

41st Informal Gathering on Atmospheric Science and Photochemistry

Friday April 17th 2026

Pentland Hills, One Pentland Way, Riverside, CA 92507

UC Riverside

Schedule

Morning

8:00–8:30	Arrival & Breakfast
8:30–8:40	Welcome remarks
8:40–9:20	Jasper Kok (UCLA): Historical changes in desert dust: implications for climate forcing
9:20–10:00	Miriam Freedman (Penn State): Phase transitions and acidity of model atmospheric aerosol particles
10:00–10:10	A word from our sponsors!
10:10–10:30	Poster Madness 1
10:30–12:00	Poster Session 1 in Foxhole Refreshments in Bearcave

Midday

12:00–1:30	Lunch (Glasgow Restaurant)
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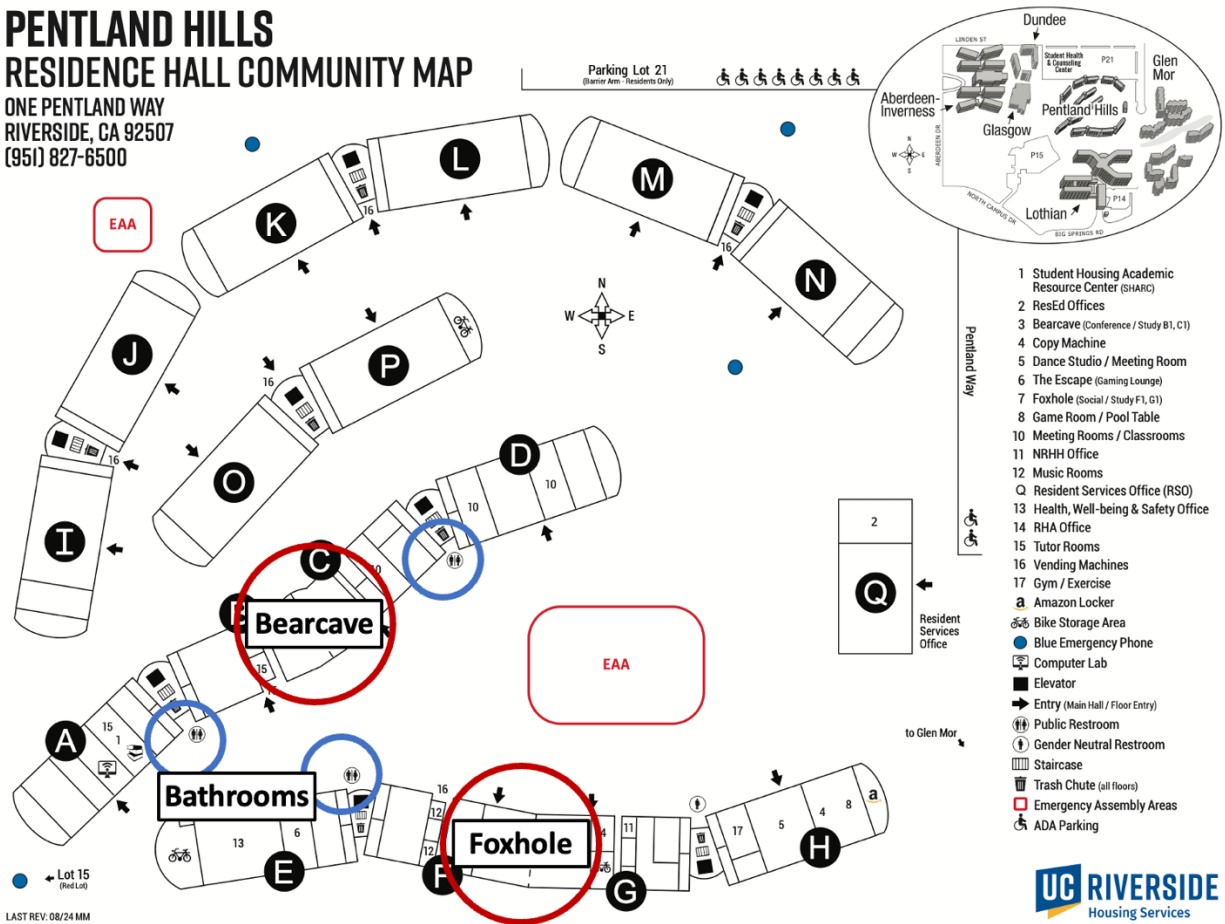
Afternoon

1:30–2:10	Markus Petters (UCR): Primary emissions of sub-10 nm particles: measurement approaches, sources, and emission estimates
2:10–2:40	Poster Madness 2
2:40–4:10	Poster Session 2 in Foxhole Refreshments in Bearcave
4:10–4:50	Hanyang Li (SDSU): Toxic Metal Particles in the Atmosphere: Insights Enabled by Near-Real-Time Measurements
4:50–5:00	Closing remarks

*** To access Wi-Fi, you can connect to UCR-GUEST or EDUROAM**

PENTLAND HILLS RESIDENCE HALL COMMUNITY MAP

ONE PENTLAND WAY
RIVERSIDE, CA 92507
(951) 827-6500



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UC RIVERSIDE
Housing Services

Poster Assignments

Poster boards will be marked am, pm, or am/pm to indicate to judges that a poster presenter is eligible (all students).

Poster Session 1 (10.30am – 12pm)

* Poster madness presenter

	Name	Institution	Title
* 1	Adriane Tam	UC San Diego	Evolution of the composition & pH of single aqueous aerosols produced from bulk aqueous sulfite solutions
* 2	Anna Kapp	UC Irvine	Effect of Air Mass Origin on Ultrafine Particle Composition and Hygroscopicity during the EPCAPE Campaign
* 3	Berenice Rojas	UC Irvine	Laboratory study of the contribution of phenolic resin thermal degradation to automotive brake emissions
* 4	Bujin Bekbulat	CARB	RMP: Greenhouse Gas Emissions from Stationary Refrigeration Systems
* 5	Christian Pelayo	UC San Diego	High Semi-Volatile Organic Aerosol Contributions Associated with Ammonium Nitrate in the Coastal Urban Environment
* 6	Daniel Kendall	UCLA	Phenylacetaldehyde Photolysis: Modeling Toluene's Understudied Oxidation Pathway
* 7	David De Haan	U San Diego	Effects of Cloud Processing and Aging on Smoke from African Grasses
* 8	Dhivya Manickam	UC Irvine	Analysis of non-tailpipe organic aerosol emissions using an Aerosol Chemical Speciation Monitor (ACSM)
* 9	Elavarasi Ravichandran	UC Riverside	Aerosol Properties during Stratocumulus Cloud Passages at a Coastal Mountain Site
10	Ella Ivanova	UC Riverside	Large-eddy simulation and eddy-covariance measurement of ultrafine aerosol number flux from aircraft overpasses within the convective boundary layer
11	Emily Truong	UC Irvine	Chemistry in the Air: Assessing Indoor Air Quality in Undergraduate Chemistry Laboratories
* 12	Emma Buerk	UC Riverside	Identifying and Characterizing High-Emission Runoff Events in the Tijuana River Estuary Using Water Quality Indicators
13	Gino Pena	UC Riverside	Year-long Measurements of PM _{2.5} Composition and Size Distributions at the ASCENT Joshua Tree Site
* 14	Greyson Karis-Sconyers	Harvey Mudd College	Investigating Temperature Dependence of Oxygenated Organic Aerosol in Eastern LA County
* 15	Hovanness Dingilian	UC Riverside	A New Method of Generating Smoke Emission Profiles for WUI Health Studies and Source Apportionment
16	Jackson Ryan	UC Irvine	Urban Enantiomers: An Exploration of Diurnal and Seasonal Variations in Ambient Volatile Organic Compounds in Los Angeles
17	Jenille Cruz	UC San Diego	Influence of pH on Lipase Structure and Surface Propensity at the Air-Water Interface and in Aqueous Aerosols

*	18	Katia Hatem	UC Riverside	Direct Measurements of Criegee Intermediates for the Ozonolysis of 1-Hexene and its Isomers
	19	Kathleen Fong	UC Riverside	Integrating Surface Observations, Meteorological Analysis, and Dispersion Modeling to Attribute Port-Related Air Pollution in Long Beach, California
	20	Lintong Cai	UC Riverside	Nanoparticle Emission from Aircraft Final Approach
*	21	Lucia Liu	UC Irvine	Aerosol composition above and below the cloud at Bankhead national forest
	22	Mia Mirabelli	Harvey Mudd College	Physics-Informed Edge Connectivity for Graph Neural Network Climate Models: A Lorenz96 Case Study
	23	Mackenzie Arnold	UCLA	Evaluating and improving modeled smoke vertical distribution and surface concentrations for the 2020 western US wildfires
*	24	Zach Schiffman	UC Irvine	Totally Radical: New Insights into Radical Reactions at Interfaces with Surface-Sensitive Spectroscopy
	25	Manas Ranjan Mohanty	UCLA	Modeling of a degassing volcanic plume using two different aerosol and chemical mechanisms: Insights from evaluating against satellite retrievals and in-situ observations.
	26	Maria Flores	UC Irvine	Iodometry-Assisted UPLC-Orbitrap MS Detection of Organic Peroxides in Acyclic Terpene SOA
	27	Megan Harmon	UC Irvine	Site selection for ambient chiral VOC monitoring in LA
	28	Minghao Han	UC Riverside	Secondary Organic Aerosol Formation from Gaseous Tire Emissions: Laboratory Characterization and Real-World Implications
*	29	Rebeka Mendelsohn	UCLA	Characterizing Off-Gassed Volatile Organic Compounds from In-Service Firefighter Personal Protective Equipment
	30	Timothy Chau	UCLA	Identifying Conformers of Isoprene-Derived Peroxy Radical-Water Complexes
	31	Vanessa Valdez	UC San Diego	Impact of Surface Adsorption on DNA Stability Under Varying Conditions
	32	Zixuan Gong	UC Riverside	Brake Emissions from a Light-Duty Vehicle: Comparative Analysis Across Three Driving Routes
	33	Wen Zhang	UC San Diego	Interfacial Oxidation of Charged Alcohol Microdroplets during Evaporation in Humid Environments
	34	William Ragen	UC Riverside	Investigation of gas-phase OH oxidation of biomass burning phenolic VOCs
	35	Yanyu Zhang	UC Riverside	Improving global terpene SOA estimates in GEOS-Chem using VBS parameterizations derived from controlled chamber experiments
	36	Zhaomin Yang	UC Irvine	Highly Oxidized Molecules Make a Significant Contribution to Enhanced Aromatic-Derived Secondary Organic Aerosol under a Humid Environment

Please take your poster down after this session to let the next group of presenters set up.

Poster Session 2 (2.40pm – 4.10pm)

* Poster madness presenter

	Name	Institution	Title
* 1	Aaron Palmisano	UC Riverside	Simulating Prebiotic Earth Environments to Explore the Role of Aerosol Particles in Abiogenesis
* 2	Abigail Williams	UC San Diego	Cloud Processing of Organic Aerosols in Coastal Southern California
* 3	Anna Figge	Harvey Mudd College	Upscaling Carbon Flux: Predicting Performance
4	Azure Fisher	UC Riverside	Fine Scale Statistical Modeling of Ambient Pollution Attributed to Land Use Change and Warehouse Intensification in the Inland Empire
5	Benjamin Dao	UC San Diego	pH-Dependent Adsorption and Conformational Changes of b-Lactoglobulin at the Geochemical Interface via Attenuated Total Reflectance Infrared Spectroscopy
* 6	Colleen Miller	UC Irvine	Chemical Characterization of Acid-Base Aerosol Nanoclusters
* 7	Cooper Crabtree	UCLA	Navigating Challenging Areas of Atmospheric Reactivity Space in Chamber Studies with Direct RO ₂ Generation
* 8	Elsie Calderon	CSU Fullerton	Temperature Dependent Reaction Kinetics of Brown Carbon Formation
* 9	Erin Bowey	UC Riverside	Photooxidative Fate of Methylated Selenium Compounds
* 10	Jane Pasa	CSU Fullerton	Measuring the Effects of Independence Day Fireworks on Air Pollution through Low-Cost Sensors in Orange County, California
11	Jonas Enders	UC Irvine	An Improved Understanding of the CH ₂ I + O ₂ Reaction System
12	Kat Ball	Caltech	Hydroxy Nitrates as a Diagnostic of Alkene Emissions, Chemistry, and Impacts in Asia
13	Kedong Gong	UC San Diego	Size-Dependent Reaction Pathways in Multiphase SO ₂ Oxidation Chemistry
* 14	Kennetta Roebuck	Harvey Mudd College	Seasonality of VOC emissions from the Coastal Sage Scrub Ecosystem
* 15	Kiara Falconi	UC Irvine	How Amine Structure Shapes MSA-Driven New Particle Formation: A Tale of Two Amines
16	Kristen Cramer	UC Irvine	Observations of Particle Growth and Composition in the Mojave Desert
* 17	Kyra Harada Alcantara	CSU Fullerton	Hygroscopicity of Brown Carbon from Methylamine and Carbonyl Mixtures
18	Laura Marie Dahler Heinlein	UC Davis	Rapid Wintertime Formation of Phenolic Secondary Organic Aerosol from Brown Carbon Photochemistry
* 19	Lisa Wingen	UC Irvine	A New Approach to Detection of Highly Oxidized Products from Ethylbenzene Oxidation Using Matrix Assisted Ionization in Vacuum - Mass Spectrometry
* 20	Madison Landi	UC Irvine	Atmospheric water-soluble carbon and nitrogen: measurements and modeling of aqSOA precursors during the GOTHAAM field campaign

*	21	Matt Zaragoza	UC Irvine	Photochemical Cloud Processing of Water-Soluble Organic Gases Produced by Aqueous-Phase Photooxidation of α -Pinene, d-Limonene and Toluene
*	22	Matthew Simpson	Harvey Mudd College	Thermodynamics of Eddy Covariance in Semiarid Shrubland
	23	Lynne Xu	UC Riverside	Analyzing the Meteorology Driven Spatial-temporal Variability in Transportation Air Quality Impacts on neighboring communities
*	24	Michael Lum	UC Riverside	Influence of atmospheric particulate selenium on simulated cloud water and aqueous secondary aerosol composition under a marine emission scenario
*	25	Michelle Le	CSU Fullerton	Investigating the Indirect Effect of Brown Carbon Aerosol Through Hygroscopicity and Product Formation
*	26	Oriole Song	UC Irvine	Implementing New Chemical Mechanisms Into Atmospheric Chemistry Models
*	27	Prakriti Singh	UC Riverside	Applying Single Particle Levitation to Explore the Properties of Aqueous Brown Carbon Aerosol: Methylglyoxal–Glycine System
*	28	Ryan Reynolds	UC Irvine	Cold & Buried? Understanding Aerosol Particle Growth with Temperature Programmed Desorption & Uptake Measurements
*	29	Sourita Saha	UC San Diego	Importance of Size and Composition in CCN Activation of Natural Aerosols in the Arctic
	30	Tzaara Jauhar	Harvey Mudd College	Synthesizing olfactory data across disciplines to model perception
	31	Xiaoyang Liu	UC Riverside	Heterogeneous Transformation of Tobacco-Specific Nitrosamines on Human Skin in Indoor Environments
	32	Xu Zhang	Caltech	^{13}C fractionation of organics on Mars
*	33	Yaowei Li	Caltech	The Far-Reaching Impacts of Wildfire Smoke on Atmospheric Chemistry and Climate
*	34	Mads Sulbaek Andersen	CSUN	Sources, sinks and potential human health and environmental impacts of TFA
*	35	Katelyn Pacaud	UC Riverside	Determining the complex refractive index of light absorbing particles using a linear quadrupole electrodynamic balance
*	36	Weihong Wang	UC Irvine	Gas Phase Oxidation of OH Radicals with 2-Methylthiobenzothiazole

Sponsors

We gratefully acknowledge our primary sponsors, the California Air Resources Board (CARB) and the South Coast Air Quality Management District (SCAQMD), whose support made this event possible. We also thank Atmospheric Science & Technology (AS&T) for generously sponsoring the poster prizes.

