

Sergey A. Nizkorodov, Chancellor's Professor of Chemistry

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BIOSKETCH

Sergey Nizkorodov was born and started his education in Kazakhstan. In 1997, he was invited to finish the last year of his high school education at the M. A. Lavrentyev Specialized Educational Scientific Center of the Novosibirsk State University. In 1988, he started his undergraduate studies in biochemistry at Novosibirsk State University, with his undergraduate research project (1991-93) done at Voevodsky Institute of Chemical Kinetics and Combustion under mentorship of Dr. Nikolai Bazhin and Dr. Vladimir Makarov. He did his Ph.D. research (1993-97) in physical chemistry at Basel University, Switzerland, under mentorship of Dr. Evan Bieske, Dr. Otto Dopfer, and Dr. John Maier. After doing his postdoctoral research in chemical kinetics and reaction dynamics at the University of Colorado at Boulder with Dr. David Nesbitt, and in atmospheric chemistry at the California Institute of Technology with Drs. Mitchio Okumura, Paul Wennberg, Stanley Sander and Geoffrey Blake, he joined the faculty of the Department of Chemistry, University of California, Irvine (UCI) in 2002. He presently has over 200 peer-reviewed papers focusing on atmospheric and physical chemistry. He teaches general, analytical, 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. He has been a research mentor to over 100 graduate, undergraduate, high-school, and postdoctoral students. His research, education, service and public outreach work have been recognized by several awards including Fulbright Scholarship, AAAS Fellowship, Camille Dreyfus Teacher-Scholar Award, AGU Ascent Award, Coblentz Award, UCI Chancellor's Award for Excellence in Fostering Undergraduate Research, Daniel G. Aldrich, Jr. Distinguished University Service Award, and UCI Professor of the Year Award. He served as the President of the American Association for Aerosol Research (AAAR) in 2020-21, a professional organization of about 1000 scientists and engineers working to advance the field of aerosol research and technology, and became an AAAR Fellow in 2022. He has been active in various service roles at UCI and in the research community.

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

High School Diploma (1988)

M. A. Lavrentyev Specialized Educational Scientific Center of the Novosibirsk State University (also known as Physics-Mathematics School)

EMPLOYMENT

Chancellor’s Professor of Chemistry (July 2025 – present)

Professor of Chemistry (July 2013–June 2025)

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–June 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

PROFESSIONAL DEVELOPMENT

- ❑ UCI Faculty Academy for Teaching Excellence (FATE) during the 2024-25 academic year
- ❑ UCI Faculty Mentoring Academy of 2023-24 (three 90-minute workshops for faculty)
- ❑ ESCALA Culturally Responsive Assessment in the STEM Classroom (April 2021, two-part workshop)
- ❑ UCI Digital Learning Institute (summer 2020), certified
- ❑ UCI Course Design Institute (summer 2020)
- ❑ UCI Active Learning Institute (Fall 2018), certified as an active learning instructor (Winter 2019)
- ❑ UCI Provost's Leadership Academy during the 2018-2019 academic year

AWARDS

- ❑ *Aerosol Science and Technology 2025 Outstanding Reviewer* – for reviewing papers for this journal
- ❑ *Appointed Chancellor's Professor of Chemistry (2025)*
- ❑ *2025 Chancellor's Award for Distinguished Fostering of Undergraduate Research*
- ❑ *Aerosol Science and Technology 2022 Outstanding Reviewer* – for reviewing papers for this journal
- ❑ *Elected Fellow of the American Association for Aerosol Research – AAAR (2022)*
- ❑ *2022 Dr. De Gallow Professor of the Year* – awarded annually by the Division of Teaching Excellence and Innovation (DTEI) to recognize a faculty member who “excels in teaching through the use of particular methods, tools, or materials that positively impact students”
- ❑ *2021-2022 Daniel G. Aldrich, Jr. Distinguished University Service Award* – conferred by the Senate on a faculty member who, “in addition to achieving with distinction their scholarly pursuits, have nonetheless made sustained and outstanding contributions through service to the University”
- ❑ *2021 UCI School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education* – awarded annually to one faculty member in each of the School's Departments
- ❑ *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 the American Association for the Advancement of Science – AAAS (2015)*
- ❑ *UCI Undergraduate Research Opportunities Program Faculty Mentor of the Month (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 (2012)*
- ❑ *Camille Dreyfus Teacher-Scholar Award (2007)*
- ❑ *2006 UCI School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education* – awarded annually to one faculty member in each of the School's Departments
- ❑ *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

- ❑ *IRCELYON, Université Claude Bernard Lyon 1, France* (May 28 – July 19, 2018, 7 weeks, visiting professorship hosted by Prof. Christian George)
- ❑ *University of Melbourne, Australia* (July 9-15, 2017, 1 week, hosted by Prof. Evan Bieske)
- ❑ *University of Eastern Finland, Finland* (Aug 15, 2016 – Feb 14, 2017, Fulbright Visiting Scholar, hosted by Prof. Annele Virtanen)
- ❑ *Fudan University, China* (Sep 7 – Oct 8, 2014, 1 month, visiting professorship 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 2006, 2 weeks, hosted by Prof. Otto Dopfer)

FUNDING HISTORY

Proposal Title	PI and co-PIs	Agency / Award type	Amount	Period
Composition and Transformations of Organic Aerosol Emitted from Simulated Wildland-Urban Interface Fires	Sergey Nizkorodov (PI)	The Camille & Henry Dreyfus Foundation ST-25-089	\$50,000 total \$50,000 direct	1/1/26- 12/31/26
REU Site: Chemistry Summer Undergraduate Research Fellowship (Chem-SURF) Program at UCI	Stephen Mang (PI), Sergey Nizkorodov (co-PI)	National Science Foundation CHE-2447415	\$464,997 total \$418,774 direct	08/01/25- 07/31/28
Conference: 2025 Atmospheric Chemistry Gordon Research Conference and Gordon Research Seminar	Sergey Nizkorodov (PI), Colette Heald (Co-PI)	National Science Foundation AGS-2512892	\$49,450.00 total	05/01/25- 04/30/26
Effect of Condensed-Phase Photochemistry on Absorption Coefficients and Phase State of Atmospheric Organic Aerosol Particles	Sergey Nizkorodov (PI)	National Science Foundation AGS-2334731	\$797,203 total \$541,107 direct	2/15/24 - 1/31/27
Molecular-level Understanding Of Atmospheric Aerosols (MUOAA 2024); Corsica, France; April 1-5, 2024	Sergey Nizkorodov (PI)	National Science Foundation AGS-2332007	\$14,224 total \$13,600 direct	01/01/24- 12/31/24
UC Irvine Beckman Scholars Program: Undergraduate Mentorships in Chemical and Pharmaceutical Sciences	Sergey Nizkorodov (PI), Sam Schriener (co-PI)	Arnold and Mabel Beckman Foundation AMBF-5658773	\$156,000 total \$156,000 direct	2023- 2026
Composition and Transformations of Organic Aerosol Emitted from Facility Simulated Wildland-Urban Interface Fires	Sergey Nizkorodov (PI)	National Oceanic & Atmospheric Administration NA22OAR4310196	\$375,000 total \$260,951 direct	09/01/22- 08/31/25
Reactive Oxygen Species in Biomass Burning Particles: Dependence on Chemical Composition and Photochemical Aging	Manabu Shiraiwa (PI), Sergey Nizkorodov (co-PI)	National Science Foundation CHE-2203419	\$541,660 total \$379,238 direct	07/01/22- 06/30/25
NASA Funding Support for the American Association for Aerosol Research (AAAR) 2020 Virtual Annual Conference	Sergey Nizkorodov (acting PI for AAAR)	20-TWSC20-0014	\$20,000 direct awarded to AAAR	09/01/20- 12/01/20
UC Irvine Beckman Scholars Program: Undergraduate Mentorships in Chemical and Pharmaceutical Sciences	Sergey Nizkorodov (PI), Sam Schriener (co-PI)	Arnold and Mabel Beckman Foundation AMBF-5571546	\$156,000 total \$156,000 direct	2020- 2023

REU Site: Chemistry Summer Undergraduate Research Fellowship (Chem-SURF) Program at UCI	Sergey Nizkorodov (PI), Stephen Mang (co-PI)	National Science Foundation CHE-1950126	\$312,000 total \$285,151 direct	04/01/20- 03/31/24
MRI: Acquisition of a High-Resolution Mass Spectrometer for Atmospheric Ecometabolomics Research	James Smith (PI), Celia Faiola, Barbara Finlayson-Pitts, Alex Guenther, and Sergey Nizkorodov (co-PIs)	National Science Foundation CHE-1920242	\$448,130 direct	08/01/19- 07/31/22
Chemistry of Atmospheric Aerosols at Pacificchem 2020 Congress	Sergey Nizkorodov (PI)	National Science Foundation AGS-1936123	\$24,724 total \$20,800 direct	06/01/20 -05/31/21
Condensed-Phase Organic Photochemistry in Aerosol Particles and Aerosol Liquid Water	Sergey Nizkorodov (PI)	National Science Foundation AGS-1853639	\$679,907 total \$475,072 direct	4/15/19 - 3/31/23
A validated second-hand smoking exposure model for Electronic Nicotine Delivery Systems (ENDS)	Rufus Edwards (PI), Co-PIs: Don Blake, Sergey Nizkorodov	The Tobacco-Related Disease Research Program (TRDRP) grant number T30IP0866	\$479,770	2019- 2023
Collaborative Research: ICARUS - Index of Chamber Atmospheric Research in the United States	Tran Nguyen (PI of the overall collaborative proposal), Sergey Nizkorodov (PI of the UCI portion)	National Science Foundation, AGS-1740640	\$44,360 total \$28,712 direct	09/01/17 - 8/31/20
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 \$485,948 direct	09/15/17 - 09/14/20
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 835881	\$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 Aerosols at Pacificchem 2015 Congress	Sergey Nizkorodov (PI)	National Science Foundation AGS - 1519142	\$20,254 total \$17,175 direct	04/15/15 -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	US Environmental Protection Agency 835425	\$1,495,454 total	04/01/14 - 03/31/17

	many investigators on this grant			
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 - 7/31/16
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 Health	Sergey Nizkorodov (PI), co-investigators: Barbara Finlayson-Pitts and Donald Blake.	National Science Foundation MRI-0923323	\$680,680 direct	7/01/09 - 6/30/10
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 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; multiple other proposals where Nizkorodov is a co-PI are not listed here. These proposals were peer-reviewed and carried up to \$100k each in in-kind support.

- ❑ Composition and Transformations of Atmospheric Organic Aerosol from Wildland-Urban Fires, (DOE EMLS Proposal 61175), 10/01/2024-09/30/2026

- ❑ 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

- ❑ About 15 journal article reviews per year on average
- ❑ *Recent Journals*: ACS Earth and Space Chemistry, ACS ES&T Air, Aerosol Science and Technology, Analytical Chemistry, Atmosphere, Atmospheric Chemistry and Physics (member of the editorial board), Atmospheric Environment, Atmospheric Measurement Technologies, Chemical Physics, Chemical Physics Letters, Chemical Reviews, Chemical Science, Chemosphere, Geophysical Research Letters, Environmental Chemistry, Environmental Pollution, Environmental Science: Atmospheres, Environmental Science: Processes and Impacts, Environmental Science and Pollution Research, Environmental Science & Technology, Environmental Science & Technology Letters, Indoor Air, Journal of Atmospheric Research, Journal of American Chemical Society, Journal of Chemical Education, Journal of Chemical Physics, Journal of Chromatography A, Journal of Geophysical Research Atmospheres, Journal of Labelled Compounds and Radiopharmaceuticals, Journal of Photochemistry and Photobiology, Journal of Physical Chemistry, Journal of Physical Chemistry Letters, Langmuir, Marine Chemistry, Nature Chemistry, Physical Chemistry Chemical Physics, Proceeding of the National Academy of Sciences, Rapid Communications in Mass Spectrometry, Science Advances, Science of the Total Environment,
- ❑ *Proposal Reviews*: ACS Petroleum Research Fund, Department of Energy SBIR program, Department of Energy ASP program, Department of Energy EMSL user proposals, Environmental Protection Agency, NOAA Climate Program Office, 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

- ❑ Session co-organizer: “Fundamentals of Atmospheric Chemical and Physical Processes” at the 2026 Joint iCACGP–IGAC Conference, Heraklion, Crete, Greece, September 7–11, 2026. Co-organizers: Maria Angelaki, Nicolas Jorge Huneus, Sachin Kumar Mishra.
- ❑ Symposium co-organizer: “Innovating Assessments in Education: Challenges and Opportunities” at the 2025 American Chemical Society (ACS) fall meeting in Washington, DC, August 17-21, 2025. Co-organizers: Craig Benson and Amanda Holton. One half-day session with 10 speakers.
- ❑ Vice-Chair (2023) and co-Chair (2025) of the Gordon Research Conference on Atmospheric Chemistry, August 3-8, 2025, Newry, Maine, United States. Co-Chair: Colette Heald.
- ❑ Conference co-chair: Molecular-Level Understanding of Atmospheric Aerosols (MUOAA) in Cargèse, Corsica, France, April 1-5, 2024. Co-organizers: Antoinette Boreave, Véronique Daële, Christian George, Wahid Mellouki, Céline Toubin, Eric Villenave. Responsible for the scientific program; raised \$15k in conference support from NSF.
- ❑ Conference co-chair: 2022 IGASP Symposium (<https://igasp.org/>), Irvine, CA, June 15, 2022. 146 participants. Co-chair: Prof. Barbara Finlayson-Pitts.

- ❑ Symposium co-organizer: “Chemistry of Atmospheric Aerosols” at the 2021 International Chemical Congress of Pacific Basin Societies (Pacifichem) in Honolulu, HI, December 16-21, 2021. Co-organizers: Allan Bertram, Evan Bieske, Alexander Laskin, Chul-Un Ro, Xin Yang. Three days of virtual platform sessions with 78 speakers. Raised \$25k in support of this symposium from NSF.
- ❑ Symposium co-organizer: “Fundamental Chemical Processes Common to Dissolved Organic Matter and Atmospheric Organic Aerosols” at the 2019 American Chemical Society (ACS) fall meeting in San Diego, CA, August 25-29, 2019. Co-organizer: Nadine Borduas-Dedekind. Five half-day sessions with 40 speakers and one poster session.
- ❑ 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. Selected papers from this symposium were later published in a book: “Multiphase Environmental Chemistry in the Atmosphere” Hunt S., Laskin A., Nizkorodov S.A. Eds., 2018; ISBN13: 9780841233638.
- ❑ 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. 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) in Honolulu, HI, 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 in San Francisco, CA, 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) in 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) in Honolulu, HI, 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 Aerosol Research (member since 2003, elected Fellow in 2022)
- ❑ American Association for the Advancement of Science (member since 2000; elected Fellow in 2015)
- ❑ American Chemical Society (member since 2000)
- ❑ American Geophysical Union (member since 2004)
- ❑ European Association of Geochemistry (member since 2015)
- ❑ European Geosciences Union (member since 2018)
- ❑ 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). Aeroqual, New Zealand.
6. Dr. **Scott A. Epstein** (May 2011 – March 2014). Program Supervisor at SCAQMD.
7. Dr. **Hyun-Ji (Julie) Lee** (January 2012 – May 2015). Air Pollution Specialist at CARB.
8. Dr. **Amanda C. MacMillan** (January 2016 – June 2018). Air Pollution Chemist at SCAQMD.
9. Dr. **Alexandra L. Klodt** (July 2022 – August 2023). Air Pollution Specialist at CARB.
10. Dr. **Zhaomin Yang** (July 2025 – June 2026).

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; Principal Research Scientist at Southwest Sciences since 2010; moved to Mesa Photonics in 2022.
2. **Maggie L. Walsler** (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; currently works as an Associate Executive Director, Division on Earth and Life Studies at the National Academies of Sciences, Engineering, and Medicine.
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). M.S. 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 (now Cal Poly Humboldt) 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 B. 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". Associate professor at the Department of Environmental Toxicology, University of California Davis.
9. **Hanna Hakulinen, formerly 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); Research Director (2017-2023) and then Director (2024-present) of the VERIFIN Institute, Finland.
10. **Amanda C. 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 from 2015-18, science editor (2018-19). Air Pollution Chemist at the South Coast Air Quality Management District (SCAQMD).
11. **Sandra L. 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. M.S. 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 (2016-17) and CU Boulder (2017-2019). Air Pollution Chemist at the South Coast Air Quality Management District (SCAQMD).
 12. **Dian E. 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 (2016-18); Lecturer at SUNY Geneseo (2018-2021); currently an Analytical Chemist at Alene Candles.
 13. **Mallory L. 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.*” Technical Coordinator at the National Coordination Office for the Networking and Information Technology Research and Development (NITRD) Program.
 14. **Paige K. Aiona** (February 2013 – May 2018). Ford Foundation fellow and NSF fellow; winner of the 2018 Joan Rowland award. Ph.D. Thesis: “*Optical Properties and Chemical Composition of Brown Carbon Aerosols.*” Air Pollution Chemist at the South Coast Air Quality Management District (SCAQMD).
 15. **Kurtis T. Malecha** (February 2014 – May 2018). NSF fellow; winner of the 2017 Michael E. Gebel award. Ph.D. Thesis: “*Condensed-phase Photochemical Processes in Secondary Organic Aerosols from Biogenic and Anthropogenic Sources.*” Air Pollution Chemist at the San Diego County Air Pollution Control District until 2021; Air Monitoring Technical Project Manager at the California Air Resources Board (CARB) until 2025; Community Air Protection Monitoring (AB-617) Manager at San Diego County Air Pollution Control District.
 16. **Lauren T. Parish, née Fleming** (February 2015 – June 2019). Winner of the 2018 Peter B. Wagner Memorial Award for Women in Atmospheric Sciences (2nd place); winner of the 2018 Michael E. Gebel award; winner of the 2019 Edward K.C. Lee Award. Ph.D. Thesis: “*Molecular Composition, Optical Properties, and Chemical Aging of Primary and Secondary Organic Aerosol.*” Postdoctoral researcher at University of Leeds 2019-21; Graph Data Scientist at Crisp Thinking; Senior Data Scientist at Resolver.
 17. **Julia Montoya-Aguilera** (June 2015 – September 2020). LSAMP Bridges to the Doctorate (BD) fellow; NSF fellow; winner of the 2018 Peter B. Wagner Memorial Award for Women in Atmospheric Sciences (3rd place); 2020 Jackie Smitrovich Prize. Ph.D. Thesis: “*Nitrogen Containing Secondary Organic Aerosols: Experiments and Air Quality Simulations.*” Air Pollution Specialist at the South Coast Air Quality Management District (SCAQMD).
 18. **Vahe Baboosian** (February 2018 – Jun 2022). NSF fellow. Ph.D. Thesis: “*Condensed-Phase Photochemical Aging in Secondary Organic Aerosols.*” Air Pollution Chemist at the San Diego County Air Pollution Control District 2022-23; Environmental Scientist at Yorke Engineering.
 19. **Alexandra M. Klodt** (February 2018 – August 2022). 2021 Michael E. Gebel Award; 2022 Contributions to the Chemistry Department Teaching Program Teaching Program Award. Ph.D. Thesis: “*Effects of Aqueous Inorganic or Viscous Organic Matrices on the Chemical and Photochemical Aging Processes of Secondary Organic Aerosols in the Atmosphere.*” Air Pollution Specialist at the California Air Resources Board (CARB).
 20. **Natalie R. Smith** (February 2018 – August 2022). 2020-21 Rowland Fellow; 2020 Graduate Student Award in Environmental Chemistry from the Division of Environmental Chemistry (ENVR) of the American Chemical Society; 2021 Michael E. Gebel Award; 2022 Joan Rowland Award. Ph.D. Thesis: “*Complex Mixtures of Terpenes Results in Highly Viscous Secondary Organic Aerosols.*” Air Measurement Scientist at the Colorado Department of Public Health and Environment (2022-24); Community Science Manager at CleanAIRE NC.
 21. **Cynthia Wong** (February 2019 – June 2023). 2020-21 Ridge-to-Reef Fellow; 2022 UCI Chemistry Excellence in DEI Award; 2023 Jackie Smitrovich Prize. Ph.D. Thesis: “*Analyzing the Long-Term Aging of*

Secondary Organic Aerosols and the Impacts of Acidity.” Air Pollution Specialist at the California Air Resources Board (CARB).

22. **Avery Dalton** (February 2020 – June 2024); 2023 Contributions to the chemistry department teaching program by a TA; 2023-24 Faculty Endowed Fellowship. Ph.D. Thesis: “*Illuminating the Optical Properties and Photochemistry of Nitroaromatics in Different Atmospheric Environments.*” Scientific Programmer with Applied Research Associates since 2024.
23. **Katherine Hopstock** (February 2020 – June 2024). 2021 Contributions to the Chemistry Department Teaching Program Award; 2023-24 Rowland Fellow, 2024 Graduate Student Award in Environmental Chemistry from ACS ENVR Division, 2024 Joan Rowland Award, 2024 Outstanding Contribution to the Department of Chemistry Award. Ph.D. Thesis: “*Molecular Composition and Chemical Aging of Organic Aerosol from Various Types of Smoke.*” Atmospheric Scientist in the Refinery Services Department at Sonoma Tech.
24. **Lena Gerritz** (February 2022 – present), co-advised with Prof. Manabu Shiraiwa. 2022 Contributions to the Chemistry Department Teaching program by a first-year TA; 2023-26 NSF fellow; 2025 Michael E. Gebel Award.
25. **Lucia Liu** (September 2022 – present), co-advised with Prof. Celia Faiola. 2023 Contributions to the chemistry department teaching program by a first-year TA; 2025-26 Rowland Fellow.
26. **Luis Ruiz Armenta** (September 2022 – October 2024). Graduated with an M.S. degree. Senior Analytical Chemist at Babcock Laboratories.
27. **Matthew Zaragoza** (September 2023 – present), co-advised with Prof. Annmarie Carlton.
28. **Anthony Jue** (September 2023 – present).
29. **Erik Jackson** (July 2025 – present). 2025-26 Brython Davis Fellowship

GRADUATE STUDENT DOCTORAL COMMITTEES

Nizkorodov’s research 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. Nanna Myllys (University of Helsinki, PhD thesis pre-referee; September 2017)
36. Krista Parry (UCI Chemistry; Ph.D. committee member; November 28, 2017)
37. Nick Vizenor (UCI Chemistry; Ph.D. committee member; December 19, 2017)
38. Jack Porter (UCI Chemistry; Ph.D. committee member; March 8, 2018)
39. Jeremy Horne (Mechanical and Aerospace Engineering; Ph.D. committee member; March 1, 2018)
40. Stacey Hughes (UCI Chemistry; Ph.D. committee member; March 14, 2018)
41. Wing-Sy Wong (UCI Chemistry; Ph.D. committee member; May 30, 2019)
42. Kara Kapnas (UCI Chemistry; Ph.D. committee member; June 14, 2019)
43. Rachel Hems (Department of Chemistry, University of Toronto, Ph.D. thesis appraiser, Dec 3, 2019)
44. Amy Christensen (UCI Chemistry; Ph.D. committee member; April 27, 2020)
45. Allison Vander Wall (UCI Chemistry; Ph.D. committee member; May 28, 2020)
46. Michael Jea (Cal State Fullerton, M.S. committee member, July 9, 2020)
47. Christopher Woods (Chemistry; Ph.D. committee member, July 29, 2020)
48. William Howitz (Chemistry; Ph.D. committee member, December 1, 2020)
49. Sabrina Chee (UCI Chemistry; Ph.D. committee member; May 20, 2021)
50. Juan Miguel González Sánchez (Laboratoire de Chimie de l'Environnement, Université Aix-Marseille, Ph.D. examiner and committee member; July 22, 2021)
51. Brian Hwang (UCI Chemistry; Ph.D. committee member; August 25, 2021)
52. Alex Jarnot (UCI Chemistry; Ph.D. committee member; November 29, 2021)
53. Jinlai Wei (Chemistry; Ph.D. committee member, May 23, 2022)
54. Farzaneh Khalaj (Ecology & Evolutionary Biology; Ph.D. committee member, May 27, 2022)
55. Andrea Rohrbacher (UCI Chemistry; Ph.D. committee member; June 9, 2022)
56. Hayley Glicker (UCI Chemistry; Ph.D. committee member, June 13, 2022)
57. Michelia Dam (UCI Chemistry; Ph.D. committee member, July 14, 2023)
58. Robert Weltman (UCI Program in Public Health; Ph.D. committee member, August 21, 2023)
59. Kyla Siemens (Chemistry, Purdue University; Ph.D. external committee member, March 20, 2024)
60. Zachary Cornwell (UCI Chemistry; Ph.D. committee member, June 12, 2024)
61. Alyssa Burns (UCI Chemistry; Ph.D. committee member, July 17, 2024)
62. Adam Thomas (UCI Chemistry; Ph.D. committee member, May 20, 2025)
63. Kasey Edwards (UCI Chemistry; Ph.D. committee member, June 3, 2025)

UPCOMING DOCTORAL EXAMS

- ❑ Jonas Enders (UCI Chemistry; Ph.D. committee member, 2023-...)
- ❑ Regina Luu (UCI Chemistry; Ph.D. committee member, 2025-...)
- ❑ Kieudiem (Kate) Nguyen (UCI Chemistry; Ph.D. committee member, 2025-...)
- ❑ Colleen Miller (UCI Chemistry; Ph.D. committee member, 2025-...)
- ❑ Madison Landi (UCI Chemistry; Ph.D. committee member, 2025-...)
- ❑ Karen Campos (UCI Chemistry, Ph.D. committee member, 2025-...)

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 (Earth System Science, 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 Nissenson (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 (Mechanical and Aerospace Engineering, advancement exam committee member, Dec. 6, 2006)
16. Satish Vutukuru (Mechanical and 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 (Earth System Science, 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. David Herman (Department of Medicine, Environmental Health Sciences Graduate Program, advancement exam committee member, October 23, 2017)
105. Sabrina Chee (Chemistry, advancement exam committee member, November 2, 2017)
106. Wing-Sy Wong (Chemistry, advancement exam committee member, November 9, 2017)
107. Christopher Woods (Chemistry, advancement exam committee Chair, November 13, 2017)
108. Amy Christensen (Chemistry, advancement exam committee Chair, April 4, 2018)
109. Rebecca Johnson (Department of Medicine, Environmental Health Sciences Graduate Program, advancement exam committee member, August 30, 2018)

110. Hayley Glicker (Chemistry, advancement exam committee Chair, November 1, 2018)
111. Vivian Chen (Chemistry, advancement exam committee member, November 5, 2018)
112. Annie Rohrbacher (Chemistry, advancement exam committee Chair, May 20, 2019)
113. Alexander Jarnot (Chemistry, advancement exam committee Chair, November 21, 2019)
114. Madison Flesch (Chemistry, advancement exam committee member, April 9, 2020)
115. Jinlai Wei (Chemistry, advancement exam committee member, November 2, 2020)
116. Michelia Dam (Chemistry, advancement exam committee member, November 9, 2020)
117. Farzaneh Khalaj (Ecology & Evolutionary Biology, advancement exam committee member, Oct 15, 2021)
118. Adam Thomas (Chemistry, advancement exam committee Chair, November 2, 2021)
119. Zachary Cornwell (Chemistry, advancement exam committee member, November 10, 2021)
120. Robert Weltman (Public Health, advancement exam committee member, November 15, 2021)
121. Kasey Edwards (Chemistry, advancement exam committee Chair, November 9, 2022; Chemistry, original proposal committee Chair, 2023-24)
122. Zane Long (Chemistry, original proposal committee member, 2023-24)
123. Jonas Enders (Chemistry, advancement exam committee Chair, November 16, 2023; Chemistry, original proposal committee Chair, 2024-25)
124. Maria Flores (Chemistry, advancement exam committee Chair, March 17 and May 23, 2024)
125. Ellie Smith (Chemistry, advancement exam committee member, November 5, 2024)
126. Kieudiem (Kate) Nguyen (Chemistry, advancement exam committee member, November 7, 2024; Chemistry, original proposal committee Chair, 2025-26)
127. Regina Luu (Chemistry, advancement exam committee Chair, November 14, 2024; Chemistry, original proposal committee member, 2025-26)
128. Colleen Miller (Chemistry, advancement exam committee Chair, June 2, 2025)
129. Madison Landi (Chemistry, advancement exam committee Chair, November 12, 2025)
130. Karen Campos (Chemistry, advancement exam committee member, November 17, 2025)

UNDERGRADUATE STUDENTS AND POST-BACS 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 at the University of Maryland
32. Renee Leslie (Summer 2013 Chem-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 – July 2018) – co-authored multiple papers, 2014 Gebel undergraduate award, 2014 ACS Analytical Chemistry Award; 2016 ACS Division of Environmental Chemistry Award. Went to MD/PhD program at John Hopkins University.
34. Mariyah Saiduddin (September 2013 – June 2014) – co-authored a paper, 2014 Gebel undergraduate award. Went to graduate school at NYU.
35. Monica Brady (summer 2014 SURF student) – co-authored a paper. Went to graduate school at Tulane University in New Orleans.
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. Co-authored a paper. Went to medical school.
39. Tim Cai (September 2015 – June 2017). 2017 ACS Division of Environmental Chemistry Award. Co-authored a paper. Went to graduate school at Carnegie Mellon University.
40. Lucas Ellison (Summer 2016 visiting student from McGill University). Co-authored a paper.
41. Aditya Iyengar (April 2016 – June 2017).
42. Suki Gu (September 2017 – June 2020). 2018 Gebel undergraduate award. 2020 Don Bunker award. Co-authored a paper. Went to graduate school at Caltech.
43. Henry Chin (September 2018 – June 2019). 2019 Gebel undergraduate award and 2019 ACS Division of Environmental Chemistry Award. First author on a paper. Went to graduate school at UCSD.
44. Michal Olsen (September 2018 – August 2019). Co-authored a paper. Went to graduate school at UC Riverside.
45. Judith Wang (September 2018 – June 2019).
46. Danielle Rocco (September 2018 – June 2020). 2019 Gebel undergraduate award. Went to graduate school at Cal State Fullerton, then got a position at Ramboll as an air quality consultant.
47. Dainel Vite (September 2019 – June 2020). Co-authored a paper.
48. Jorge Fernandez (September 2019 – June 2020). Co-authored a paper. HPLC Technician at MG Global LLC, Garden Grove.
49. Samantha Scott (December 2019 – March 2021). 2020 Gebel undergraduate award.
50. Kimberly Zhang (April 2020 – August 2021). 2020-21 UCI Beckman Scholar. Co-authored a paper. 2021 Chancellor's Award for Excellence in Research, 2021 Chancellor's Award of Distinction, 2020-21 Beckman Scholarship, 2021 Don L. Bunker Award. Went to graduate school at MIT in 2021.
51. Scott Le (April 2021 – March 2022) – co-authored a paper
52. Angel Arredondo (Summer 2021 Chem-SURF student)
53. Lucia Liu (July 2021 – September 2022). Co-authored a paper. Went to graduate school at UCI in 2022.
54. Krisztina Rakosi (September 2021 – July 2022). 2022 Michael E. Gebel Undergraduate Award and 2022 ACS Division of Analytical Chemistry Undergraduate Award.
55. Maggie Chou (April 2022 – June 2023). 2023 Michael E. Gebel Undergraduate Award. Went to Pharmacy School at UCI in 2023.
56. Seamus Frey (Chem-SURF 2022 summer student). Went to graduate school at MIT.
57. Michael Alvarado (June 2022 – Feb 2023). Works at EMAX Laboratories, Inc. in Torrance, CA

58. Jett Vuong (August 2022 – June 2023). 2023 ACS Division of Environmental Chemistry Undergraduate Award; 2023 Outstanding Senior.
59. Tim Oeij (October 2022 – June 2023).
60. Sofia Stirone (October 2022 – April 2023). 2023 Poster Presentation Chancellor Award Winner, Earth and Beyond category, 3rd place.
61. Eleanor Miko (October 2022 – June 2026). 2025 Chancellor's Award for Excellence in Undergraduate Research, 2025-26 UCI Beckman Scholar.
62. Shweta Shah (October 2022 – March 2023)
63. Helen Qin (October 2022 – June 2023)
64. Avisia Charmchi (July 2024 – August 2025). 2024-25 UCI Beckman Scholar, 2025 Don L. Bunker Award
65. Noam Levi (October 2024 – June 2025). 2025 Chancellor's Award for Excellence in Undergraduate Research.
66. Ethan Hery (June 2025 – August 2025). Summer program student from Mount San Antonio Community College (Mt. SAC).
67. Ayush Shah (September 2025 – December 2025).

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)
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. Aden Alemayhu (Science Fair Project, Winter 2015)
10. Jasmine Wang (Science Fair Project, Winter 2015)
11. Lauren Kim, Woodbridge High School (Science Fair Project, Winter 2015)
12. Yujane Chen, Troy High School (laboratory internship; Summers 2015 and 2016)
13. Bonnie Huang, El Toro High School (laboratory internship; Summer 2015)
14. Emily Yen, Troy High School (laboratory internship; Summer 2016)
15. Daniel Fishman, Sage High School (laboratory internship; September 2017 – August 2018)
16. Reese Carlton, University High School (laboratory internship; Summer 2018)
17. Ailin Jia, Sage High School (laboratory internship; Summer 2019)

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, 2006, 2007)
- ❑ UCI COSMOS participant (2004, 2005, 2007)
- ❑ 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.

- ❑ Laser and spectroscopy facility oversight committee, Member (2004-05, 2024-...)

- ❑ Graduate admissions and recruiting committee, Member (2007-09; 2010-14, 2024-...)
- ❑ Chem-SURF REU, Co-Director (2019-...)
- ❑ External faculty awards committee, Member (2011-14, 2020-25)
- ❑ OVPTL's Academic Success Research Fellow (2018-19) – to improve student retention in Chemistry
- ❑ Nuclear Chemistry/Radiochemistry faculty search committee, Member (2018-19)
- ❑ Undergraduate and TA awards committee, Member (2018-20)
- ❑ Vice-Chair for academic programs and curriculum (2016-20)
- ❑ Teaching assistant assignment and oversight committee, Chair (2016-20)
- ❑ Committee on undergraduate curriculum, Chair (2016-20) and Member (2020-...)
- ❑ Graduate fellowships/awards committee, Member (2017-18)
- ❑ Analytical/atmospheric chemistry graduate academic advisor (2016-17)
- ❑ High Impact Hiring (HIH) search committee, Member (2014-16)
- ❑ Chemistry website oversight committee, Member (2011-18)
- ❑ Graduate fellowships/awards committee, Member (2004-11) and Chair (2011-14)
- ❑ Physical chemistry graduate academic advisor (2010-14)
- ❑ 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)
- ❑ Physical seminar, Chair (2003-04)
- ❑ Mass-spectrometry facility oversight committee, Member (2003-04, 2009-10)
- ❑ Undergraduate program funding opportunities committee, Member (2008-10)

School of Physical Sciences at UCI

- ❑ NSF GRFP Reviewer Discussion Panel for Physical Sciences students (Aug 2020, 2021, 2022)
- ❑ School of Physical Sciences strategic plan committee, Member (2017-19)
- ❑ School of Physical Sciences Steering Committee, Chair (2006-07)
- ❑ Divisional Senate Assembly Representative for the School of Physical Sciences (2005-07)

UCI

- ❑ Physical Sciences Dean Ad Hoc Review Committee, Chair (2023-24)
- ❑ Hellman Fellow internal review panel at UCI, Member (2023)
- ❑ Beckman Scholars Selection Committee, Chair (2019-...)
- ❑ Subcommittee on Courses and Continuing, Part-Time, and Summer Session Education (SCOC), Member (September 1, 2018 – August 31, 2019) and Chair (September 1, 2019 – August 31, 2021)
- ❑ Fulbright program, internal interviewer for UCI applicants (Fall 2018, 2019, 2020, 2023)
- ❑ Science in Action Chemistry, Department representative (July 2018-June 2019)
- ❑ Provost Ph.D. Fellowship review panel, Member (February-March 2018, 2019, 2020)
- ❑ UCI Research Seed Funding review panel, Member (January 2016)
- ❑ AirUCI Organized Research Unit, Co-Director (September 2015 – present)
- ❑ NSF GRFP Reviewer Discussion Panel for UCI students (July 2014, 2015, 2016)
- ❑ Graduate LEAD Fellowship review panel, Member (February-March 2015)
- ❑ Graduate Opportunity Program (GOP) fellowship review panel, Member (February 2013)

Outside UCI

- ❑ NASA TEMPO/ACX Science and Applications review panel, Member (2025)
- ❑ Gordon Research Conference on Atmospheric Chemistry: Vice-Chair of 2021 [postponed to 2023 due to Covid] meeting, Chair of 2023 meeting [postponed to 2025 due to Covid].
- ❑ ACS Society Committee on Education (SOCED)
 - Chair of the Graduate Student & Postdoctoral Scholars Advisory Board (GSPSAB) (2025-2027)
 - Voting member of SOCED (2025-2027)
 - Associate member of SOCED (2021-2024)
- ❑ American Association for Aerosol Research:
 - Development Committee 2025-2028

- Vice-President Elect (2018-19) → Vice-President (2019-20) → President (2020-21) → Immediate Past President (2021-22), Executive Board of Directors member during this period
- Aerosol Chemistry working group chair for the 2017 annual meeting, elected (2015-17)
- Board of Directors member, elected (2013-2016)
- NSF MRI program review panel, Member (2022)
- NSF REU program review panel, Member (2021)
- EPA STAR program review panel, Member (2021)
- DOE Office of Science Graduate Student Research (SCGSR) Program. Reviewer (2020-21)
- Atmospheric Science graduate program at the University of Nevada, Reno, External Review Committee Chair, November 2020
- National Science Foundation, GRFP panelist (2012-13, 2014-15, 2018-19, 2019-20 competitions)
- National Oceanic and Atmospheric Administration, panelist, 2017 competition
- Atmospheric Chemistry and Physics, Associate Editor (2013-present)
- NSERC Discovery Grant, panelist (2011 and 2012 competitions)
- DOE Environmental Molecular Science Laboratory, user advisory committee member, elected (2011-14)
- Evaluating 3-6 faculty appointment and promotion cases each year for other universities

SUMMARY OF TEACHING EXPERIENCE *

Course	Course title	Quarters taught	Description
<i>Chem 1X</i>	<i>General Chemistry Plus</i>	F20, F21(x2), F22(x2), F23(x2), F24(x2), F25(x2)	Class designed to help students succeed in general chemistry
<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 M2B</i>	<i>Majors General Chemistry</i>	W18, W19, W20, W21, W22	The second part of the general chemistry sequence for the Chemistry majors
<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 11</i>	<i>New Chemistry Student Seminar</i>	F17, F18, F19	A course designed to introduce incoming freshman and transfer students to the Major
<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>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 180</i>	<i>Undergraduate research</i>	every quarter	Activities associated with individual mentoring of undergraduate students in the group
<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 200</i>	<i>Conduct of Research</i>	F17, F18, F19	A required course in research ethics and skills for incoming graduate students
<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

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

Chem 241	<i>Current Issues Related to Air Quality, Climate, and Energy</i>	S25	A graduate level course featuring highly-accomplished outside speakers and team projects involving physical sciences and engineering students
Chem 243	<i>Instrumental Analysis</i>	F12, W15	A graduate level course focusing on theory and methods of modern instrumental analysis
Chem 245	<i>Atmospheric Chemistry</i>	F02, F03, F04, F09, W13, W22	A graduate level course covering chemistry of the lower atmosphere
Chem 280	<i>Graduate research</i>	every quarter	Activities associated with individual mentoring of graduate students in the group
Chem 290	<i>Physical Chemistry Colloquium</i>	F03, W04, S04	The physical chemistry seminar series for the department
Chem 291	<i>Group seminar</i>	every quarter	The weekly research group meetings
Chem 399	<i>University teaching</i>	each quarter 2016-17, 2017-18, 2018-19, 2019-20	Supervising teaching activities of all the Department's teaching assistants
Chem X416	<i>AirUCI Workshop for Science Teachers</i>	Every summer from 2005 to 2014	A two-week intensive outreach program with lectures and experiments focusing on environmental chemistry.
Uni Stu 3	<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

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 (lowest) – 4.00 (highest)
- **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	Advanced Analytical Lab	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	Chemistry Computational Skills	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	Chemistry Computational Skills	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		
F 2016	Chem 280	Graduate Research	5		
F 2016	Chem 291	Research Seminar	5		
F 2016	Chem 399	University Teaching	108		
W 2017	Chem 180	Undergraduate Research	2		
W 2017	Chem 280	Graduate Research	5		
W 2017	Chem 291	Research Seminar	5		
W 2017	Chem 399	University Teaching	97		
S 2017	Chem H2C	Honors General Chemistry Part C	63	3.84	3.61
S 2017	Chem 280	Graduate Research	5		
S 2017	Chem 291	Research Seminar	5		
S 2017	Chem 399	University Teaching	90		
F 2017	Chem 11	New Chemistry Student Seminar (four sections: 3.97 from 20/30 students; 3.77 from 18/36 students; 3.98 from 15/34 students; 4.00 from 5/14 students)	114	3.91	3.55
F 2017	Chem 200	Conduct of Research (co-taught with Prof. Eric Potma)	54	3.80	3.55
F 2017	Chem 180	Undergraduate Research	1		
F 2017	Chem 280	Graduate Research	4		
F 2017	Chem 291	Research Seminar	4		
F 2017	Chem 399	University Teaching	102		
W 2018	Chem M2B	Majors General Chemistry Lecture Part B	87	3.90	3.61
W 2018	Chem 180	Undergraduate Research	1		
W 2018	Chem 280	Graduate Research	4		
W 2018	Chem 291	Research Seminar	4		
W 2018	Chem 399	University Teaching	91		

S 2018	Chem 280	Graduate Research	6		
S 2018	Chem 291	Research Seminar	6		
S 2018	Chem 399	University Teaching	102		
F 2018	Chem 11	New Chemistry Student Seminar (two sections, 3.94 from 48/60 students; 3.99 from 27/47 students)	107	3.96	3.56
F 2018	Chem 200	Conduct of Research (co-taught with Prof. Eric Potma)	56	3.90	3.56
F 2018	Chem 180	Undergraduate Research	4		
F 2018	Chem 280	Graduate Research	5		
F 2018	Chem 291	Research Seminar	5		
F 2018	Chem 399	University Teaching	101		
W 2019	Chem M2B	Majors General Chemistry Lecture Part B	56	3.93	3.48
W 2019	Chem 180	Undergraduate Research	4		
W 2019	Chem 280	Graduate Research	5		
W 2019	Chem 291	Research Seminar	5		
W 2019	Chem 399	University Teaching	107		
S 2019	Chem 180	Undergraduate Research	4		3.59
S 2019	Chem 280	Graduate Research	6		
S 2019	Chem 291	Research Seminar	6		
S 2019	Chem 399	University Teaching	115		
F 2019	Chem 11	New Chemistry Student Seminar (two sections, 3.92 from 61/100 students; 3.92 from 30/51 students)	151	3.92	3.59
F 2019	Chem 200	Conduct of Research (co-taught with Prof. Eric Potma)	80	3.92	3.59
F 2019	Chem 180	Undergraduate Research	3		
F 2019	Chem 280	Graduate Research	5		
F 2019	Chem 291	Research Seminar	5		
F 2019	Chem 399	University Teaching	111		
W 2020	Chem M2B	Majors General Chemistry Lecture Part B	72	3.95	3.47
W 2020	Chem 180	Undergraduate Research	4		
W 2020	Chem 280	Graduate Research	5		
W 2020	Chem 291	Research Seminar	5		
W 2020	Chem 399	University Teaching (two sections)	116		
S 2020	Chem 180	Undergraduate Research	3		
S 2020	Chem 280	Graduate Research	6		
S 2020	Chem 291	Research Seminar	6		
S 2020	Chem 399	University Teaching	121		
F 2020	Chem 1X	General Chemistry Extra	191	n/a	n/a
F 2020	Chem 180	Undergraduate Research	2		
F 2020	Chem 280	Graduate Research	6		
F 2020	Chem 291	Research Seminar	6		
W 2021	Chem M2B	Majors General Chemistry Lecture Part B	96	n/a	n/a
W 2021	Chem 280	Graduate Research	6		
W 2021	Chem 291	Research Seminar	6		
S 2021	Chem 180	Undergraduate Research	1		
S 2021	Chem 280	Graduate Research	6		
S 2021	Chem 291	Research Seminar	6		
F 2021	Chem 1X	General Chemistry Extra (in person section)	219	n/a	n/a
F 2021	Chem 1X	General Chemistry Extra (online section)	252	n/a	n/a
F 2021	Uni Stu 198	LA Mentoring	10		
F 2021	Chem 180	Undergraduate Research	3		
F 2021	Chem 280	Graduate Research	6		
F 2021	Chem 291	Research Seminar	6		
W 2022	Chem M2B	Majors General Chemistry Lecture Part B	64	n/a	n/a
W 2022	Uni Stu 198	LA Mentoring	2		
W 2022	Chem 180	Undergraduate Research	1		
W 2022	Chem 145A	Gas-Phase Atmospheric Chemistry (concurrent 245A)	5		
W 2022	Chem 245A	Gas-Phase Atmospheric Chemistry (concurrent 145A)	4		
W 2022	Chem 280	Graduate Research	6		

W 2022	Chem 291	Research Seminar	6		
S 2022	Chem 180	Undergraduate Research	2		
S 2022	Chem 280	Graduate Research	8		
S 2022	Chem 291	Research Seminar	6		
F 2022	Chem 1X	<u>General Chemistry Extra (in person section 1)</u>	275	n/a	n/a
F 2022	Chem 1X	<u>General Chemistry Extra (in person section 2)</u>	198	n/a	n/a
F 2022	Uni Stu 198	LA Mentoring	12		
F 2022	Chem 180	Undergraduate Research	4		
F 2022	Chem 280	Graduate Research	4		
F 2022	Chem 291	Research Seminar	4		
W 2023	Chem M2B	<u>Majors General Chemistry Lecture Part B</u>	60		
W 2023	Chem 180	Undergraduate Research	5		
W 2023	Chem 280	Graduate Research	4		
W 2023	Chem 291	Research Seminar	4		
S 2023	Chem 180	Undergraduate Research	6		
S 2023	Chem 280	Graduate Research	6		
S 2023	Chem 291	Research Seminar	6		
F 2023	Chem 1X	<u>General Chemistry Extra (in person section 1)</u>	237	n/a	n/a
F 2023	Chem 1X	<u>General Chemistry Extra (in person section 2)</u>	134	n/a	n/a
F 2023	Uni Stu 198	LA Mentoring	4		
F 2023	Chem 180	Undergraduate Research	5		
F 2023	Chem 280	Graduate Research	5		
F 2023	Chem 291	Research Seminar	5		
W 2024	Chem 180	Undergraduate Research	4		
W 2024	Chem 280	Graduate Research	5		
W 2024	Chem 291	Research Seminar	5		
S 2024	Chem 180	Undergraduate Research	3		
S 2024	Chem 280	Graduate Research	6		
S 2024	Chem 291	Research Seminar	6		
F 2024	Chem 1X	<u>General Chemistry Extra (in person section 1)</u>	191		
F 2024	Chem 1X	<u>General Chemistry Extra (in person section 2)</u>	145		
F 2024	Uni Stu 198	LA Mentoring	5		
F 2024	Chem 180	Undergraduate Research	1		
F 2024	Chem 280	Graduate Research	4		
F 2024	Chem 291	Research Seminar	2		
W 2025	Chem 180	Undergraduate Research	1		
W 2025	Chem 280	Graduate Research	4		
W 2025	Chem 291	Research Seminar	4		
S2025	Chem 241	<u>Current Issues Related to Air Quality, Climate, and Energy</u>	27		
S 2025	Chem 180	Undergraduate Research	1		
S 2025	Chem 280	Graduate Research	4		
S 2025	Chem 291	Research Seminar	4		
F 2025	Chem 1X	<u>General Chemistry Extra (in person section 1)</u>	228		
F 2025	Chem 1X	<u>General Chemistry Extra (in person section 2)</u>	85		
F 2025	Uni Stu 198	LA Mentoring	5		
F 2025	Chem 180	Undergraduate Research	1		
F 2025	Chem 280	Graduate Research	5		
F 2025	Chem 291	Research Seminar	4		
W 2026	Chem 280	Graduate Research	6		
W 2026	Chem 291	Research Seminar	6		

PUBLICATIONS

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BLUE = GRADUATE STUDENT (at the time of actively working on the project)
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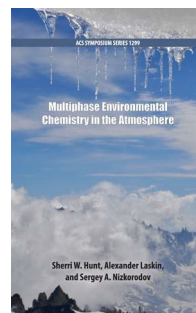


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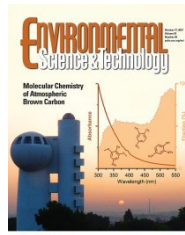
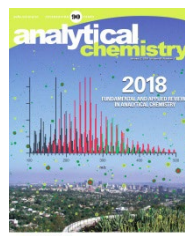
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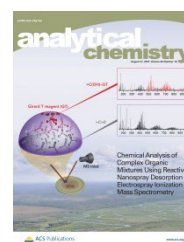
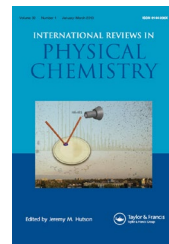


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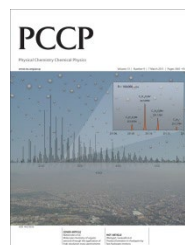
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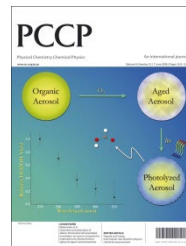
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MOLECULAR REACTION DYNAMICS

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SPECTROSCOPY

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13. Evan J. Bieske,* Sergey A. Nizkorodov, Otto Dopfer, John P. Maier, Ross J. Stickland, Bryan J. Cotterell and Brian J. Howard, “Observation of the infrared spectrum of the ν_3 band of the argon-ammonium ionic complex” *Chemical Physics Letters*, **250** (1996) 266-272, [DOI:10.1016/0009-2614\(96\)00029-2](https://doi.org/10.1016/0009-2614(96)00029-2).
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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” *Chemical Physics Letters*, **224** (1994) 16-20, [DOI: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” *Chemical Physics Letters*, **215** (1993) 662-667, [DOI:10.1016/0009-2614\(93\)89374-Q](#).

CHEMICAL EDUCATION

189. Kameryn Denaro, [Sergey A. Nizkorodov](#), and Amanda J. Holton* “The impact of modality choice on final exam success and retention in a concurrent preparatory chemistry course” *Journal of Chemical Education*, **100** (2023) 4585-4596. [DOI:10.1021/acs.jchemed.3c00365](#).
54. [Stephen A. Mang](#), [Maggie L. Walser](#), [Sergey A. Nizkorodov](#),* and John M. Laux “Measurement of ozone emission and particle removal rates from portable air purifiers” *Journal of Chemical Education*, **86** (2009) 219-221, [DOI:10.1021/ed086p219](#).

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](#), **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](#).)

OTHER PEER-REVIEWED PUBLICATIONS

- I. Manabu Shiraiwa,* Ting Fang, Jinlai Wei, Pascale S.J. Lakey, Brian C.H. Hwang, Kasey C. Edwards, Sukriti Kapur, Jessica E. Monterrosa Mena, Yu-Kai Huang, Michelle A. Digman, Scott A. Weichenthal, [Sergey Nizkorodov](#), Michael T. Kleinman 2023. Chemical and Cellular “Formation of Reactive Oxygen Species from Secondary Organic Aerosols in Epithelial Lining Fluid” Research Report 215. Boston, MA: Health Effects Institute. [Link to the report](#)
- II. Donald R. Blake, Barbara J. Finlayson-Pitts and [Sergey A. Nizkorodov](#), “James N. Pitts Jr. (1921–2014)” *EOS*, **96** (2015) [DOI:10.1029/2015EO029385](#).

SEMINARS AT COLLEGES, RESEARCH CENTERS AND ONLINE

78. Department of Atmospheric Sciences, Texas A&M University, College Station, TX (February 25, 2026)
77. The American Association for Aerosol Research on-line lecture series (June 19, 2024), “Light-absorbing products of atmospheric oxidation of indole by hydroxyl radical, nitrate radical and ozone”, remote seminar, about 70 attendees.
76. Environmental Science and Engineering (EnSE) program at King Abdullah University of Science and Technology (KAUST) (May 7, 2024), “Photochemical and dark ageing of organic aerosols”, remote seminar, about 40 attendees
75. Frontiers in Atmospheric Chemistry Seminar Series (<https://facss.mit.edu/>) (September 8, 2023), “Photochemical and dark ageing of organic aerosols”, remote seminar, about 200 attendees
74. Atmospheric Science Graduate Group, University of California, Davis (November 10, 2020) – remote seminar
73. Environmental Protection Agency, Raleigh-Durham, North Carolina Area (May 21, 2020) – remote seminar
72. Department of Chemistry & Biochemistry, California State University, Fullerton, CA (March 14, 2019)
71. Department of Chemistry, University of California, Riverside, CA (February 7, 2019)
70. CIRES, University of Colorado, Boulder, CO (September 17, 2018)
69. Center for the Environment, Harvard University, Cambridge, MA (September 14, 2018)

68. Department of Chemistry, California State University, Long Beach, CA (September 12, 2018)
67. Laboratoire de Chimie de l'Environnement, Aix-Marseille Université, France (July 6, 2018)
66. Department of Environmental Systems Science, ETH Zurich, Switzerland (July 3, 2018)
65. IRCELYON, Université Claude Bernard Lyon 1, France (June 14, 2018)
64. Department of Chemistry, University of Alberta, Canada (April 27, 2018)
63. Department of Chemistry, Purdue University, West Lafayette, IN (April 10, 2018)
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. Department of Environmental Science and Engineering and Shanghai Key Laboratory of Atmospheric Particle Pollution and Prevention, Fudan University, 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. School of Earth & Atmospheric Sciences, Georgia Tech, Atlanta, GA (May 4, 2012)
41. Department of Chemistry, University of Wisconsin-Madison, Madison, WI (March 20, 2012)
40. Department of Chemistry, University of Colorado, Denver, Denver, CO (Sep 2, 2011)
39. Fritz Haber Research Center for Molecular Dynamics, Hebrew University of Jerusalem, Israel (March 14, 2011)
38. Department of Chemistry and Biochemistry, Southern Illinois University, Carbondale, IL (Sep 17, 2010)
37. Environmental Molecular Science Laboratory, Pacific Northwest National Laboratory, Richland, WA (Feb 25, 2010)
36. Department of Chemistry, Reed College, Portland, OR (February 18, 2010)
35. Department of Chemistry, University of Toronto, Toronto, Canada (May 29, 2009)
34. Environmental Science and Engineering, California Institute of Technology, Pasadena, CA (April 15, 2009)
33. Department of Chemistry and Biochemistry, San Diego State University, San Diego, CA (March 27, 2009)
32. Department of Chemistry, University of California, Irvine, CA (October 2, 2007)
31. Department of Chemistry, University of Southern California, Los Angeles, CA (September 24, 2007)
30. Department of Chemistry, Georgetown University, Washington, DC (March 22, 2007)
29. Department of Environmental Sciences, University of California, Riverside, CA (March 12, 2007)
28. Department of Chemistry, University of Iowa, Iowa City, IA (March 2, 2007)
27. Department of Chemistry, Iowa State University, Ames, IA (March 1, 2007)
26. Scripps Institute of Oceanography, University of California, San Diego, La Jolla, CA (February 20, 2007)
25. Department of Atmospheric Sciences, Harvard University, Cambridge, MA (February 16, 2007)
24. Department of Chemistry, University of North Carolina, Chapel Hill, NC (February 12, 2007)
23. Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN (February 8, 2007)
22. Indiana University, Department of Chemistry, Bloomington, IN (February 6, 2007)
21. Department of Atmospheric and Oceanic Sciences, University of California, Los Angeles, CA (Jan 31, 2007)
20. Environmental Molecular Science Laboratory, Pacific Northwest National Laboratory, Richland, WA (Jan 16, 2007)
19. Department of Chemistry, University of Georgia, Athens, GA (December 1, 2006)
18. Department of Chemistry, Emory University, Atlanta, GA (November 30, 2006)
17. Department of Chemistry and Biochemistry, Georgia Tech, Atlanta, GA (November 29, 2006)
16. Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ (October 26, 2006)
15. Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO (September 22, 2006)
14. Institut für Physikalische Chemie, Universität Würzburg, Germany (March 27, 2006)
13. Department of Chemistry and Biochemistry, California State University, Fullerton, CA (March 2, 2006)
12. Department of Chemistry, University of California, Irvine, CA (September, 2005)
11. College of Arts and Sciences, California Lutheran University, Thousand Oak, CA (April, 2005)
10. Department of Chemistry and Biochemistry, University of California, San Diego, La Jolla, CA (April, 2003)

9. Department of Chemistry, University of California, Irvine, CA (2001, faculty job interview seminar)
8. Department of Chemistry and Biochemistry, University of Colorado, Boulder, CO (2001, faculty job interview seminar)
7. Department of Chemistry, Iowa State University, Ames, IA (2001, faculty job interview seminar)
6. Department of Chemistry, University of California, Berkeley, Berkeley, CA (2001, faculty job interview seminar)
5. Department of Chemistry, Washington University, St. Louis, MO (2001, faculty job interview seminar)
4. Department of Chemistry, University of Wisconsin-Madison, Madison, WI (2001, faculty job interview seminar)
3. Department of Chemistry, Kansas State University, Manhattan, KS (2001, faculty job interview seminar)
2. Department of Chemistry, Louisiana State University, Baton Rouge, LA (1999, faculty job interview seminar)
1. Department of Chemistry, University of Minnesota, Minneapolis, MN (1999, faculty job interview seminar)

PUBLIC, OUTREACH AND PEDAGOGICAL SEMINARS

17. The Fourth Sino-European School on Atmospheric Chemistry, Nov 2019, Shanghai, China
Two 90 min lectures to graduate students from various universities from China and other countries; invited
 - a. "Particle Photochemistry"
 - b. "Atmospheric Brown Carbon"
16. The Third Sino-European School on Atmospheric Chemistry, Nov 2017, Shanghai, China
"Photochemical ageing of organic aerosols" (a 90 min lecture to graduate students from various universities from China and other countries; invited)
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
 - c. "Photochemical and dark ageing of organic aerosols"
 - d. "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

48. Core-to-core symposium UCSB-JSPS "Elucidation of solvation effects on molecular recognition", September 15-17, 2025, Santa Barbara, CA, USA
The role of molecular solvation environment in photochemistry of air pollutants in gas-phase, aqueous droplets and particulate matter
47. American Chemical Society Spring Meeting, March 23-27, 2025, San Diego, CA, USA
Interfacial photochemistry in aerosol particles containing multiple condensed phases
46. KAUST Research Conference: Atmospheric Chemistry & Air Pollution (ACAP@KAUST-2025) and Women in Science and Engineering (WISE 2025), February 10-12, 2025, Thuwal, Saudi Arabia
Rates and mechanisms of photochemical processes in atmospheric aerosol particles
45. American Geophysical Union Meeting, December 9-13, 2024, Washington, DC, USA
Condensed-phase photochemical and acid-catalyzed reactions in atmospheric aerosol particles
44. **Keynote speaker** at the 7th International Workshop on Heterogeneous Kinetics Related to Atmospheric Aerosols, October 19-20, 2024, Qingdao, China
Rates and mechanisms of photochemical reactions in organic aerosol particles
43. American Chemical Society Fall Meeting, August 18-22, 2024, Denver, CO, USA
Direct and indirect photochemistry of organic aerosols in aqueous solutions
42. Telluride Summer Research Workshop, "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact" July 29 – August 2, 2024, Telluride, Colorado, USA
Chemical composition and photochemical aging of organic aerosols from burning of biomass and urban materials
41. American Chemical Society Fall Meeting, August 13-17, 2023, San Francisco, CA, USA
Atmospheric transformations of organic aerosol emitted from burning of biomass and urban materials
40. Canadian Chemical Society Meeting, June 2-6, 2023, Vancouver, Canada
Chemical composition, absorption coefficients and atmospheric transformations of organic aerosol emitted from burning of biomass and urban materials
39. American Chemical Society Spring Meeting, March 26-30, 2023, Indianapolis, IN, USA
Condensed-phase photochemical and dark aging processes in secondary organic aerosol
38. Telluride Summer Research Workshop, "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact" July 18-22, 2022, Telluride, Colorado, USA
Condensed-phase organic photochemistry in atmospheric particles: effect on chemical composition and properties
37. American Chemical Society Fall Meeting, August 25-29, 2019, San Diego, CA, USA
Condensed-phase photochemical processes in atmospheric particulate matter
36. The 29th International Conference on Photochemistry, July 21-26, 2019, Boulder, CO, USA
Organic photochemistry in atmospheric particulate matter
35. 4th International Workshop on Heterogeneous Kinetics Related to Atmospheric Aerosols, September 24, 2018, Tsukuba, Japan
Rates of photodegradation of organic aerosol particle
34. Tsukuba Global Science Week 2018, The Mitsubishi UFJ Environment Foundation Lectures, "Air Pollution and its Biological Effects" September 22, 2018, Tsukuba, Japan
Role of photochemistry in controlling composition of organic aerosols
33. Telluride Summer Research Workshop, "Organic Particles in the Atmosphere: Formation, Properties, Processing, and Impact" July 23-27, 2018, Telluride, Colorado, USA
Condensed-phase photochemical processes in organic particles
32. 36th Annual AAAR Conference, October 16-20, 2017, Raleigh, North Carolina, USA
Effect of aerosol water on chemical composition and aging of organic aerosols
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. American Chemical Society Spring 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. American Chemical Society Spring Meeting, March 22-26, 2015, Denver, CO, USA
Aqueous-phase and organic-phase photochemistry of atmospheric organic compounds
22. American Geophysical Union 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 Union 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. American Chemical Society Spring Meeting, April 7-11, 2013, New Orleans, LA, USA
Photochemical aging of atmospheric organics in ambient particles and aqueous droplets
16. American Chemical Society Fall Meeting, August 19-23, 2012, Philadelphia, PA, USA
Evolution of organic aerosol composition and properties through aqueous chemistry and photochemistry
15. American Chemical Society Spring 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. American Chemical Society Fall Meeting, August 2011, Denver, CO, USA
Effect of chemical and photochemical cloud processing on the light absorption properties of biogenic secondary organic aerosols
12. American Chemical Society Fall 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. American Chemical Society Spring 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. American Chemical Society Fall 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. 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. American Chemical Society 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. 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

34. American Chemical Society Spring Meeting, March 22-26, 2026, Atlanta, GA, USA
Chemical composition and photochemistry of organic aerosol emitted from burning of urban materials
33. Molecular-Level Understanding of Atmospheric Aerosols, April 1-5, 2024, Cargèse, Corsica, France
Atmospheric transformations of organic aerosol emitted from burning of biomass and urban materials
32. 40th Annual AAAR Conference, October 3-7, 2022, Raleigh, NC, USA
Effect of condensed-phase photochemistry on the viscosity of atmospheric secondary organic aerosol particles
31. 11th International Aerosol Conference, September 4-9, 2022, Athens, Greece [attending virtually]
Condensed-phase photochemistry greatly increases the viscosity of atmospheric secondary organic aerosol particles
30. American Chemical Society Fall Meeting, August 16-20, 2017, Washington, DC, USA
Reactive uptake of ammonia by biogenic and anthropogenic organic aerosols
29. American Chemical Society Spring 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 Union 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. American Chemical Society Fall 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. American Chemical Society Spring Meeting, March 16-20, 2014, Dallas, TX, USA
Combined experimental and theoretical studies of photolysis of atmospherically relevant organic compounds in various phases
22. American Chemical Society Spring 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. American Chemical Society Fall 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. Pacifichem, December 15-20, 2010, Honolulu, HI, USA
Hygroscopic properties of nanoparticles coated with ionic surfactants
15. Pacifichem, December 15-20, 2010, Honolulu, HI, USA
Photodegradation of organic hydroperoxides and carbonyls derived from atmospheric oxidation of unsaturated fatty acids in aerosols and cloud droplets
14. Joint Assembly of Geophysical Societies, 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. 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. AirUCI Meeting, June 2005, Prague, Czech Republic
Photochemistry of aged organic aerosol particles

8. American Physical Society March Meeting, March 2005, Los Angeles, CA, USA
Photodissociation action spectroscopy of ozonized films of undecylenic acid
7. American Chemical Society Fall Meeting, August 2004, Philadelphia, PA, USA
Photodissociation action spectroscopy at organic aerosol particle-air interfaces
6. American Chemical Society Spring Meeting, March 2004, Anaheim, CA, USA
Ozonolysis of undecylenic and oleic acid films studied with infrared cavity-ring down spectroscopy
5. American Chemical Society Spring Meeting, April 2002, Orlando, FL, USA
Observation and characterization of HOONO in the OH + NO₂ reaction
4. American Chemical Society Fall 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

28. 40th Annual Informal Gathering on Atmospheric Sciences and Photochemistry (IGASP), October 4, 2024, San Diego, CA, USA
Optical Properties and Atmospheric Transformations of Organic Aerosol Emitted from Burning of Urban Materials
27. The 16th International Commission on Atmospheric Chemistry and Global Pollution (iCACGP) Symposium and 18th International Global Atmospheric Chemistry (IGAC) Science Conference (iCACGP-IGAC Conference 2024), September 9 – 13, 2024, Kuala Lumpur, Malaysia
Optical Properties and Atmospheric Transformations of Organic Aerosol Emitted from Burning of Urban Materials
26. Gordon Research Conference on Atmospheric Chemistry, July 28 – August 2, 2019, Sunday River, Newry, ME, USA
Condensed-phase photochemistry changes chemical composition and optical properties of aerosol particles
25. The 14th iCACGP Quadrennial Symposium and the 15th IGAC Science Conference, September 25 – 29, 2018, Takamatsu, Japan
Effect of condensed-phase photochemistry on the mass, composition, and properties of organic aerosols
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. American Chemical Society Fall 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. American Chemical Society Fall 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 (v = 1) (1 < n ≤ 6) clusters