissociation Spectroscopy of Ionic Complexes and Clusters”

Research mentors: Dr. Evan Bieske and Dr. Otto Dopfer, and Dr. John Maier

Diploma of Higher Education in Chemistry (September 1988–June 1993; Honors; GPA = 5.00/5.00)

Novosibirsk State University, Novosibirsk, Russia

Diploma Thesis: “Influence of Magnetic Field on Time-Resolved Fluorescence and Photolysis of NO₂”

Research mentors: Dr. Nikolai Bazhin and Dr. Vladimir Makarov

EMPLOYMENT

Professor of Chemistry (July 2013–present)

Associate Professor of Chemistry (July 2008–June 2013)

Assistant Professor of Chemistry (July 2002– June 2008)

Department of Chemistry, University of California, Irvine, California, USA

Dreyfus Postdoctoral Scholar in Environmental Chemistry (November 2000–July 2002)

Division of Chemistry & Chemical Engineering / Division of Geological & Planetary Sciences / Jet Propulsion Laboratory at California Institute of Technology, Pasadena, California, USA

Principal investigators: Drs. Mitchio Okumura, Paul Wennberg, Stanley Sander and Geoffrey Blake

Postdoctoral Research Associate (October 1997–October 2000)

JILA, University of Colorado at Boulder, Colorado, USA

Principal investigator: Dr. David J. Nesbitt

Graduate Research Assistant (September 1993–June 1997)

Institute of Physical Chemistry, University of Basel, Basel, Switzerland

Principal investigator: Dr. John P. Maier

Research Assistant (September 1992–June 1993)

Institute of Chemical Kinetics and Combustion, Novosibirsk, Russia

Principal investigator: Dr. Vladimir I. Makarov

AWARDS

- ❑ *Wilsmore Fellowship (to support travel to University of Melbourne, July 9-15, 2017)*
- ❑ *Fulbright Scholarship, University of Eastern Finland, supported by the Fulbright-Saastamoinen Foundation Grant in Health and Environmental Sciences (Aug 15, 2016 – Feb 14, 2017)*

- ❑ *Elected Fellow of AAAS (Nov 2015)*
- ❑ *UCI Undergraduate Research Opportunities Program Faculty Mentor of the Month (Nov 2013)*
- ❑ *Ascent Award from the American Geophysical Union (2013) – given to “exceptional mid-career (academic, government, and private sector) scientists in the fields of the atmospheric and climate sciences”*
- ❑ *UCI Chancellor's Award for Excellence in Fostering Undergraduate Research (May 2012)*
- ❑ *Camille Dreyfus Teacher-Scholar Award (2007)*
- ❑ *UCI School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education (May 2006)*
- ❑ *Coblentz Award from the Coblentz Society (2005) – presented annually “to an outstanding young molecular spectroscopist under the age of 40”*
- ❑ *Research Innovation Award from the Research Corporation (2003)*
- ❑ *Camille and Henry Dreyfus Postdoctoral Scholarship (2000)*
- ❑ *International Journal Student Paper Award from Elsevier Science and Finnigan MAT (1996)*
- ❑ *Undergraduate Academic Achievement Award (1991)*
- ❑ *Lenin's Scholarship (1990)*

VISITING PROFESSORSHIPS AND INTERNATIONAL COLLABORATIONS

- ❑ *University of Melbourne, Australia (July 9-15, 2017, hosted by Prof. Evan Bieske)*
- ❑ *University of Eastern Finland, Finland (Aug 15, 2016 – Feb 14, 2017, hosted by Prof. Annele Virtanen)*
- ❑ *Fudan University, China (Sep 7 – Oct 8, 2014, 1 month, hosted by Prof. Xin Yang)*
- ❑ *University of Helsinki, Finland (Oct 2013, 3 weeks, hosted by Prof. R. Benny Gerber)*
- ❑ *Hebrew University of Jerusalem, Israel (Mar 2011, 3 weeks, hosted by Prof. R. Benny Gerber)*
- ❑ *Universität Würzburg, Germany (Mar 2016, 2 weeks, hosted by Prof. Otto Dopfer)*

FUNDING HISTORY

Proposal Title	PI and co-PIs	Agency / Award type	Amount	Period
Impacts of phase state and water content on secondary organic aerosol formation and partitioning	Manabu Shiraiwa (PI), James Smith (co-PI), Annmarie Carlton (co-PI), Sergey Nizkorodov (co-PI).	Office of Biological & Environmental Research (BER), Atmospheric Science Program (ASR), Department of Energy (DOE) Office of Science,	\$698,727 total	07/15/17 - 07/14/20
Vapor and particulate phase smoke components and cardiovascular dysfunction	Michael Kleinman (PI), James Smith (co-PI), Sergey Nizkorodov (co-PI), Norbert Staimer (co-PI)	National Institute of Health 1R01ES027232-01	\$1,050,041 total	09/01/16 - 08/31/19
Studies of Atmospheric Brown Carbon Chemistry in Support of the FIREX Campaign	Sergey Nizkorodov (PI), Julia Laskin (co-PI), Alexander Laskin (co-PI)	National Oceanic & Atmospheric Administration NA16OAR4310102	\$239,999 total \$168,428 direct	07/01/16 - 10/30/19
Effects of Ammonia on Secondary Organic Aerosol Formation in a Changing Climate	Donald Dabdub (PI), Sergey Nizkorodov (co-PI)	US Environmental Protection Agency 83588101	\$701,304 total \$510,446 direct	01/01/16 - 12/31/18
Chemistry of Atmospheric Aerosols at Pacificchem 2015 Congress	Sergey Nizkorodov (PI)	Office of Biological & Environmental Research (BER), Atmospheric Science Program (ASR), Department of Energy (DOE) Office of Science, DE-SC0014432	\$10,475 total \$10,475 direct	08/01/15 - 07/31/16
Chemistry of Atmospheric	Sergey Nizkorodov	National Science	\$20,254 total	04/15/15 -

Aerosols at Pacificchem 2015 Congress	(PI)	Foundation AGS - 1519142	\$17,175 direct	03/31/16
Impacts of Household Sources on Outdoor Pollution at Village and Regional Scales in India	Kirk Smith, UC Berkeley (PI), Sergey Nizkorodov is one of many investigators on this grant	US Environmental Protection Agency R835425	\$1,495,454 total	04/01/14 - 03/31/17
Development of a test center to determine SAE J2719 (and CCR) listed trace contaminants in hydrogen fuel from hydrogen vehicle fueling stations located within the South Coast Air Basin	Sergey Nizkorodov (PI), co-investigators: Hyun Ji (Julie) Lee, Barbara Finlayson-Pitts, Donald Blake	South Coast Air Quality Management District	\$114,500 total \$74,110 direct	08/13/14 - 04/12/15
Combined Laboratory and Field Characterization of Nitrogen-Containing Light-Absorbing Organic Compounds	Sergey Nizkorodov (PI), Julia Laskin (co-PI), Alexander Laskin (co-PI)	National Oceanic & Atmospheric Administration NA13OAR4310062	\$224,985 total \$162,864 direct	08/01/13 - 07/31/16
MRI: Acquisition of an Atmospheric Pressure Ionization Mass Spectrometer for Measurements of Trace Gases and Secondary Organic Aerosol Components in Air	Barbara Finlayson-Pitts (PI), co-investigators: Sergey Nizkorodov, Donald Blake, Michael Kleinman, Eric Saltzman.	National Science Foundation CHE-1337080	\$278,658 direct	09/01/13 - 08/31/16
Differential Redox & Electrophilic Toxicities of Modified Tobacco Products	Norbert Staimer (PI), co-investigators: Ralph Delfino, Rufus Edwards, Michael Kleinman, Sergey Nizkorodov, Nosratola Vaziri	National Institute of Health 1R21CA164540-01A1	\$359,777 total \$239,250 direct	4/1/13 - 3/31/15
Photochemistry in Organic Aerosols	Sergey Nizkorodov (PI)	National Science Foundation AGS-1227579	\$547,648 total	8/15/12 - 7/31/15
Symposium on Kinetics and Photochemical Processes in the Atmosphere (co-PI = Eric Saltzman)	Sergey Nizkorodov (PI)	UCI Conference Support Program (proposal# 2010-11-6)	\$1,500 direct	3/03/11
The First Application of Chemoinformatics to Organic Aerosols	Sergey Nizkorodov (PI), Pierre Baldi (co-PI)	UCI Environmental Institute	\$26,980 direct	1/01/10 - 1/31/11
A Comprehensive Approach to Understanding Chemistry at Interfaces and Atmospheric Implications)	Barbara Finlayson-Pitts (PI), co-investigators: Donald Dabdub, Filipp Furche, John Hemminger, Benny Gerber, Sergey Nizkorodov, and Douglas Tobias.	National Science Foundation CHE-0909227	\$8,260,697 total	9/01/09 - 8/30/14
MRI: Acquisition of Two High-Resolution Mass Spectrometers for Collaborative Research on Energy Use, Air Quality and	Sergey Nizkorodov (PI), co-investigators: Barbara Finlayson-	National Science Foundation MRI-0923323	\$680,680 direct	7/01/09 - 6/30/10

Health	Pitts and Donald Blake.			
Photochemistry of Secondary Organic Aerosol Particles	Sergey Nizkorodov (PI)	National Science Foundation ATM-0831518	\$447,840 total	9/01/08 - 8/31/12
Inactivation of Human Erythrocyte Glutathione Peroxidase 1 and Cu,Zn Superoxide Dismutase by Air Pollutant-Mediated Oxidative and Electrophilic Stress	Ralph Delfino (PI), Sergey Nizkorodov (co-PI)	The Academic Senate Council on Research, Computing and Library Resources (CORCLR)	\$19,000 total	9/01/08 - 6/30/09
Camille Dreyfus Teacher-Scholar Award: Laboratory Studies of Chemical Processes Taking Place in Atmospheric Aerosol Particles	Sergey Nizkorodov (PI)	The Camille and Henry Dreyfus Foundation	\$75,000 total	7/01/07 - 6/30/12
Graduate Fellowships for Interdisciplinary Training in Chemical and Materials Physics & Atmospheric / Analytical Chemistry	Department Chair (PI); Sergey Nizkorodov is one of the co-PIs who heled write the proposal	Department of Education	\$633,360 direct	7/01/06 - 6/30/09
Photochemistry at Organic Particle-Air Interfaces	Sergey Nizkorodov (PI)	National Science Foundation ATM-0509248	\$341,897 total	7/01/05 - 6/30/08
New Analytical Tools for Characterization of Precursors of Cloud Condensation Nuclei	Otto Dopfer (PI), Sergey Nizkorodov (co-PI)	Bavaria California Technology Center (BaCaTeC)	€7,600 total	9/05 - 8/07
Development of a novel aerosol particle counter	Sergey Nizkorodov (PI)	UCI Committee on Research	\$2,640 total	3/01/05 - 5/31/05
NSF-EMSI: Reactions of Atmospheric Relevance at the Air-Water Interface: Developing a Molecular Level Understanding and Application to the Troposphere on Local to Regional Scales (PI = Barbara Finlayson-Pitts)	Barbara Finlayson-Pitts (PI), co-investigators: Donald Dabdub, John Hemminger, Benny Gerber, Sergey Nizkorodov, and Douglas Tobias	National Science Foundation CHE-0431312	\$6,009,585 total	9/01/04 - 8/30/09
Dreyfus Postdoctoral Scholar in Environmental Chemistry: Training Program Proposal for 2004-2006	Sergey Nizkorodov (PI)	The Camille and Henry Dreyfus Foundation	\$120,000 total	2004-2006
Effect of Particle Size on Rates of Photodegradation and/or Photoactivation of Carcinogenic PAHs Adsorbed on Atmospheric Soot Aerosol Particles	Sergey Nizkorodov (PI)	UC Cancer Research Coordinating Committee	\$50,000 total	7/01/04 - 6/30/05
FMP Schedule of Training Goals for Anthony Gomez in 2004-05	Sergey Nizkorodov (PI)	UCI Office of Graduate Studies / diversity fellowship for grad. student Anthony Gomez	\$22,518 total	9/01/04 - 5/31/05
Effect of particle size on rates of photodegradation of atmospheric toxins adsorbed on soot aerosol particles	Sergey Nizkorodov (PI)	UC Toxic Substances Research and Teaching Program / fellowship for grad. student Xiang Pan	\$25,000 total	7/01/04 - 6/30/05

Development of a novel approach for studying the mechanism of ozonolysis of unsaturated fatty acids at gas-solid and gas-liquid interfaces	Sergey Nizkorodov (PI)	Research Corporation / Research Innovation Award	\$35,000 total	9/01/03 - 8/31/04
Surface Photochemistry Of Oxidized Organic Layers Immobilized on Sea-Salt Studied With Cavity-Ring Down Spectroscopy	Sergey Nizkorodov (PI)	UCI Committee on Research	\$3,000 total	Spring 2003

APPROVED USER FACILITIES PROPOSALS

The following user proposals have Sergey Nizkorodov as the PI; proposals where Nizkorodov is a co-PI are not listed.

- ❑ Effect of Relative Humidity and Cloud Processing on Biogenic and Anthropogenically-Influenced Organic Aerosols - A Combined Laboratory and Modeling Approach (DOE EMSL Proposal 48808), 10/01/2015-09/30/2017
- ❑ The Effect of Biogenic-Anthropogenic Interactions on the Physical and Chemical Properties of Atmospheric Organic Aerosols (DOE EMSL Proposal 48624), 1/23/2014-09/30/2015
- ❑ Molecular Level Analysis of Photochemical Processing of Brown Carbon and Nitrogen Compounds in Atmospheric Aerosols (DOE EMSL Proposal 47915), 10/01/2013-09/30/2015
- ❑ Molecular Chemistry of Secondary Organic Aerosol Formed in Photochemical Aging of Primary Anthropogenic Emissions (DOE EMSL Proposal 39957), 10/01/2010-09/30/2013
- ❑ Molecular Characterization of Organic Aerosols from the Los Angeles Ground Site (CalNex 2010) Using High-Resolution Mass Spectrometry (DOE EMSL Proposal 39490), 08/20/2010 - 08/20/2010
- ❑ Probing the Reactivity of Organic Particles Using Ion Soft-Landing (DOE EMSL Proposal 30466), 10/01/2008-09/30/2011
- ❑ Photochemical Processing of Organic Aerosol Particles Studied with High-Resolution Mass Spectrometry (DOE EMSL Proposal 24392), 05/31/2007-09/30/2010

REVIEWING EXPERIENCE

- ❑ *Journal Article Reviews:* Aerosol Science and Technology, Atmospheric Chemistry and Physics (associate editor), Atmospheric Environment, Atmospheric Measurement Technologies, Chemical Physics, Chemical Physics Letters, Geophysical Research Letters, Environmental Science and Technology, Indoor Air, Journal of Atmospheric Research, Journal of Chemical Education, Journal of Chemical Physics, Journal of Chromatography, Journal of Geophysical Research, Journal of Photochemistry and Photobiology, Journal of Physical Chemistry, Langmuir, Marine Chemistry, Nature Chemistry, Physical Chemistry Chemical Physics, Proceeding of the National Academy of Sciences, Rapid Communications in Mass Spectrometry.
- ❑ *Proposal Reviews:* ACS Petroleum Research Fund, Department of Energy SBIR program, Department of Energy ASP program, Department of Energy EMSL user proposals, National Science Foundation (multiple programs), Research Corporation, Sloan Foundation, Canadian Foundation for Climate and Atmospheric Sciences, Canada Foundation for Innovation, US Civilian Research and Development Foundation, Canada NSERC Discovery Grants, UK Natural Environment Research Council.

CONFERENCES ORGANIZED

- ❑ Aerosol Chemistry Working Group Chair for the American Association for Aerosol Research (AAAR) annual meeting, Raleigh, NC, October 16-20, 2017. Responsible for assigning 100+ abstracts into eight platform sessions and one poster session.
- ❑ Symposium co-organizer: "Multi-Phase Environmental Chemistry of Aerosols" at the 2017 American Chemical Society (ACS) spring meeting in Washington, DC, August 20-24, 2017. Co-organizers: Sherri Hunt, Alexander Laskin. Three days of platform presentations with 48 speakers and one poster session.
- ❑ Symposium co-organizer: "Symposium in Honor of Prof. Barbara Finlayson-Pitt, Recipient of the Francis P. Garvan-John M. Olin Medal" at the 2017 American Chemical Society (ACS) spring meeting in San

Francisco, CA, April 2-6, 2017. Primary organizer: Joan-Emma Shea, UCSB. Half-a-day symposium with 8 invited speakers.

- ❑ Symposium co-organizer: “Chemistry of Atmospheric Aerosols” at the 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem 2015), December 15-20, 2015. Co-organizers: Allan Bertram, Evan Bieske, Alexander Laskin, Chul-Un Ro, Xin Yang. Three days of platform sessions with 65 speakers and one poster session. Raised \$30k in support of this symposium from DOE and NSF.
- ❑ Symposium co-organizer: “Chemistry of Atmospheric Nitrogen-Containing Compounds” at the 2014 American Chemical Society (ACS) fall meeting in San Francisco, CA, August 10-14, 2014. Co-organizers: Steven Brown, Alexander Laskin. One and a half days of platform presentations with 26 speakers.
- ❑ Symposium co-organizer: “Molecular Chemistry and Physicochemical Properties of Organic Aerosols” at the 2013 American Geophysical Union (AGU) annual meeting, December 9-13, 2013. Co-organizers: Alexander Laskin, Yinon Rudich, Joel Thornton.
- ❑ Meeting chair: 31st annual meeting of the American Association for Aerosol Research (AAAR), Minneapolis, MN, October 8-12, 2012. The meeting was attended by 845 people.
- ❑ Conference chair: 28th Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere, Irvine, CA, March 3, 2011. 174 participants. Co-chair: Prof. Eric Saltzman.
- ❑ Symposium co-organizer: “Environmental Chemistry of Aerosols” at the 2010 International Chemical Congress of Pacific Basin Societies (Pacifichem 2010), December 15-20, 2010. Co-organizers: Alexander Laskin, Allan Bertram, Ruth Signorell, Chak Chan, Xin Yang.
- ❑ Conference chair: 22nd Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere, Irvine, CA, February 14, 2005. 125 participants. Co-chair: Prof. Donald Dabdub.

PROFESSIONAL SOCIETY AFFILIATIONS

- ❑ American Association for the Advancement of Science (member since 2000; elected Fellow in 2015)
- ❑ American Geophysical Union (member since 2004)
- ❑ American Chemical Society (member since 2000)
- ❑ American Association for Aerosol Research (member since 2003)
- ❑ European Association of Geochemistry (member since 2015)
- ❑ Royal Society of Chemistry (member since 2013)

POSTDOCTORAL RESEARCHERS MENTORED IN RESEARCH

1. Dr. **Ao Lin** (March 2003 – September 2005). Staff scientist at CARB.
2. Dr. **Jiho Park** (January 2004 – May 2006). Faculty member at Korea National Open University.
3. Dr. **Joelle S. Underwood** (June 2005 – May 2007). Faculty member at Loyola Univ., New Orleans, LA.
4. Dr. **Jia-Hua Xing** (April 2007 – March 2008). Researcher at Kyoto University, Japan.
5. Dr. **David L. Bones** (June 2008 – August 2010). Researcher at the University of Leeds, UK.
6. Dr. **Scott A. Epstein** (May 2011 – March 2014). Staff scientist at SCAQMD.
7. Dr. **Hyun-Ji (Julie) Lee** (January 2012 – May 2015). Staff scientist at CARB.
8. Dr. **Amanda C. MacMillan** (January 2016 – present).

GRADUATE STUDENTS MENTORED IN RESEARCH

1. **Anthony L. Gomez** (July 2002 – June 2007). Ph.D. thesis: “*Analysis of the Chemical and Photochemical Aging of Organic Aerosol Particles*”. Postdoctoral fellow at the Combustion Research Facility at the Sandia National Laboratories in 2007-2010; researcher at Southwest Sciences, Inc. since 2010.
2. **Maggie L. Walser** (September 2004 – August 2007). NSF fellow; winner of the 2007 Edward K.C. Lee Award. Ph.D. thesis: “*Limonene-Derived Secondary Organic Aerosol: Composition and Photochemistry*”. Postdoctoral fellow at the National Council for Science and the Environment (NCSE) in 2007-2008; the AGU's 2008-2009 Congressional Science Fellow; the Board on Atmospheric Sciences and Climate at the National Academies since 2009.
3. **Ahmad Alshawa** (July 2002 – January 2008). Ph.D. thesis: “*Hygroscopicity of Mixed Inorganic/Surfactant Ultrafine Aerosol Particles*”. Chemistry Lecturer at Cypress College
4. **Stephen A. Mang** (September 2003 – May 2008). MS thesis: “*Development of a Microwave Plasma Torch for Single Particle Counting with Chemical Information*”. Ph.D. thesis: “*Atmospheric Aging of*

- Monoterpene Secondary Organic Aerosol*". Teaching faculty member at the University of Maryland, Baltimore County from 2008-2016; Teacher-professor in the Department of Chemistry at UCI since 2016.
5. **Xiang Pan** (September 2003 – June 2009). Winner of the 2004 UC TSR&TP graduate fellowship. Ph.D. thesis: "*Photochemistry of Limonene Secondary Organic Aerosol Studied with Chemical Ionization Mass Spectrometry*". Researcher at the Jiangsu Skyray Instrument Co, China (2009-2015); Branch Manager at Kunshan Myzy Fixture Technology Co. since 2015.
 6. **Christopher W. Harmon** (June 2007 – December 2009). Winner of the 2009 Joan Rowland Award. Ph.D. thesis: "*Hygroscopicity of Amphiphilic Nanoparticles: The Role of Size and Composition*" Postdoctoral researcher at the Lawrence Berkeley National Laboratory (LBNL) in 2010-2011; professor at Humboldt State University since 2011.
 7. **Adam P. Bateman** (September 2006 – May 2011). DOE Graduate Research Environmental Fellowship; winner of the 2010 Marvin L. Wesely Graduate Research Fellow Award and the 2011 Michael Zach Award. Ph.D. thesis: "*Chemical Composition and Photochemical Evolution of Limonene Secondary Organic Aerosol Studied using High Resolution Electrospray Ionization Mass Spectrometry*". Postdoctoral researcher at Harvard University 2011-16; R&D at Lam Research since 2016.
 8. **Tran Nguyen** (September 2008 – June 2012). Winner of the 2010 Michael E. Gebel Award, 2012 Chancellor's Club Fund for Excellence Fellowship, and 2012 Edward K.C. Lee Award. Ph.D. thesis: "*Molecular Composition and Chemical Transformation of Secondary Organic Aerosols from Biogenic Precursors*". Stanback Postdoctoral Fellowship in Global Environmental Science at Caltech 2012-2015; professor at the University of California, Davis since 2015. In 2015, Tran received the Sheldon K. Friedlander Award from the American Association for Aerosol Research (AAAR). This award recognizes an "outstanding dissertation by an individual who has earned a doctoral degree".
 9. **Hanna Lignell** (June 2011 – December 2013). Student from the University of Helsinki, who did a portion of her research in my lab for two years. Winner of the Finnish Cultural Foundation graduate fellowship. Ph.D. Thesis: "*Photochemical Studies of Atmospherically Relevant Species in Multiple Phases*". Postdoctoral researcher at Caltech (2014-2015); researcher at SCAQMD (2015-17); permanent University Researcher position at the Verifin institute, Finland (2017-present).
 10. **Amanda MacMillan** (September 2009 – December 2015). NSF fellow; winner of the 2012 Michael E. Gebel award; winner of the 2015 Joan Rowland award. Ph.D. Thesis: "*Uptake of Water and Other Molecules by Aerosolized Nanoparticles*". Postdoctoral researcher at UCI since 2015.
 11. **Sandra Blair** (June 2011 – June 2016). Winner of the 2014 Michael E. Gebel award; winner of the 2015 Chancellor's Club Fund for Excellence Fellowship; winner of the 2016 Joan Rowland award. MS thesis: "*Photolytic Processing of Organic Aerosol through Carbonyl Photochemistry*". Ph.D. thesis: "*Composition and Photochemistry of Anthropogenic and Biogenic Organic Aerosols*". Postdoctoral researcher at Georgia Tech since 2016.
 12. **Dian Romonosky** (March 2012 – July 2016). NSF fellow; winner of the 2016 Jackie Smitrovich Prize. Ph.D. thesis: "*Optical Properties, Chemical Composition, and Aqueous Photochemistry of Secondary Organic Aerosol*". Postdoctoral researcher at LANL since 2016.
 13. **Paige Aiona** (February 2013 – present). Ford Foundation fellow and NSF fellow.
 14. **Mallory Hinks** (February 2013 – June 2017). Winner of the 2016 UCI Grad Slam competition; 2nd place in the 2016 UC systemwide Grad Slam competition; winner of the Chemistry Champions competition at the 2016 American Chemical Society meeting; 2017 Chancellor's Club Fund for Excellence Fellowship; winner of the 2017 Jackie Smitrovich Prize. Ph.D. thesis: "*Effect of Environmental Conditions on Composition and Photochemistry of Secondary Organic Aerosols*". American Institute for Physics Congressional Science Fellowship since 2017.
 15. **Kurtis Malecha** (February 2014 – present). NSF fellow; winner of the 2017 Michael E. Gebel award
 16. **Lauren Fleming** (February 2015 – present). Rowland fellow.
 17. **Julia Montoya** (June 2015 – present). LSAMP Bridges to the Doctorate (BD) fellow. NSF fellow.

GRADUATE STUDENT DOCTORAL COMMITTEES

The Nizkorodov's group students are listed separately above; these are students from other research groups

1. Darren Segale (UCI ChaMP program; MSc committee member; 2005)
2. Rosemarie L. Wilson (The University of Melbourne; Chemistry; Ph.D. committee member; May 2006)
3. Andreas Beyersdorf (UCI Chemistry; Ph.D. committee member; September 5, 2007)

4. Angela Baker (UCI Chemistry; Ph.D. committee member; December 5, 2007)
5. Jennifer Peairs (UCI Chemistry; MSc committee member; 2008).
6. Jason Midyett (UCI Chemistry; Ph.D. committee member; June 1, 2009)
7. Melissa Yang (UCI Chemistry; Ph.D. committee member; June 25, 2009)
8. Katrine Gorham (UCI Chemistry; Ph.D. committee member; September 8, 2009)
9. Samar Moussa (UCI Chemistry; Ph.D. committee member; January 12, 2009)
10. Nicole Barrentine (UCI Chemistry; Ph.D. committee member; July 7, 2011)
11. Ming Cheng (UCI Chemistry; Ph.D. committee member; October 24, 2011)
12. Nicole Richards (UCI ChaMP program; MSc and Ph.D. committee member; November 16, 2011)
13. Emily Bruns (UC IChemistry; Ph.D. committee member; November 16, 2011)
14. Hyun-Ji (Julie) Lee (UCI Chemistry; Ph.D. committee member; November 28, 2011)
15. Brandon Umber (UCI Chemistry; Ph.D. committee member; January 20, 2012)
16. Alexandria Margarella (UCI Chemistry; Ph.D. committee member; September 12, 2012)
17. Matthew Carlson (UCI Chemistry; Ph.D. committee member; November 29, 2012)
18. Christopher Dilbeck (UCI Chemistry; Ph.D. committee member; May 9, 2013)
19. Gregory Hartt (UCI Chemistry; Ph.D. committee member; August 27, 2013)
20. Yu-Hsin Hung (UCI Chemistry; Ph.D. committee member; December 16, 2013)
21. Matthew Dawson (UCI Chemistry; Ph.D. committee member; July 3, 2014)
22. Safa Khan (UCI Chemistry; Ph.D. committee member; January 5, 2015)
23. Josette Marrero (UCI Chemistry; Ph.D. committee member; April 8, 2015)
24. Jenny Wong (Department of Chemistry, University of Toronto, Ph.D. committee member, April 10, 2015)
25. Jason Schroeder (UCI Chemistry; Ph.D. committee member; June 3, 2015)
26. Amanda Weber (UCI Chemistry; Ph.D. committee member; July 23, 2015)
27. Steven Timko (UCI Civil & Environmental Engineering; Ph.D. committee member; November 20, 2015)
28. Charlotte Hirsch (UCI Chemistry; Ph.D. committee member; February 24, 2016)
29. Stefanie Richters (Leibniz Institute for Tropospheric Research (TROPOS)), Ph.D. external evaluator; 2016)
30. Jordan Vincent (UCI Chemistry; Ph.D. committee member; August 4, 2016)
31. Crystin Eggers (UCI Chemistry; Ph.D. committee member; February 23, 2017)
32. Elizabeth Foreman (UCI Chemistry; Ph.D. committee member; July 25, 2017)
33. Kristine Arquero (UCI Chemistry; Ph.D. committee member; July 26, 2017)
34. Michelle Fairhurst (UCI Chemistry; Ph.D. committee member; August 15, 2017)
- 35.

UPCOMING DOCTORAL EXAMS

- ❑ Monique Teich (Leibniz Institute for Tropospheric Research (TROPOS)), Ph.D. external evaluator; 2016)
- ❑ Jose (Raul) Ocampo (UCI Chemistry; Ph.D. committee member; 2014-...)
- ❑ Krista Parry (UCI Chemistry; Ph.D. committee member; 2014-...)
- ❑ Stacey Hughes (UCI Chemistry; Ph.D. committee member; 2014-...)
- ❑ David Fooshee (Information and Computer Sciences; Ph.D. committee member; 2014-...)
- ❑ Kara Kapnas (UCI Chemistry; Ph.D. committee member; 2016-...)
- ❑ Jeremy Horne (Mechanical and Aerospace Engineering; Ph.D. committee member; 2016-...)
- ❑ Allison Vander Wall (UCI Chemistry; Ph.D. committee member; 2016-...)
- ❑ Nanna Myllys (Univerisiy of Helsinki, PhD thesis pre-referee; 2017-...)

GRADUATE STUDENT ADVANCEMENT COMMITTEES

1. Shiwei Wu (Physics; advancement exam committee member; Sep. 3, 2003)
2. Gary Mikaelian (Physics; advancement exam committee member; Sep. 2003)
3. Erich Walter (Chemistry; advancement exam committee member; Mar. 18, 2004)
4. Barbara Barletta (Chemistry; candidacy committee member; May 24, 2004)
5. Brandon Finley (ESS; advancement exam committee member; Nov. 22, 2004)
6. Eduardo Roman (Chemistry; advancement exam committee member; Apr. 14, 2005)
7. Jennie Thomas (Chemistry; advancement exam committee chair; May 2, 2005)
8. Huda Shaka (Chemistry; advancement exam committee member; May 18, 2005)
9. Paul Nissenon (Mech. Aerospace Engineering; advancement exam committee member; June 13, 2005)

10. Fuu-Ming Kai (ESS, advancement exam committee member; June 24, 2005)
11. Angela Baker (Chemistry; advancement exam committee chair; Jan. 11, 2006)
12. Li-Mei Yang (Chemistry; advancement exam committee member; Apr. 7, 2006)
13. Andreas Beyersdorf (Chemistry; advancement exam committee member; Apr. 27, 2006)
14. Darren Segale (Chemistry; advancement exam committee chair; May 4, 2006)
15. Siarhei Piatrovitch (Mech. Aerospace Engineering; advancement exam committee member; Dec. 6, 2006)
16. Satish Vutukuru (Mech. Aerospace Engineering; advancement exam committee member; Jan. 29, 2007)
17. Melissa Yang (Chemistry; advancement exam committee member; July 24, 2007)
18. Nicole Barrentine (Chemistry; advancement exam committee member; Nov 29, 2007)
19. Clark Ridge (Chemistry; advancement exam committee member; Nov 19, 2007)
20. Jason Midyett (Chemistry; advancement exam committee member; March 13, 2008)
21. Desiré Whitmore (Chemistry; advancement exam committee member; April 25, 2008)
22. Qi Tang (ESS; advancement exam committee member; June 4, 2008)
23. Jason Deckman (Chemistry; advancement exam committee member; Nov 3, 2008)
24. Brandon Umber (Chemistry; advancement exam committee member; Nov 18, 2008)
25. Matt Carlson (Chemistry; advancement exam committee member; Nov 20, 2008)
26. Hyun Ji Lee (Chemistry; advancement exam committee member; Dec 4, 2008)
27. Christopher Dilbeck (Chemistry; advancement exam committee member; Dec 9, 2008)
28. James Taing (Chemistry; advancement exam committee member; Apr 3, 2009)
29. Nicole Richards (Chemistry; advancement exam committee member; June 3, 2009)
30. Emily Bruns (Chemistry; advancement exam committee member; June 8, 2009)
31. Catalina Espinosa (Chemistry; advancement exam committee member; November 4, 2009)
32. Ming Cheng (Chemistry; advancement exam committee member; November 6, 2009)
33. Alexandria Margarella (Chemistry; advancement exam committee member; November 12, 2009)
34. Aaron Halpern (Chemistry; advancement exam committee member; November 16, 2009)
35. Yong Wang (Chemistry; advancement exam committee member; November 16, 2009)
36. Tanza Lewis (Chemistry; advancement exam committee member; November 17, 2009)
37. Megan Johnson (Chemistry; advancement exam committee member; November 19, 2009)
38. Megan Warner Szyndler (Chemistry; advancement exam committee member; March 8, 2010)
39. Jordan Vincent (Chemistry; advancement exam committee member; March 16, 2010)
40. Molly Taylor (Chemistry; advancement exam committee member; May 6, 2010)
41. Khin Lay Maung (Chemical Engineering; advancement exam committee member; July 13, 2010)
42. Kristal Verhulst (Earth System Science; advancement exam committee member; August 30, 2010)
43. Safa Khan (Chemistry; advancement exam committee member; November 2, 2010)
44. Rachelle Ihly (Chemistry; advancement exam committee member; November 3, 2010)
45. Yu-Hsin Hung (Chemistry; advancement exam committee member; November 4, 2010)
46. Wenbo Yan (Chemistry; advancement exam committee member; November 12, 2010)
47. Mathew Dawson (Chemistry; advancement exam committee member; April 13, 2011)
48. Jayde Kwon (Chemistry; advancement exam committee member; April 14, 2011)
49. Alejandro Rodriguez Perez (Chemistry; advancement exam committee member; April 18, 2011)
50. Mayukh Banik (Chemistry; advancement exam committee member; April 19, 2011)
51. Aurora Pribram-Jones (Chemistry; advancement exam committee member; November 1, 2011)
52. Gregory Hartt (Chemistry; advancement exam committee member; November 9, 2011)
53. Yu-Lin Chen (Chemistry; advancement exam committee member; November 14, 2011)
54. Amanda Weber (Chemistry; advancement exam committee member; November 16, 2011)
55. Marijke Van Spyk (Chemistry; advancement exam committee member; November 17, 2011)
56. Josette Marrero (Chemistry; advancement exam committee member; November 21, 2011)
57. Kyunghye Cho (Chemistry; advancement exam committee member; April 2, 2012)
58. Beau Martini (Chemistry; advancement exam committee member; April 9, 2012)
59. Nicholas Shirac (Chemistry; advancement exam committee member; April 10, 2012)
60. Wesley Botello-Smith (Chemistry; advancement exam committee member; April 11, 2012)
61. Steven Yampolski (Chemistry; advancement exam committee member; April 12, 2012)
62. Ruben Magana (Chemistry; advancement exam committee member; April 16, 2012)
63. Moritz Limpensel (Chemistry; advancement exam committee member; August 22, 2012)
64. Maryna Taranova (Chemistry; advancement exam committee member; October 17, 2012)
65. David Montelongo (Chemistry; advancement exam committee member; November 6, 2012)

66. Gavin Bascom (Chemistry; advancement exam committee member; November 7, 2012)
67. Jason Schroeder (Chemistry; advancement exam committee member; November 13, 2012)
68. Brandon Krull (Chemistry; advancement exam committee member; November 14, 2012)
69. Raphael Ribeiro (Chemistry; advancement exam committee member; November 15, 2012)
70. Gergana Mouteva (ESS; advancement exam committee member; February 5, 2013)
71. Emel Ficici (Chemistry; advancement exam committee member; April 5, 2013)
72. Crystin Eggers (Chemistry; advancement exam committee member; November 1, 2013)
73. Brian Albee (Chemistry; advancement exam committee member; November 4, 2013)
74. Gianmarc Johns (Chemistry; advancement exam committee member; November 6, 2013)
75. Paolo Reyes (Chemistry; advancement exam committee member; November 6, 2013)
76. Jin Guo (Chemistry; advancement exam committee member; November 7, 2013)
77. Mohammed El Makkaoui (Chemistry; advancement exam committee member; November 8, 2013)
78. Jose Ocampo (Chemistry; advancement exam committee member; November 13, 2013)
79. Mya Le Thai (Chemistry; advancement exam committee member; November 14, 2013)
80. James Fields (Chemistry; advancement exam committee member; November 15, 2013)
81. Julie Hsu (Chemistry; advancement exam committee member; November 15, 2013)
82. Sandra Brown (Chemistry; advancement exam committee member; November 18, 2013)
83. Charlotte Hirsch (Chemistry; advancement exam committee member; November 20, 2013)
84. Melissa Palmer (Chemistry; advancement exam committee member; November 25, 2013)
85. Krista Parry (Chemistry; advancement exam committee member; April 9, 2014)
86. Nicholas Tallarida (Chemistry; advancement exam committee member; April 11, 2014)
87. Michelle Fairhurst (Chemistry; advancement exam committee member; April 24, 2014)
88. Kristine Arquero (Chemistry; advancement exam committee member; April 25, 2014)
89. Kyle Rosenkoetter (Chemistry; advancement exam committee member; November 10, 2014)
90. Stacey Hughes (Chemistry; advancement exam committee chair; November 13, 2014)
91. Stephen Timko (Civil & Environmental Engineering; advancement exam committee member; November 13, 2014)
92. Elizabeth Foreman (Chemistry; advancement exam committee member; November 17, 2014)
93. Jack Porter (Chemistry; advancement exam committee member; November 17, 2014)
94. David Fooshee (Information and Computer Sciences; advancement exam committee member; November 25, 2014)
95. Tianyang Zhu (Chemistry; advancement exam committee chair; January 15, 2015)
96. Jennifer Logan (Chemistry; advancement exam committee chair; May 7, 2015)
97. Nick Vizenor (Chemistry; advancement exam committee chair; November 4, 2015)
98. John Kelly (Chemistry; advancement exam committee chair; November 5, 2015)
99. Zachary Thammavongsy (Chemistry; advancement exam committee member; November 16, 2015)
100. Amber Hennessy (Chemistry; advancement exam committee chair; November 23, 2015)
101. Kara Kapnas (Chemistry; advancement exam committee member; May 11, 2016)
102. Jeremy Horne (Mechanical and Aerospace Engineering; advancement exam committee member; May 10, 2016)
103. Allison Van der Wall (Chemistry; advancement exam committee member; May 25, 2016)
104. Sabrina Chee
105. Wing-Sy Wong
106. Chistopher Woods
- 107.

UNDERGRADUATE STUDENTS MENTORED IN RESEARCH

1. David Whitt (September 2003 – June 2004)
2. Nicole J. Britigan (September 2004 – June 2005): co-authored a paper. Currently works as a high school chemistry teacher.
3. Melanie Nguyen (September 2004 – June 2005). Currently works as a Chemistry stockroom manager at UCI
4. Ashley R. Russell (September 2005 – June 2006): co-authored a paper
5. Steven Ng (September 2005 – June 2006)
6. Robert Benningsdorf (September 2005 – June 2006)

7. Tanza L. Lewis (September 2006 – June 2007): co-authored a paper
8. Thong Do (September 2006 – June 2007)
9. Enosh Cohen (September 2006 – June 2007)
10. Mark Dailo (September 2006 – June 2007)
11. Stacy A. Wilkinson (September 2007 – June 2008): co-authored a paper
12. Jennifer Pears (September 2007 – January 2008)
13. Sero Kassabian (September 2007 – June 2008)
14. Dana K. Henricksen (January 2008 – June 2009): co-authored two papers
15. Joshua Klobas (September 2008 – June 2010) – 2010 Don L. Bunker Award, 2009 ACS Analytical Chemistry Award, wrote a paper for the UCI undergraduate research journal
16. Madelyn McKittrick (September 2008 – June 2009)
17. Anne Nguyen (September 2008 – Match 2009)
18. Mark Peterson (September 2008 – June 2009): co-authored a paper
19. Susann Rodas (September 2008 – Match 2009)
20. Carmen Seetho (September 2008 – June 2009)
21. Kathy Kim (September 2009 – June 2010)
22. Lucas Nguyen (September 2009 – September 2010): 2010 ACS Analytical Chemistry Award, co-authored a paper
23. Zoe Cabral (September 2009 – September 2010)
24. John Morrison (September 2009 – September 2010): co-authored a paper
25. Nicole Levac (May 2010 – June 2010, participant in CalNex 2010): co-authored a paper
26. Paula Lee (September 2010 – August 2011): co-authored a paper
27. Katelyn Updyke (September 2010 – June 2012): 2011 American Institute of Chemists Award, co-authored a paper, first author on another paper, went to medical school
28. Van Tran (July 2011 – June 2012): 2012 American Institute of Chemists Award, co-authored a paper. Currently working at Emagen Entertainment Group Inc.
29. Chad Eyerly (September 2011 – June 2012)
30. Moses Avedikian (September 2012 – March 2013)
31. Margaret Marvin (April 2013 – June 2013): co-authored a paper, went to graduate school
32. Renee Leslie (summer 2013 SURF student): co-authored a paper, got a MS degree in chemistry from SDSU, high school chemistry teacher.
33. Nujhat Ali (April 2013 – September 2014; September 2015 – present) – co-authored a paper, 2014 Gebel undergraduate award, 2014 ACS Analytical Chemistry Award; 2016 ACS Division of Environmental Chemistry Award.
34. Mariyah Saiduddin (September 2013 – June 2014) – co-authored a paper, 2014 Gebel undergraduate award
35. Monica Brady (summer 2014 SURF student) – co-authored a paper
36. Katrina Mazloomian (September 2014 – December 2014, individual study supervisor)
37. Claire Engelmann (September 2014 – June 2015, individual study supervisor and research advisor)
38. Stephanie Kim (September 2014 – June 2016). 2016 Gebel undergraduate award.
39. Tim Cai (September 2015 – June 2017). 2017 ACS Division of Environmental Chemistry Award
40. Lucas Ellison (Summer 2016 visiting student from McGill University) – co-authored a paper.
41. Aditya Iyengar (April 2016 – June 2017).

HIGH SCHOOL STUDENTS MENTORED IN RESEARCH

1. Kwano Lee, Woodbridge High School (Science Fair project; Fall 2004)
2. Emily Doo, Woodbridge High School (Science Fair Project; Fall 2006) bormoglot
3. Regina Lee, Woodbridge High School (Science Fair Project; Fall 2006)
4. Clement Kao, University High School (laboratory internship; Summer 2009)
5. Michelle Yang, Diamond Bar High School (laboratory internship; Summer 2010)
6. Kevin Nguyen, Bolsa Grande High School (laboratory internship; Summer 2011)
7. Elina Balanina, Woodbridge High School (laboratory internship; Summer 2013)
8. Michael Wu, University High School (laboratory internship; Summers 2014, 2015, 2016) – co-authored a paper; won 2nd place in the Orange County Science & Engineering Fair (OCSEF) and the 3rd place in the California State Science Fair (CSSF)
9. Jasmine Wang and Aden Alemayhu (Science Fair Project, Winter 2015)

10. Lauren Kim, Woodbridge High School (Science Fair Project, Winter 2015)
11. Yujane Chen, Troy High School (laboratory internship; Summers 2015 and 2016)
12. Bonnie Huang, El Toro High School (laboratory internship; Summer 2015)
13. Emily Yen, Troy High School (laboratory internship; Summer 2016)

PUBLIC SERVICE & OUTREACH

- ❑ AirUCI outreach program coordinator for middle/high school science teachers (every summer, 2005–14)
- ❑ Science Fair judge (2011, 2015)
- ❑ Activity presenter at “Future of Science Conference” for K-12 teachers, Nov 13, 2010 and Oct 15, 2011
- ❑ Ask-A-Scientist Night participant (2010)
- ❑ UCI Middle School Science Career Conference participant (2008)
- ❑ UCI Honors experience day participant (2008, 09)
- ❑ AirUCI Community Day participant (2005, 06, 07)
- ❑ UCI COSMOS participant (2004, 05, 07)
- ❑ Osher Lifelong Learning Institute (OLLI) participant (2005)

PROFESSIONAL SERVICE

Department of Chemistry at UCI

All department service appointments below begin on July 1 and end on June 30 of the year specified.

- ❑ Vice-chair for academic programs and curriculum (2016-19)
- ❑ Chemistry Majors Task Force Committee chair (2016-17)
- ❑ Analytical/atmospheric chemistry graduate academic advisor (2016-17)
- ❑ High Impact Hiring search committee member (2014-16)
- ❑ External faculty awards committee member (2011-14)
- ❑ Graduate fellowships/awards committee member (2004-11) and chair (2011-14)
- ❑ Graduate admissions and graduate recruiting committee member (2007-09; 2010-14)
- ❑ Physical chemistry graduate academic advisor (2010-14)
- ❑ Chemistry website review committee member (2011-14)
- ❑ Upper-division labs oversight committee member (2003-08, 2010-11) and chair (2008-10, 2011-12)
- ❑ Undergraduate curriculum review committee member (2008-10)
- ❑ Graduate proposal writing committee member (2007-10)
- ❑ Laser facility oversight committee member (2004-05)
- ❑ Physical seminar chair (2003-04)
- ❑ Mass-spectrometry facility oversight committee member (2003-04, 2009-10)
- ❑ Undergraduate program funding opportunities committee member (2008-10)

UCI

- ❑ UCI Research Seed Funding review panel (January 2016)
- ❑ NSF GRFP Reviewer Discussion Panel for students (Julies of 2014, 2015, 2016)
- ❑ AirUCI Organized Research Unit, Co-Director (September 2015 – present)
- ❑ Provost Ph.D. and Graduate LEAD Fellowship review panel (February 2015)
- ❑ Graduate Opportunity Program fellowship review panel (February 2013)
- ❑ School of Physical Sciences Steering Committee chair (2006-07)
- ❑ Divisional Senate Assembly representative for the School of Physical Sciences (2005-07)

Outside UCI

- ❑ American Association for Aerosol Research, Aerosol Chemistry working group chair for the 2017 annual meeting, elected (2015-2017)
- ❑ Atmospheric Chemistry and Physics, Associate Editor (2013-present)
- ❑ American Association for Aerosol Research, board of directors member, elected (2013-present)
- ❑ National Science Foundation, GRFP panelist (2013 and 2015 competitions)
- ❑ NSERC Discovery Grant, panelist (2011 and 2012 competitions)
- ❑ DOE Environmental Molecular Science Laboratory, user advisory committee member, elected (2011-14)

SUMMARY OF TEACHING EXPERIENCE*

Course	Course title	Quarters taught	Description
<i>Chem 1B</i>	<i>General Chemistry</i>	W12, W14, S14, S15, W16	The second part of the general chemistry sequence at UCI (typically 300-450 students)
<i>Chem 1C</i>	<i>General Chemistry</i>	S07	The third part of the general chemistry sequence at UCI (typically 300-450 students)
<i>Chem H2C</i>	<i>Honors General Chemistry</i>	S16, S17	The third part of the general chemistry sequence for honors students at UCI
<i>Chem 5</i>	<i>Computational Skills</i>	S06, F06, F07, Sm08, W09, Sm09	A sophomore-level course that introduces chemistry majors to basic computational skills in using programs like <i>Mathematica</i> and <i>Excel</i>
<i>Chem 130C</i>	<i>Physical Chemistry</i>	S04	The third part of the physical chemistry sequence (required for all chemistry majors). <i>Note: this course is now indexed as Chem 131C.</i>
<i>Chem 151L</i>	<i>Analytical Chemistry Lab</i>	F08, F09, F10, F11	An analytical chemistry laboratory course involving traditional and instrumental projects (required for all chemistry majors). <i>Note: this course was converted to a freshman course in 2012-13, and is no longer offered at UCI.</i>
<i>Chem 152</i>	<i>Advanced Analytical Chemistry</i>	W03, W04, W05, W06	An elective course that focuses on instrumental laboratory skills (typically taken by strong chemistry majors)
<i>Chem 153</i>	<i>Physical Chemistry Lab</i>	S08, S09, S10, S11, S12	An elective course that focuses on physical chemistry experiments and data acquisition (typically taken by strong chemistry majors)
<i>Chem 290</i>	<i>Physical Chemistry Colloquium</i>	F03, W04, S04	The physical chemistry seminar series for the department
<i>Chem 206</i>	<i>Laboratory Skills – rotations only</i>	Sm03, Sm04, Sm07, Sm09	A summer course introducing incoming ChaMP (Chemical and Materials Physics) graduate students to core laboratory skills
<i>Chem 243</i>	<i>Instrumental Analysis</i>	F12, W15	A graduate level course focusing on theory and methods of modern instrumental analysis
<i>Chem 245</i>	<i>Atmospheric Chemistry</i>	F02, F03, F04, F09, W13	A graduate level course covering chemistry of the lower atmosphere
<i>Chem 180/280</i>	<i>Undergraduate/graduate research</i>	every quarter	Activities associated with individual mentoring of undergraduate/graduate students in the group
<i>Chem 291</i>	<i>group seminar</i>	every quarter	The weekly research group meetings
<i>Chem X416</i>	<i>AirUCI Workshop for Science Teachers</i>	Sm05, Sm06, Sm07, Sm08, Sm09, Sm10, Sm11, Sm12, Sm13, Sm14	A two-week intensive outreach program with lectures and experiments focusing on environmental chemistry.
<i>Uni Stu 3</i>	<i>Freshman discussion “I breathe: The Science of Our Atmosphere” and “Aerosol World”</i>	W05, F05, F07, W13	A discussion-style course meant to introduce students to the university

* Quarters: F = fall; W = winter; S = spring; Sm = summer.

DETAILED TEACHING HISTORY

- **Quarter:** F = Fall; W = Winter; S = Spring; Sm = Summer
- **Course Title:** Regular courses are **bold and underlined**
- **Enr:** number of students who were officially enrolled in the course
- **Eval:** Instructor's mean student evaluation score on a scale of 0.00 (worst) – 4.00 (best)
- **Dept:** Mean evaluation score for the entire Department of Chemistry

Quarter	Course	Course Title	Enr	Eval	Dept
F 2002	Chem 245	<u>Atmospheric Chemistry</u>	7	3.9	3.53
F 2002	Chem 280	Graduate Research	2		
W 2003	Chem 152L	<u>Advanced Analytical Lab</u>	12	3.7	3.22
W 2003	Chem 280	Graduate Research	2		
W 2003	Chem 291	Research Seminar	2		
S 2003	Chem 280	Graduate Research	3		
S 2003	Chem 291	Research Seminar	2		
Sm 2003	Chem 206	Laboratory Skills (P. Taborek)	13		
F 2003	Chem 245	<u>Atmospheric Chemistry</u>	9	3.9	3.37
F 2003	Chem 280	Graduate Research	3		
F 2003	Chem 290B	Physical Chemistry Seminar	29		
F 2003	Chem 291	Research Seminar	1		
W 2004	Chem 152L	<u>Advanced Analytical Lab</u>	10	3.8	3.50
W 2004	Chem 280	Graduate Research	3		
W 2004	Chem 290B	Physical Chemistry Seminar	19		
W 2004	Chem 291	Research Seminar	3		
S 2004	Chem 130C	<u>Physical Chemistry C</u>	62	3.7	3.56
S 2004	Chem 280	Graduate Research	3		
S 2004	Chem 290B	Physical Chemistry Seminar	19		
S 2004	Chem 291	Research Seminar	3		
Sm 2004	Chem 206	Laboratory Skills (P. Collins)	9		
F 2004	Chem 180	Undergraduate Research	1		
F 2004	Chem 245	<u>Atmospheric Chemistry</u>	7	3.9	3.43
F 2004	Chem 280	Graduate Research	4		
F 2004	Chem 291	Research Seminar	3		
W 2005	Chem 152L	<u>Advanced Analytical Lab</u>	28	3.5	3.51
W 2005	Chem 180	Undergraduate Research	2		
W 2005	Chem 280	Graduate Research	5		
W 2005	Chem 291	Research Seminar	5		
W 2005	Uni Stu 3	Freshman Seminar (class 87565)	12		
S 2005	Chem 180	Undergraduate Research	2		
S 2005	Chem 280	Graduate Research	5		
S 2005	Chem 291	Research Seminar	5		
Sm 2005	Chem X416	Workshop for Science Teachers	20		
F 2005	Chem 180	Undergraduate Research	1		
F 2005	Chem 280	Graduate Research	5		
F 2005	Chem 291	Research Seminar	5		
F 2005	Uni Stu 3	Freshman Seminar (class 87588)	10		
W 2006	Chem 152L	<u>Advanced Analytical Lab</u>	8	4.0	3.57
W 2006	Chem 180	Undergraduate Research	1		
W 2006	Chem 280	Graduate Research	5		
W 2006	Chem 291	Research Seminar	5		
S 2006	Chem 5	<u>Chemistry Computational Skills</u>	41	3.8	3.55
S 2006	Chem 180	Undergraduate Research	1		
S 2006	Chem 280	Graduate Research	5		
S 2006	Chem 291	Research Seminar	5		
Sm 2006	Chem X416	Workshop for Science Teachers	20		
F 2006	Chem 5	<u>Chemistry Computational Skills</u>	50	3.8	3.57
F 2006	Chem 180	Undergraduate Research	4		

F 2006	Chem 280	Graduate Research	5		
F 2006	Chem 291	Research Seminar	5		
W 2007	Chem 180	Undergraduate Research	4		
W 2007	Chem 280	Graduate Research	6		
W 2007	Chem 291	Research Seminar	5		
S 2007	Chem 1C	General Chemistry 1C	341	3.8	3.53
S 2007	Chem 180	Undergraduate Research	4		
S 2007	Chem 280	Graduate Research	6		
Sm 2007	Chem X416	Workshop for Science Teachers	20		
Sm 2007	Chem 206	Laboratory Skills (I. Krivorotov)	12		
F 2007	Chem 5	Chemistry Computational Skills	41	3.84	3.45
F 2007	Chem 180	Undergraduate Research	1		
F 2007	Chem 280	Graduate Research	6		
F 2007	Chem 291	Research Seminar	6		
W 2008	Chem 180	Undergraduate Research	2		
W 2008	Chem 280	Graduate Research	4		
W 2008	Chem 291	Research Seminar	4		
S 2008	Chem 153	Physical chemistry Lab 153	12	3.88	3.48
S 2008	Chem 180	Undergraduate Research	4		
S 2008	Chem 280	Graduate Research	2		
S 2008	Chem 291	Research Seminar	4		
Sm 2008	Chem X416	Workshop for Science Teachers	19		
Sm 2008	Chem 5	Chemistry Computational Skills	45	3.84	n/a
F 2008	Chem 151L	Analytical Chemistry Laboratory A	65	3.85	3.48
F 2008	Chem 151L	Analytical Chemistry Laboratory B	49	3.56	3.48
F 2008	Chem 180	Undergraduate Research	6		
F 2008	Chem 280	Graduate Research	4		
F 2008	Chem 291	Research Seminar	4		
W 2009	Chem 5	Chemistry Computational Skills	28	3.77	3.53
W 2009	Chem 180	Undergraduate Research	6		
W 2009	Chem 280	Graduate Research	4		
W 2009	Chem 291	Research Seminar	4		
S 2009	Chem 153	Physical Chemistry Lab 153	11	3.95	3.57
S 2009	Chem 180	Undergraduate Research	4		
S 2009	Chem 280	Graduate Research	3		
S 2009	Chem 291	Research Seminar	3		
Sm 2009	Chem X416	Workshop for Science Teachers	19		
Sm 2009	Chem 5	Chemistry Computational Skills	48	3.76	n/a
Sm 2009	Chem 199	Independent Study	1		
Sm 2009	Chem 206	Laboratory Skills (I. Krivorotov)	16		
F 2009	Chem 151L	Analytical Chemistry Laboratory A	63	3.71	3.49
F 2009	Chem 151L	Analytical Chemistry Laboratory B	41	3.75	3.49
F 2009	Chem 245	Atmospheric Chemistry	7	3.90	3.49
F 2009	Chem 180	Undergraduate Research	4		
F 2009	Chem 280	Graduate Research	3		
F 2009	Chem 291	Research Seminar	3		
W 2010	Chem 180	Undergraduate Research	4		
W 2010	Chem 280	Graduate Research	3		
W 2010	Chem 291	Research Seminar	3		
S 2010	Chem 153	Physical Chemistry Lab 153	23	3.94	3.51
S 2010	Chem 180	Undergraduate Research	4		
S 2010	Chem 280	Graduate Research	3		
S 2010	Chem 291	Research Seminar	3		
Sm 2010	Chem X416	Workshop for Science Teachers	9		
F 2010	Chem 151L	Analytical Chemistry Laboratory A	69	3.59	3.51
F 2010	Chem 151L	Analytical Chemistry Laboratory B	39	3.73	3.51
F 2010	Chem 180	Undergraduate Research	2		
F 2010	Chem 280	Graduate Research	3		

F 2010	Chem 291	Research Seminar	3		
S 2011	Chem 153	Physical Chemistry Lab 153	17	3.85	3.56
S 2011	Chem 280	Graduate Research	3		
S 2011	Chem 291	Research Seminar	3		
Sm 2011	Chem X416	Workshop for Science Teachers	20		
F 2011	Chem 151L	Analytical Chemistry Laboratory A	59	3.82	3.27
F 2011	Chem 151L	Analytical Chemistry Laboratory B	49	3.63	3.27
F 2011	Chem 180	Undergraduate Research	2		
F 2011	Chem 280	Graduate Research	3		
F 2011	Chem 291	Research Seminar	3		
W 2012	Chem 1B	General Chemistry Part B	275	3.69	3.49
W 2012	Chem 180	Undergraduate Research	2		
W 2012	Chem 280	Graduate Research	3		
W 2012	Chem 291	Research Seminar	3		
S 2012	Chem 153	Physical Chemistry Lab 153	13	3.97	3.57
S 2012	Chem 180	Undergraduate Research	3		
S 2012	Chem 280	Graduate Research	3		
S 2012	Chem 291	Research Seminar	3		
Sm 2012	Chem X416	Workshop for Science Teachers	20		
Sm 2011	Chem X416	Workshop for Science Teachers	20		
F 2012	Chem 243	Advanced Instrumental Analysis	20	3.98	3.40
F 2012	Chem 180	Undergraduate Research	1		
F 2012	Chem 280	Graduate Research	4		
F 2012	Chem 291	Research Seminar	2		
W 2013	Chem 245	Atmospheric Chemistry	11	4.00	3.53
W 2013	Uni Stu 3	Freshman seminar	15	3.34	
W 2013	Chem 180	Undergraduate Research	1		
W 2013	Chem 280	Graduate Research	3		
W 2013	Chem 291	Research Seminar	3		
S 2013	Chem 180	Undergraduate Research	2		
S 2013	Chem 280	Graduate Research	3		
S 2013	Chem 291	Research Seminar	2		
F 2013	Chem 180	Undergraduate Research	2		
F 2013	Chem 280	Graduate Research	6		
F 2013	Chem 291	Research Seminar	5		
W 2014	Chem 1B	General Chemistry Part B	429	3.61	3.55
W 2014	Chem 180	Undergraduate Research	2		
W 2014	Chem 280	Graduate Research	5		
W 2014	Chem 291	Research Seminar	5		
S 2014	Chem 1B	General Chemistry Part B – off sequence	338	3.75	3.60
S 2014	Chem 180	Undergraduate Research	2		
S 2014	Chem 280	Graduate Research	6		
S 2014	Chem 291	Research Seminar	6		
F 2014	Chem 180	Undergraduate Research	1		
F 2014	Chem 199	Independent Study	2		
F 2014	Chem 280	Graduate Research	7		
F 2014	Chem 291	Research Seminar	6		
W 2015	Chem 180	Undergraduate Research	2		
W 2015	Chem 280	Graduate Research	6		
W 2015	Chem 243	Advanced Instrumental Analysis	12	4.00	3.55
W 2015	Chem 291	Research Seminar	6		
S 2015	Chem 1B	General Chemistry Part B – off sequence	298	3.84	3.66
S 2015	Chem 180	Undergraduate Research	2		
S 2015	Chem 280	Graduate Research	7		
S 2015	Chem 291	Research Seminar	6		
F 2015	Chem 180	Undergraduate Research	3		
F 2015	Chem 280	Graduate Research	6		
F 2015	Chem 291	Research Seminar	5		

W 2016	Chem 1B	General Chemistry Part B	448	3.95	3.59
W 2016	Chem 180	Undergraduate Research	3		
W 2016	Chem 280	Graduate Research	6		
W 2016	Chem 291	Research Seminar	6		
S 2016	Chem H2C	Honors General chemistry Part C	68	3.87	3.64
S 2016	Chem 180	Undergraduate Research	4		
S 2016	Chem 280	Graduate Research	7		
S 2016	Chem 291	Research Seminar	7		
F2016	Chem 280	Graduate Research	5		
F2016	Chem 291	Research Seminar	5		
F2016	Chem 399	University Teaching	108		
W2017	Chem 180	Undergraduate Research	2		
W2017	Chem 280	Graduate Research	5		
W2017	Chem 291	Research Seminar	5		
W2017	Chem 399	University Teaching	97		
S2017	Chem H2C	Honors General chemistry Part C	63	3.84	3.61
S2017	Chem 280	Graduate Research	5		
S2017	Chem 291	Research Seminar	5		
S2017	Chem 399	University Teaching	90		

PUBLICATIONS

Researcher ID profile: <http://www.researcherid.com/rid/I-4120-2014>

Publications resulting from research conducted (at least in part) at UCI: 43, 45-47, 49-52, 54-111, 114-116

Author color coding applied to UCI publications only:

RED = HIGH-SCHOOL STUDENT (at the time of doing the study/writing)

GREEN = UNDERGRADUATE STUDENT (at the time of doing the study/writing)

BLUE = GRADUATE STUDENT (at the time of doing the study/writing)

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2. Adrian A. Friedmann, Sergey A. Nizkorodov, Evan J. Bieske* and John P. Maier “Discrete UV absorption by N₃⁺---(N₂)_n clusters” Chem. Phys. Lett. **224** (1994) 16-20, [DOI:10.1016/0009-2614\(94\)00514-1](https://doi.org/10.1016/0009-2614(94)00514-1).
1. Sergey A. Nizkorodov, Vladimir I. Makarov,* Igor V. Khmelinskii, Sergei A. Kotschubei and Konstantin A. Amosov “Time-resolved fluorescence of NO₂ in a magnetic field” Chem. Phys. Lett. **215** (1993) 662-667, [DOI:10.1016/0009-2614\(93\)89374-Q](https://doi.org/10.1016/0009-2614(93)89374-Q).

TOXICOLOGY

58. Jeffrey R. Suchard,* Sergey A. Nizkorodov, Stacy A. Wilkinson “1,4-Butanediol Content of Aqua Dots Children’s Craft Toy Beads” Journal of Medical Toxicology, **5** (2009) 120-124, [DOI:10.1007/BF03161221](https://doi.org/10.1007/BF03161221), PMID:19655283.
(Preliminary results of this study were also reported in printed peer-reviewed conference proceedings: Jeffrey R. Suchard, Sergey A. Nizkorodov, Stacy A. Wilkinson “1,4-Butanediol Content of Aqua Dots Craft Toy Beads” Academic Emergency Medicine, **15** (2008) S84-S102, [DOI:10.1111/j.1553-2712.2008.00123.x](https://doi.org/10.1111/j.1553-2712.2008.00123.x).)

OTHER PEER-REVIEWED PUBLICATIONS

Donald R. Blake, Barbara J. Finlayson-Pitts and Sergey A. Nizkorodov “James N. Pitts Jr. (1921–2014)” EOS, **96** (2015) [DOI:10.1029/2015EO029385](https://doi.org/10.1029/2015EO029385).

SEMINARS AT COLLEGES AND RESEARCH CENTERS

62. School of Chemistry, University of Melbourne, Australia (July 11, 2017)
61. Department of Environmental Science and Analytical Chemistry (ACES), Stockholm University, Sweden (Feb 2, 2017)
60. Department of Physics, Tampere University of Technology, Tampere, Finland (Jan 26, 2017)
59. Department of Chemistry, Aarhus University, Aarhus, Denmark (Jan 12, 2017)
58. Department of Applied Physics, University of Eastern Finland, Kuopio, Finland (Nov 22, 2016)
57. Labor für Umweltchemie (LUC), Paul Scherrer Institut (PSI), Switzerland (Nov 4, 2016)
56. Department of Physics, University of Helsinki, Helsinki, Finland (Oct 31, 2016)
55. Department of Chemistry, Colorado State University, Fort Collins, CO (Nov 18, 2015)
54. Department of Chemistry, Humboldt State University, Arcata, CA (Nov 13, 2015)
53. Department of Chemistry, University of California, Berkeley, CA (Nov 11, 2015)
52. Leibniz-Institut für Troposphärenforschung (TROPOS), Leipzig, Germany (August 24, 2015)
51. National Center for Atmospheric Research, Boulder, CO (June 16, 2015)
50. University of Toronto, joint research seminar of atmospheric chemistry groups, Toronto, Canada (April 10, 2015)
49. Department of Chemical and Environmental Engineering, University of California, Riverside, CA (Feb 27, 2015)
48. Fudan University, Department of Environmental Science and Engineering and Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention, Shanghai, China (Sep 25, 2014)
47. Department of Chemistry and Biochemistry, University of California, San Diego, CA (Feb 11, 2014)
46. Department of Chemistry and Biochemistry, California State University, San Bernardino, CA (Feb 6, 2014)
45. Laboratory of Physical Chemistry, University of Helsinki, Helsinki, Finland (Oct 18, 2013)
44. Department of Chemistry and Biochemistry, California State University, Chico, CA (Sep 27, 2013)
43. Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic (June 15, 2013)
42. Georgia Tech, School of Earth & Atmospheric Sciences, Atlanta, GA (May 4, 2012)

41. University of Wisconsin-Madison, Department of Chemistry, Madison, WI (March 20, 2012)
40. University of Colorado, Denver, Department of Chemistry, Denver, CO (Sep 2, 2011)
39. Hebrew University of Jerusalem, Fritz Haber Research Center for Molecular Dynamics, Israel (March 14, 2011)
38. Southern Illinois University, Department of Chemistry and Biochemistry, Carbondale, IL (Sep 17, 2010)
37. Pacific Northwest National Laboratory, Environmental Molecular Science Lab, Richland, WA (Feb 25, 2010)
36. Reed College, Department of Chemistry, Portland, OR (February 18, 2010)
35. University of Toronto, Department of Chemistry, Toronto, Canada (May 29, 2009)
34. California Institute of Technology, Environmental Science and Engineering, Pasadena, CA (April 15, 2009)
33. San Diego State University, Department of Chemistry and Biochemistry, San Diego, CA (March 27, 2009)
32. University of California, Irvine, Department of Chemistry, Irvine, CA (October 2, 2007)
31. University of Southern California, Department of Chemistry, Los Angeles, CA (September 24, 2007)
30. Georgetown University, Department of Chemistry, Washington, DC (March 22, 2007)
29. University of California, Riverside, Department of Environmental Sciences, Riverside, CA (March 12, 2007)
28. University of Iowa, Department of Chemistry, Iowa City, IA (March 2, 2007)
27. Iowa State University, Department of Chemistry, Ames, IA (March 1, 2007)
26. University of California, San Diego, Scripps Institute of Oceanography, La Jolla, CA (February 20, 2007)
25. Harvard University, Department of Atmospheric Sciences, Cambridge, MA (February 16, 2007)
24. University of North Carolina, Department of Chemistry, Chapel Hill, NC (February 12, 2007)
23. University of Notre Dame, Department of Chemistry and Biochemistry, Notre Dame, IN (February 8, 2007)
22. Indiana University, Department of Chemistry, Bloomington, IN (February 6, 2007)
21. University of California, Los Angeles, Dept. of Atmospheric and Oceanic Sciences, Los Angeles, CA (Jan 31, 2007)
20. Pacific Northwest National Laboratory, Environmental Molecular Science Lab, Richland, WA (Jan 16, 2007)
19. University of Georgia, Department of Chemistry, Athens, GA (December 1, 2006)
18. Emory University, Department of Chemistry, Atlanta, GA (November 30, 2006)
17. Georgia Tech, Department of Chemistry and Biochemistry, Atlanta, GA (November 29, 2006)
16. Arizona State University, Department of Chemistry and Biochemistry, Tempe, AZ (October 26, 2006)
15. University of Colorado, Department of Chemistry and Biochemistry, Boulder, CO (September 22, 2006)
14. Universität Würzburg, Institut für Physikalische Chemie, Germany (March 27, 2006)
13. California State University, Department of Chemistry and Biochemistry, Fullerton, CA (March 2, 2006)
12. University of California, Irvine, Department of Chemistry, Irvine, CA (September, 2005)
11. California Lutheran University, College of Arts and Sciences, Thousand Oak, CA (April, 2005)
10. University of California, San Diego, Department of Chemistry and Biochemistry, La Jolla, CA (April, 2003)
9. University of California, Irvine, Department of Chemistry, Irvine, CA (2001, faculty job interview seminar)
8. University of Colorado, Department of Chemistry and Biochemistry, Boulder, CO (2001, faculty job interview seminar)
7. Iowa State University, Department of Chemistry, Ames, IA (2001, faculty job interview seminar)
6. University of California, Berkeley, Department of Chemistry, Berkeley, CA (2001, faculty job interview seminar)
5. Washington University, Department of Chemistry, St. Louis, MO (2001, faculty job interview seminar)
4. University of Wisconsin-Madison, Department of Chemistry, Madison, WI (2001, faculty job interview seminar)
3. Kansas State University, Department of Chemistry, Manhattan, KS (2001, faculty job interview seminar)
2. Louisiana State University, Department of Chemistry, Baton Rouge, LA (1999, faculty job interview seminar)
1. University of Minnesota, Department of Chemistry, Minneapolis, MN (1999, faculty job interview seminar)

PUBLIC, OUTREACH AND PEDAGOGICAL SEMINARS

15. American Voices Seminar, University of Turku, Oct 7-8, 2016, Turku, Finland
A Look at Californian Forests: Forests on Fire (presented jointly with Marie Tysman)
14. The Second Sino-European School on Atmospheric Chemistry, Oct 2015, Shanghai, China
Two 90 min lectures to graduate students from various universities from China and other countries; invited
a. *Photochemical and dark ageing of organic aerosols*
b. *Atmospheric Brown Carbon*
13. Troy High School, Fullerton, CA, USA (Oct 8, 2015)
Air-pollution research (two identical talks for two classes of AP chemistry students)
12. AirUCI Informal seminar, Irvine, CA, USA (Nov 25, 2014)
How to recognize different types of aerosols from quite a long way away (an overview of aerosol mass spectrometry methods for AirUCI students and postdocs)
11. Fudan University, Department of Environmental Science and Engineering, Shanghai, China (Sep 19 and 26, 2014)
Introduction to aerosols (two two-hour lectures for the Fudan University graduate students; invited)
10. Sino-European School on Atmospheric Chemistry, May 2013, Taicang City, China
Photochemical and dark ageing of organic aerosols (a two-hour lecture to graduate students from various universities from China and other countries)

9. Associated Students UCI (ASUCI) luncheon, January 2009, Irvine, CA, USA
How you can generate a smog in your own home
8. UCI Middle School Science Career Conference, December 2008, Irvine, CA, USA
Clean air on my mind
7. Chemical Sciences Roundtable workshop “Strengthening High School Chemistry Education through Teacher Outreach Programs”, August 2008, Washington, DC, USA
AirUCI summer workshop for teachers
6. UCI Chancellor’s Club luncheon, August 2007, Irvine, CA, USA
What is in the air we breathe?
5. Ninth Annual Discover the Physical Sciences Breakfast Lecture Series, January 2007, Irvine, CA, USA
Chewable components of the air we breathe: organic particles in indoor and outdoor environment
4. OCSEA Science and Technology Conference, November 2005, Santa Ana, CA, USA
Educating high school students about energy use, air pollution and climate problems
3. Osher Lifelong Learning Institute, October 2005, Irvine, CA, USA
Ultrafine particles in the air we breathe
2. UCI Cosmos Program, July 2005, Irvine, CA, USA
Particles in the atmosphere
1. UCI Cosmos Program, July 2004, Irvine, CA, USA
The Earth atmosphere: a fragile reactor

INVITED PARTICIPATION IN PANELS AND WORKSHOPS

1. The Future of Laboratory Studies in Atmospheric Chemistry Workshop, June 17-19, 2015, Boulder, CO, USA
(participant in workshop discussions; discussion subgroup chair)

INVITED TALKS AT RESEARCH MEETINGS

31. Indoor air chemistry, December 7-8, 2016, Washington, DC, USA
Towards molecular level modeling of indoor air chemistry
30. John P. Maier’s Retirement Symposium, University of Basel, September 3-4, 2016, Basel, Switzerland
Photochemistry of Organic Aerosols
29. 21T Ultra-High Resolution Mass Spectrometer Dedication Event, Pacific Northwest National Laboratory, April 14, 2016, Richland, WA, USA
Effects of biogenic-anthropogenic interactions on the physical and chemical properties of atmospheric organic aerosols
28. 251st American Chemical Society National Meeting, March 13-17, 2016, San Diego, CA, USA
Condensed-phase photochemical reactions in atmospheric organic aerosols
27. Goldschmidt Conference, Aug 16-21, 2015, Prague, Czech Republic
The role of condensed-phase photochemistry in atmospheric processing of aerosols and aqueous droplets
26. Gordon Research Conference on Atmospheric Chemistry, Aug 2-7, 2015, Waterville Valley, NH, USA
The state of knowledge of condensed-phase photochemistry in atmospheric organic aerosols
25. Innovations in Aerosol Physics and Chemistry, organized by the Center for Aerosol Science and Engineering (CASE) at Washington University in St. Louis, July 13-15, 2015, St. Louis, MO, USA
Photochemical and dark ageing processes in organic aerosols
24. Interface between indoor and atmospheric chemistry, May 15-16, 2015, Lille, France
Composition and aging of secondary organic aerosols under illuminated and dark conditions
23. 249th American Chemical Society National Meeting, March 22-26, 2015, Denver, CO, USA
Aqueous-phase and organic-phase photochemistry of atmospheric organic compounds
22. American Geophysical Society Meeting, December 15-19, 2014, San Francisco, CA, USA
Exploring atmospheric aerosol chemistry with advanced high-resolution mass spectrometry and particle imaging methods
21. 31st Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere, March 2014, Riverside, CA, USA
Aqueous and aerosol photochemistry of atmospheric organic compounds
20. American Geophysical Society Meeting, December 9-13, 2013, San Francisco, CA, USA
Photochemical processing of water-soluble organic compounds by clouds and fogs
19. XXXVIII Colloquium Spectroscopicum Internationale (CSI 2013), June 16-20, 2013, Tromsø, Norway
Plenary talk: Molecular-level analysis and photochemical aging of atmospheric organics in ambient particles and aqueous droplets
18. XXV International Symposium on Molecular Beams, June 9-14, 2013, Prague, Czech Republic
Water uptake by aerosolized nanoparticles: experiments, modeling, and molecular dynamics simulations

17. 245th American Chemical Society National Meeting, April 7-11, 2013, New Orleans, LA, USA
Photochemical aging of atmospheric organics in ambient particles and aqueous droplets
16. 244th American Chemical Society National Meeting, August 19-23, 2012, Philadelphia, PA, USA
Evolution of organic aerosol composition and properties through aqueous chemistry and photochemistry
15. 243rd American Chemical Society National Meeting, March 25-29, 2012, San Diego, CA, USA
Photolysis of atmospheric organics in water and aerosols
14. Triennial review of the Environmental Molecular Science Laboratory, October 2011, Richland, WA, USA
(a small number of productive EMSL users invited to highlight their scientific work)
Probing molecular chemistry of aerosols with high resolution mass spectrometry
13. 242nd American Chemical Society National Meeting, August 2011, Denver, CO, USA
Effect of chemical and photochemical cloud processing on the light absorption properties of biogenic secondary organic aerosols
12. 240th American Chemical Society National Meeting, August 2010, Boston, MA, USA
Aging of secondary organic aerosols by carbonyl-amine chemistry
11. Gordon Research Conference on "Water & Aqueous Solutions", August 2010, Holderness, NH, USA
Hygroscopic growth of nanoparticles containing surface active molecules
10. 235th American Chemical Society National Meeting, April 2008, New Orleans, Louisiana, USA
Photodissociation processes in secondary organic aerosol particles
9. 55th Annual Western Spectroscopy Association Conference, February 2008, Pacific Grove, California, USA
Photochemistry of organic aerosol formed by oxidation of monoterpenes
8. 234th American Chemical Society National Meeting, August 2007, Boston, Massachusetts, USA
Photochemistry of secondary organic aerosol particles formed in oxidation of monoterpenes by O₃ and NO₃
7. Workshop "Interfacial chemistry in indoor environments", July 2007, Berkeley, CA, USA
Composition of indoor secondary organic aerosol particles
6. 2007 Joint Assembly (of Geophysical Societies), May 2007, Acapulco, Mexico
Photochemical aging of organic aerosol particles
5. Workshop "Atmospheric Chemistry: Climate Change with Trace Gases and Aerosols", August 2006, Telluride, CO, USA
Photochemical processing of secondary organic aerosol particles
4. ACS Orange County Section March dinner meeting, March 2006, Santa Ana, CA, USA
Organic aerosol particles in indoor and outdoor air
3. 23rd Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere, Feb 2006, Pasadena, CA, USA
Photochemistry of secondary organic aerosol particles
2. 40th American Chemical Society Western Regional Meeting, January 2006, Anaheim, CA, USA
Photochemical processes in secondary organic aerosol particles
1. Coblentz award lecture at the 60th Intern. Symp. on Molecular Spectroscopy, June 2005, Columbus, Ohio, USA
Studying chemistry with vibrational overtone photodissociation spectroscopy

CONTRIBUTED TALKS AT RESEARCH MEETINGS

30. 254th American Chemical Society National Meeting, August 16-20, 2017, Washington, DC, USA
Reactive uptake of ammonia by biogenic and anthropogenic organic aerosols
29. 253rd American Chemical Society National Meeting, April 2-6, 2017, San Francisco, CA, USA
Organic photochemistry in atmospheric particulate matter
28. The International Chemical Congress of Pacific Basin Societies (Pacifichem), Dec. 15-20, 2015, Honolulu, HI, USA
Photolysis of organic compounds in atmospheric aerosols
27. American Geophysical Society Meeting, December 15-19, 2014, San Francisco, CA, USA
Effect of relative humidity and temperature on photochemical aging of secondary organic aerosols
26. 33rd Annual AAAR Conference, October 20-24, 2014, Orlando, FL, USA
Photochemical aging of brown carbon aerosols
25. 248th American Chemical Society National Meeting, August 10-14, 2014, San Francisco, CA, USA
Photochemistry in secondary organic aerosols
24. EMSL User Meeting, May 6-7, 2014, Richland, WA, USA
Photochemistry in atmospheric aerosols and clouds
23. 247th American Chemical Society National Meeting, March 16-20, 2014, Dallas, TX, USA
Combined experimental and theoretical studies of photolysis of atmospherically relevant organic compounds in various phases
22. 247th American Chemical Society National Meeting, March 16-20, 2014, Dallas, TX, USA
Photochemical and dark aging of secondary organic aerosols
21. 32nd Annual AAAR Conference, September 30 – October 4, 2013, Portland, OR, USA
A systematic evaluation of the extent of photochemical processing in different types of secondary organic aerosols

20. The Aerosol Society's Focus Meeting – Atmospheric Aerosols, July 24-24, 2013, University of Leeds, UK
Processing of fresh and aged secondary organic aerosols by direct photolysis
19. Faraday Discussion 165: Tropospheric Aerosol – Formation, Transformation, Fate and Impacts, July 22-24, 2013, University of Leeds, UK
Brown carbon formation from ketoaldehydes of biogenic monoterpenes
18. 244th American Chemical Society National Meeting, August 19-23, 2012, Philadelphia, PA, USA
Interaction of water vapor with ionic liquid nanoparticles and thin films
17. CalNex 2010 Data Analysis Workshop, May 2011, Sacramento, CA, USA
Molecular characterization of organic aerosols from the Los Angeles ground site during the CalNex 2010 campaign using high-resolution mass spectrometry
16. Pacificchem 2010, December 15-20, 2010, Honolulu, HI, USA
Hygroscopic properties of nanoparticles coated with ionic surfactants
15. Pacificchem 2010, December 15-20, 2010, Honolulu, HI, USA
Photodegradation of organic hydroperoxides and carbonyls derived from atmospheric oxidation of unsaturated fatty acids in aerosols and could droplets
14. 2009 American Geophysical Society Joint Assembly, May 2009, Toronto, Ontario, Canada
Effect of slow aging reactions on optical properties of secondary organic aerosol prepared by oxidation of selected monoterpenes
13. 27th Annual AAAR Conference, October 20-24, 2008, Orlando, FL, USA
Hygroscopic growth of nanoparticles containing surface active molecules prepared by an electrospray aerosol source
12. 27th Annual AAAR Conference, October 20-24, 2008, Orlando, FL, USA
Photodegradation of secondary organic aerosol derived from oxidation of terpenes
11. 2006 AirUCI Meeting, December 2006, Christchurch, New Zealand.
Ultrafine aerosol particle generation by ionization air purifiers
10. 7th International Aerosol Conference, September 2006, St. Paul, MN, USA
Laboratory studies of photochemical processing of secondary organic aerosol particles
9. 2005 AirUCI Meeting, June 2005, Prague, Czech Republic
Photochemistry of aged organic aerosol particles
8. 2005 American Physical Society March Meeting, March 2005, Los Angeles, CA, USA
Photodissociation action spectroscopy of ozonized films of undecylenic acid
7. 228th American Chemical Society National Meeting, August 2004, Philadelphia, PA, USA
Photodissociation action spectroscopy at organic aerosol particle-air interfaces
6. 227th American Chemical Society National Meeting, March 2004, Anaheim, CA, USA
Ozonolysis of undecylenic and oleic acid films studied with infrared cavity-ring down spectroscopy
5. 223rd American Chemical Society National Meeting, April 2002, Orlando, FL, USA
Observation and characterization of HOONO in the OH + NO₂ reaction
4. 222nd American Chemical Society National Meeting, August 2001, Chicago, IL, USA
Vibrationally-mediated dissociation of water molecules inside (H₂O)₂ and Ar-H₂O
3. 48th Annual Western Spectroscopy Association Conference, January 2001, Pacific Grove, CA, USA
Vibrationally-mediated photodissociation of H₂O, (H₂O)₂ and Ar-H₂O: Spectroscopy and energy flow dynamics
2. 4th Annual Rocky Mountain Symposium on Photons and Chemistry, March 1998, Estes Park, CO, USA
State-to-state reactive scattering study of the F + n-H₂ reaction in crossed molecular beams
1. Structure and Reactivity of Molecular Ions, July 1995, Spandau, Germany.
Infrared spectroscopic studies of ionic complexes: HCO⁺-Rg and N₂H⁺-Rg (Rg = He, Ne, Ar)

POSTER PRESENTATIONS AT RESEARCH MEETINGS

24. Gordon Research Conference on Atmospheric Chemistry, July 30 – August 4, 2017, Sunday River, Newry, ME, USA
Climate-relevant compounds produced from burning forest fire fuels in conjunction with the FIREX campaign
23. 35th Annual AAAR Conference, October 17-21, 2016, Portland, OR, USA
Molecular Composition of Biomass Burning Aerosol from Household Cookstoves in Rural Haryana, India
22. Gordon Research Conference on Atmospheric Chemistry, July 28 – August 2, 2013, West Dover, VT, USA
Photochemical degradation of primary and secondary brown carbon
21. 30th Annual AAAR Conference, October 3-7, 2011, Orlando, FL, USA
Effect of cloud processing on the light absorption properties of biogenic secondary organic aerosols
20. Gordon Research Conference on Atmospheric Chemistry, August 2011, West Dover, VT, USA
Modification of light absorption properties of organic aerosols by cloud processing
19. CalNex 2010 Data Analysis Workshop, May 2011, Sacramento, CA, USA
Molecular characterization of organic compounds in atmospheric aerosols

18. 240th American Chemical Society National Meeting, August 2010, Boston, MA, USA
Characterization of hygroscopic core-organic shell nanoparticles by tandem particle mobility measurements
17. 31st DOE Annual Combustion Research Meeting, June 2010, Warrenton, VA, USA
Investigation of molecular level composition and atmospheric aging of organic aerosols
16. 28th Annual AAAR Conference, October 26-30, 2009, Minneapolis, MN, USA
Chemical and photoinduced aging processes in secondary organic aerosol derived from oxidation of isoprene and selected monoterpenes
15. Gordon Research Conference on Atmospheric Chemistry, August 2009, Waterville Valley, NH, USA
Extracting chemical and mechanistic information from high-resolution mass spectra of organic aerosols
14. 24th Informal Symposium on Kinetics and Photochemical Processes in the Atmosphere, Feb 2007, Los Angeles, CA, USA
Ultrafine aerosol particle and ozone generation by ionization and ozonation air-purifiers
13. Gordon Research Conference on Atmospheric Chemistry, August 2007, Big Sky, MT, USA
Photochemical processing of secondary organic aerosol particles
12. Gordon Research Conference on Atmospheric Chemistry, September 2005, Big Sky, MT, USA
Photochemistry of oxidized organic aerosol particles
11. 228th American Chemical Society National Meeting, August 2004, Philadelphia, PA, USA
Ozonolysis of organic particles studied with laser ablation - chemical ionization aerosol mass spectrometry
10. 22nd Annual AAAR Conference, October 2003, Anaheim, CA, USA
Surface photochemistry of oxidized organic layers immobilized on sea-salt studied with cavity-ring down spectroscopy
9. Gordon Research Conference on Atmospheric Chemistry, September 2003, Big Sky, MT, USA
Novel instrumentation for investigation of photochemistry in atmospheric particle-air interfaces
8. 50th Annual Western Spectroscopy Association Conference, January 2003, Pacific Grove, CA, USA
Photochemistry of atmospheric aerosols studied with action spectroscopy
7. Atmospheric Chemistry and Air Pollution Yesterday, Today and Tomorrow: a Symposium to Honor James N. Pitts, Jr., August 2001, University of California, Irvine, CA, USA
Experimental study of vibrationally mediated dissociation of PNA, PAN and HOONO
6. Gordon Research Conference on Atmospheric Chemistry, June 2001, Newport, RI, USA
Experimental study of vibrationally mediated dissociation of PNA, PAN and HOONO
5. Gordon Research conference on Molecular Energy Transfer, January 2001, Ventura, CA, USA
Vibrationally-mediated photodissociation dynamics of H₂O in the $\nu_{OH} = 2$ polyad
4. 17th Conference on the Dynamics of Molecular Collisions, July 1999, Split Rock, PA, USA
State-to-state reaction dynamics in F+H₂ studied in crossed supersonic jets
3. Gordon Research Conference on Atomic and Molecular Interactions, June 1998, NH, USA
State-to-state reactive scattering study of the F + n-H₂ reaction in crossed molecular jets
2. Symposium on Atomic Cluster and Surface Physics, January 1996, Engelberg, Switzerland
Mid-infrared spectra of ionic proton-bound complexes: intermolecular interaction and solvation effects
1. Structure and Reactivity of Molecular Ions, January 1994, Dourdan, France
Metastable decay of N₂⁺-He_n ($\nu = 1$) ($1 < n \leq 6$) clusters