



# Atmospheric Chemical Mechanisms Conference

December 7-9, 2022 - U.C. Davis Hybrid Conference

Photochemical mechanisms have been a critical component of air quality models that are used to 1) predict the concentrations of criteria pollutants such as ozone, NO<sub>2</sub>, and PM<sub>2.5</sub>, and 2) develop strategies to decrease the concentrations of these pollutants. Because of their importance in the regulation and reduction of these pollutants, chemical mechanisms must continue to be improved as our knowledge of the complex processes that occur in the atmosphere develops. ACM brings together the top scientists from around the globe to share their research findings and discuss new approaches and methods to improve on our ever-developing understanding of how the chemical constituents of our atmosphere, impact the earth's climate and the air upon which all life depends.

The ACM conference welcomes you to join us in-person at UC Davis or virtually for three days of principal Presentations, Lighting Talks, and a wide variety of Poster Presentations. Review the presentation descriptions and schedule on our website: <https://acm.aqrc.ucdavis.edu/>

## Conference Sessions

New and Emerging Air Pollutants (HAPs, VCPs, PFAS)

*Session Chairs: Emma D'Ambro, US EPA & Matt Coggin, Cooperative Institute for Research in Environmental Sciences / NOAA Chemical Sciences Laboratory*

New Chemical Regimes: (Merging COVID, Net Zero and exoplanets)

*Session Chairs: Ellie Browne, University of Colorado, Denver & James Lee, University of York / NCAS*

Atmospheric Chemistry in Public Health and Regulatory Applications

*Session Chairs: Melissa Venecek, CARB, Jim Kelly, US EPA*

Mechanism Development and Reduction

*Session Chairs: Kelley Barsanti, University of California, Riverside & Tzung-May Fu, Southern University of Science and Technology*

Sulfur Oxidation Advancements – Improving mechanisms and modeling

*Session Chairs: Patrick Veres, NOAA Chemical Sciences Laboratory & Zongbo Shi, University of Birmingham*

Modeling at multiple scales of chemical complexity and spatial resolution

*Session Chairs: Kelvin Bates, Harvard & UC Davis, Louisa Emmons, National Center for Atmospheric Research*

Fundamental Studies of Atmospheric Chemical Mechanisms

*Session Chairs: Rebecca Caravan, Argonne National Laboratory, Sally Ng, Georgia Institute of Technology, Matti Rissanen, Tampere University & Max McGillen, CNRS*

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Conference Details: [acm.aqrc.ucdavis.edu](https://acm.aqrc.ucdavis.edu)

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