

Monday

Monday 8:00 AM – 9:45 AM

Tutorials Session 1: Introduction to Aerosols 1 (Room 101 DE)

Monday 8:00 AM – 9:45 AM

Tutorials Session 1: Single Particle Spectroscopy (Room 101 CF)

Monday 8:00 AM – 9:45 AM

Tutorials Session 1: Photochemical Box Modeling (Room 101 BG)

Monday 8:00 AM – 9:45 AM

Tutorials Session 1: ****CANCELED**** (Open Data Science for Atmospheric Chemistry)

Monday 10:00 AM – 11:45 AM

Tutorials Session 2: Introduction to Aerosols 2 (Room 101 DE)

Monday 10:00 AM – 11:45 AM

Tutorials Session 2: Mass Spectrometry Analysis of Aerosols (Room 101 CF)

Monday 10:00 AM – 11:45 AM

Tutorials Session 2: Aerosol Thermodynamics and Phase Transitions (Room 101 BG)

Monday 10:00 AM – 11:45 AM

Tutorials Session 2: Do-It-Yourself Aerosol Filtration (Room 101 AH)

Monday 1:00 PM – 2:45 PM

Tutorials Session 3: Fundamentals of Indoor Chemistry (Room 101 DE)

Monday 1:00 PM – 2:45 PM

Tutorials Session 3: Light Scattering (Room 101 CF)

Monday 1:00 PM – 2:45 PM

Tutorials Session 3: Machine Learning in Aerosol Exposure (Room 101 BG)

Monday 1:00 PM – 2:45 PM

Tutorials Session 3: Bioaerosol Metagenomics and Molecular Techniques: Theory (Room 101 AH)

Monday 1:00 PM – 2:45 PM

Tutorials Session 3: Hands-On Instrumentation Tutorial Group A (Exhibit Hall North)

Monday 2:00 PM – 4:30 PM

AAAR Executive Committee Meeting (Board Meeting Room)

Monday 3:00 PM – 4:45 PM

Tutorials Session 4: Light-Absorbing Carbonaceous Aerosols (Room 101 DE)

Monday 3:00 PM – 4:45 PM

Tutorials Session 4: Methods to Study the Nucleation of Aerosols (Room 101 CF)

Monday 3:00 PM – 4:45 PM

Tutorials Session 4: Satellite Remote Sensing of Atmospheric Aerosols and Surface PM_{2.5} (Room 101 BG)

Monday 3:00 PM – 4:45 PM

Tutorials Session 4: Bioaerosol Mutagenomics and Molecular Techniques: Practice (Room 101 AH)

Monday 3:00 PM – 4:45 PM

Tutorials Session 4: Hands-On Instrumentation Tutorial Group B (Exhibit Hall North)

Monday 5:00 PM – 6:00 PM

Community Engaged Research & Empowerment of Disadvantaged Communities and Their Scholars (Exhibit Hall South), Moderators: Cliff Davidson (Syracuse University) & Wendy Flores-Brito (Carnegie Mellon University); Panelists: Jason Brady (SUNY Buffalo), Karla Rojas Garcia (UC San Diego), Franklyn Telles (Northern Arizona University), and Lupita Montoya (San Diego State University)

Monday 6:00 PM – 7:00 PM

Refreshment Break (Exhibit Hall South)

Monday 7:00 PM – 8:30 PM

Geeks Who Drink Trivia for AAAR (Exhibit Hall South)

Tuesday

Tuesday 7:00 AM – 8:00 AM

Committee Meetings 1 – Awards (Room 103)

Tuesday 7:00 AM – 8:00 AM

Committee Meetings 1 – Endowment (Room 104)

Tuesday 7:00 AM – 8:00 AM

Committee Meetings 1 – Internet (Room 105)

Tuesday 8:00 AM – 9:15 AM

Plenary 1 (Ballroom)

8:00 **Welcoming Remarks** Jason D. Surratt, Conference Chair, *University of North Carolina at Chapel Hill*

8:05 **Friedlander Memorial Lecture: Optical Trapping for Aerosol Science and Applications: Advances and Perspectives** Chuji Wang, *Mississippi State University*

Moderator Matthew J. Berg, *Kansas State University*

9:00 **Friedlander and Hering Awards Presentation, Announcement of 2025 Award Fellows** Gabriel Isaacman-VanWertz and Barbara J. Turpin, *Virginia Tech and the University of North Carolina at Chapel Hill*

Tuesday 9:00 AM – 4:00 PM

Exhibits Open (Exhibit Hall North)

Tuesday 9:15 AM – 9:45 AM

Coffee Break (Exhibit Hall North)

Tuesday 9:45 AM – 11:30 AM

Session 1: Platform

IAC AEROSOL CHEMISTRY 1: BIOMASS BURNING AND BROWN CARBON AEROSOL: AGING, PROPERTIES, AND OXIDANT GENERATION

101 DE – Elijah Schnitzler and Stephanie Salas, chairs

- 1AC.1

Applying Single Particle Levitation to Explore the Properties of Aqueous Brown Carbon Aerosol.

PRAKRITI SINGH,

9:45 Erin Bowey, James F. Davies, Paula K. Hudson, *University of California, Riverside*
- 1AC.2

Probing the Role of Intermolecular Interactions in the Light Absorption of Biomass Burning Organic Aerosol.

10:00 Colton Calvert, Holly Anthony, Ahmadraza Chaudhary, Micah Miles, ELIJAH SCHNITZLER, *Oklahoma State University*
- 1AC.3

Volatility-Resolved In-Situ Chemical and Optical Characterization of Brown Carbon as a Function of Atmospheric Aging Using Advanced Chemical Ionization Mass Spectrometry with Aerosol Evaporation Technique.

JIAYUN ZHAO, Mingsheng Fang, Guoyang Lei, Raghu Betha, Garrett McKay, Yue Zhang, *Texas A&M University*

10:15
- 1AC.4

Concentration-Dependent Photochemical Evolution of Primary Brown Carbon under Irradiation.

SITHUMI LIYANAGE, Colton Calvert, Holly Anthony, Elijah Schnitzler, *Oklahoma State University*

10:30
- 1AC.5

Superoxide Burst upon Photochemical Aging of Secondary Organic Aerosols Derived from Biomass Burning Precursors.

LENA GERRITZ, Meredith Schervish, Sergey Nizkorodov, Manabu Shiraiwa, *University of California, Irvine*

10:45
- 1AC.6

Significant Photoproduction of Singlet Oxygen from Aqueous Extracts of Biomass-Burning Aerosol.

DANIEL BONOMO, Ryan Sullivan, *Carnegie Mellon University*

11:00
- 1AC.7

A Missing Pool of Particle Photooxidants: Photochemistry of Water-Insoluble Chromophores from Wildfire Smoke Particles.

LAURA MARIE DAHLER HEINLEIN, Sydney Ma, Murat Onder, Monika Madhiyan, Mingsheng Fang, Jiayun Zhao, Yue Zhang, Kyle Moore, Cort Anastasio, *University of California, Davis*

11:15

1AE AEROSOL EXPOSURE I

106 BC – Xuan Zhang and Gediminas Mainelis, chairs

- 1AE.1

Sustainable Aviation Fuels (SAFs): Comparative Characterization of Combustion Emissions using a Novel Aviation Fuel Combustor.

ONYINYE A. EZEIFEKA, Yevgen Nazarenko, *University of Cincinnati*

9:45
- 1AE.2

Elevated Black Carbon Exposure Among Individuals Burning Waste.

SALONI VIJAY, Lennox Khonje, Mwaiwathu Laurent Chatha, Elizabeth Tilley, *ETH Zürich*

10:00
- 1AE.3

Integration of Community Sensor Network into High Resolution PM2.5 Exposure Assessment: A Case Study in Central California.

Peizhi Hao, Wenfu Tang, Joost A. de Gouw, XUAN ZHANG, *University of California, Merced*

10:15
- 1AE.4

Establishing Contributions from Agricultural Emissions to India's Ambient PM2.5 Exposures.

GIRIVENDRA PRATAP YADAV, Neeldip Barman, Lucas Rojas-Mendoza, Zainab Arub, Piyush Bhardwaj, Julian Marshall, Joshua S. Apte, Srinidhi Balasubramanian, Chandra Venkataraman, *Indian Institute of Technology Bombay, Mumbai, India*

10:30
- 1AE.5

Design and Performance of a Novel Personal Nasal Sampler (PNS) for Measuring Personal Exposure to Biological Aerosols.

TAEWON HAN, Gediminas Mainelis, *Rutgers, The State University of New Jersey*

10:45
- 1AE.6

Advancing Aerosol Exposure Reduction through Integrated UVC Technologies, PPE Innovations, and Fluid Dynamics.

TOM DUNBAR, *tomPhyzyx.LLC*

11:00
- 1AE.7

Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) in Personal and Cooking Area Air Samples from Rwandan Households and Influencing Factors.

CLARA EICHLER, Joseph Pedit, Zachary G. Robbins, Ipsita Das, Karin Yeatts, Pamela Jagger, Sudhanshu Handa, Leena Nylander-French, *University of North Carolina at Chapel Hill*

11:15

IAP.1 Limitations of First-Order Deposition Models for Indoor Aerosol Concentration Decay. LI LI, Himanshi Saini, Jeff Tithof, Christopher J. Hogan, *University of Minnesota*
9:45

IAP.2 Queuing Theory-based Predictions Ion Mobility Shifts via Vapor Clustering at Arbitrary Field Strength.
10:00 TOMOYA TAMADATE, Christopher J. Hogan, *Kanazawa University*

IAP.3 What Is the Lower Limit of Epstein's (& Stokes-Cunningham's) Equation for Aerosol Diffusivity? SOTIRIS
10:15 PRATSINIS, *ETH Zurich, Switzerland*

IAP.4 Latent-To-Sensible Heat Conversion Kinetics During Nanoparticle Coalescence. ABHILASH OJHA, Tomoya
10:30 Tamadate, Christopher J. Hogan, *University of Minnesota*

IAP.5 Van der Waals and Image Potential Enhanced Coagulation in Unequal-sized Ultrafine Particles. BRANDON
10:45 BOREN, Deepak Sapkota, Yuechen Qiao, Hui Ouyang, *The University of Texas at Dallas*

IAP.6 Investigating Aerosol Deposition Mechanisms in a Spent Nuclear Fuel (SNF) Dry Storage Cask (DSC) Laboratory-Scale Model Under Variable Environmental Conditions. JAMES HENRY, Ren Garity, Moein Mousavi, Prasad Rangaraju, John Saylor, Nigel Kaye, Andrew Metcalf, *Clemson University*
11:00

IAP.7 Integration of a Size-Resolved Aerosol Microphysics Model with CMAQ: Toward Enhanced Representation of Particle Number Concentrations over the U.S. JINGBO MAO, Fangqun Yu, Benjamin Murphy, Jingyu An, Yan Zhang, Gan Luo, Shao Lin, Anna Gannet Hallar, *State University of New York at Albany*
11:15

ICE.1 Emerging Urban Emissions: How Buildings, Cleaning and Chemistry Link Indoor and Outdoor Air. DELPHINE K.
9:45 FARMER, Lauren A. Garofalo, Jienan Li, Morgan Selby, John Clark, Alli Salamone, Rachel Greene, Megan Willis, Emily Franklin, Rose K. Rossell, Adam De Groodt, *Colorado State University*. INVITED.

ICE.2 Secondary Organic Aerosol Formation from Reactions of Cleaning Liquids and Chlorine Bleach Under Different Lighting Conditions. SOFIE SCHWINK, Ethan Richter, Marina Vance, *University of Colorado Boulder*
10:15

ICE.3 Building Complexity in Multiphase Bleach Vapor Chemistry from the Bottom Up. DOUGLAS COLLINS, Lauren
10:30 Stettler, Christina Clarke, Olivia Jaye, Ryan Ziskin, *Bucknell University*

ICE.4 Indoor Nanoparticle Emissions and Exposures During Heat-Based Hair Styling Activities. JIANGHUI LIU, Jinglin
10:45 Jiang, Satya Patra, Xiaosu Ding, Chunxu Huang, Jordan Cross, Brian Magnuson, Nusrat Jung, *Purdue University*

ICE.5 Airborne Microplastic Generated by 3D Printing. SUNGYOON JUNG, Peyton Thompson, *University of Florida*
11:00

ICE.6 Bridging Indoors and Outdoors: The Impact of Ambient Aerosols on Indoor Air Quality. LUIS MIGUEL FEIJO
11:15 BARREIRA, Delun Li, Minna Aurela, Laura Salo, Ville Silvonen, Mohamed Elsayed, Teemu Lepistö, Andrea Wagner, Tina Wahle, Roel Schins, Toni Tykkä, Heidi Hellén, Topi Rönkkö, Sanna Saarikoski, Hilikka Timonen, *Finnish Meteorological Institute*

- 11M.1

Detection Efficiency of a Water Condensation Particle Counter Using Electrically Neutral Sulfuric Acid and Sulfuric Acid–Dimethylamine Clusters.

9:45

Darren Cheng, Joy Kiguru, COTY JEN, *Carnegie Mellon University*
- 11M.2

Improving Accuracy in Mobility–Based Aerosol Sizing by Measuring Bipolar–Charged Particles.

10:00

JINGKUN JIANG, Jin Wu, *Tsinghua University, China*
- 11M.3

Toxic Metal Aerosols Detection: Enhanced Spark–Induced Breakdown Spectroscopy with Intuitive Software Interface for Community Use.

10:15

EHSAN GOFTARI, Evan Gittings, Junbeom Jang, Brenda Lopez, Christopher Wallis, Anthony S. Wexler, Hanyang Li, *San Diego State University*
- 11M.4

Efficiency of Low–Cost Sensors to Detect Dust Particles During Dust Events.

10:30

KARIN ARDON–DRYER, John Garber, Melodie Martinez–Manahan, Lorena Albuquerque Zanandreis, Raghu Betha, *Department of Geosciences, Texas Tech University*
- 11M.5

On the Performance of a Bipolar Multi–Outlet Differential Mobility Analyzer (BiMoDMA).

10:45

SHIPENG KANG, Tongzhu Yu, Yixin Yang, Huaqiao Gui, Jianguo Liu, Da–Ren Chen, *Virginia Commonwealth University*
- 11M.6

Measuring the Detection Efficiency of Neutral Flame–Formed Materials by Two–Component Fluid–Water Condensation Particle Counters (Fluid–WCPCs).

11:00

FARNAZ KHOSRAVI, OWEN S. FUHR, Gregory S. Lewis, Francesco Carbone, *University of Connecticut*
- 11M.7

Design and Testing of a Water–Based Condensation Particle Counter for a Micro–Gravity Environment.

11:15

STEVEN SPIELMAN, Gregory S. Lewis, Nathan Kreisberg, Susanne Hering, *Aerosol Dynamics Inc.*

1UA URBAN AEROSOLS 1: URBAN PM SOURCES
101 BG – Richard Moore and Guy Symonds, chairs

- 1UA.1

Trends in New York State Vehicle Fleet Composition: Emission Standards and Engine Technology (2015–2024).

9:45

FARIHA RIMU, David Q. Rich, Gavin Lemley, Philip K. Hopke, *University of Rochester School of Medicine and Dentistry*
- 1UA.2

Characterization of Emission Factors from Fossil Fuel and Biomass Combustion Sources in Eastern Africa.

10:00

THEOBARD HABINEZA, Albert Presto, Allen Robinson, *Carnegie Mellon University*
- 1UA.3

Characterizing the Spatial and Temporal Variability of Pollution in an Urban Oil Field Using Low–cost Sensors.

10:15

CAROLINE FRISCHMON, Venezia Ramirez, Brittney Lu–Jones, Nancy Lam, Richard Parks, Bhavna Shamasunder, Jill Johnston, Michael Hannigan, *University of Colorado Boulder*
- 1UA.4

Sources of Particulate Matter and Its Precursors in the El Paso Area.

10:30

SHIHAO ZHAI, Daniel Sung, Chun–Ying Chao, Kyle Druckman, Kacper Przykaza, Lea El Khoury, David Sullivan, Pawel K. Misztal, Lea Hildebrandt Ruiz, *University of Texas at Austin*
- 1UA.5

A Scalable Framework for Modeling Near–Road Air Pollution Using Representative Road Types and Orientation–Informed Emission Profiles.

10:45

DEEPSHIKHA OLA, Tahlia Wu, Huyen Le, Jeffrey Bielicki, Andrew A. May, *The Ohio State University*
- 1UA.6

Impact of Suburban Planted Forests on the Dispersion of Carbon–Based Aerosol Plumes from Industrial Sources.

11:00

BORIS KRASOVITOV, Avi Levy, Itzhak Katra, *Ben–Gurion University of the Negev, Israel*
- 1UA.7

The Influence of Tijuana River Pollution on Coastal and Inland Aerosol Populations.

11:15

JUSTIN HAMLIN, Jena Herbst, Benjamin Rico, Leila El Masri, Kimberly Prather, *University of California, San Diego*

Tuesday 11:30 AM – 1:00 PM
AAAR Board of Directors Luncheon (Board Meeting Room)

Tuesday 12:00 PM – 1:00 PM
New PI Gathering (Exhibit Hall South)

Tuesday 12:00 PM – 1:00 PM
Committee Meetings 2 – Working Group Chairs (101 DE)

Tuesday 12:00 PM – 1:00 PM
Update on the Committee for Representation & Equity Affairs Activities in an Increasingly Challenging Climate in Academia and STEM Fields (106 BC)

Tuesday 1:00 PM – 3:00 PM
Session 2: Poster (Exhibit Hall North)

2AA AEROSOL PROCESSES AND PROPERTIES IN CHANGING ENVIRONMENTS IN THE ANTHROPOCENE 1: POSTERS
EXHIBIT HALL NORTH

- 2AA.1 Impact of Changing Ship Emissions on Water-Soluble Iron in Fine Particulate Matter Between 2009–2018 in Atlantic Canada.** RIN TAKAI, Jenny P.S. Wong, *Mount Allison University*
- 2AA.2 Determination of Secondary Organic Aerosol Formation from Cyanobacterial Harmful Algal Blooms.** SAMANTHA L. BELL, Mia B. Kauffman, Nicolas A. Buchenau, Cara Waters, Haley E. Plaas, Andrew P. Ault, Jason Surratt, *University of North Carolina at Chapel Hill*
- 2AA.3 From Wave Crest to Wind Drift: Ocean–Atmosphere Microplastics in Three Mexican Coastal Zones.** SALVADOR REYNOSO–CRUCES, Harry Alvarez–Ospina, Luis A. Ladino, Roberto Rosal, Carlos Edo, *Universidad Nacional Autónoma de México*
- 2AA.4 Airborne Investigations of Black Carbon Aerosols in Low-level Stratocumulus off the Coast of Southern California.** DONGLI WANG, Bradley Ries, Minghao Han, Alexander B. MacDonald, Don Collins, Roya Bahreini, Patrick Chuang, Mason Leandro, Lisa Welp–Smith, Mikael Witte, Sierra Bollinger, Andrew Metcalf, *Clemson University*
- 2AA.5 Investigating the Relationship between Oxidative Potential and Absorption Strength of Biomass–Burning Organic Aerosols.** YUEZHI (AUGUST) LI, Joseph V. Puthussery, Rajan K. Chakrabarty, *Washington University in St. Louis*
- 2AA.6 Determination of the Sulfur Mass Balance in Isoprene Epoxydiol–Derived Secondary Organic Aerosols.** REBECCA TURNER, Tracy Dombek, N. Cazimir Armstrong, Adam Conway, Barbara Turpin, Zhenfa Zhang, Avram Gold, Andrew P. Ault, Jason Surratt, *University of North Carolina at Chapel Hill*
- 2AA.7 Investigating Vertical Profiles of Aerosols with ARM's Unmanned Aerial Systems and Tethered Balloon Systems.** FAN MEI, Qi Zhang, Mikhail Pekour, Christopher Niedek, Israel Silber, Damao Zhang, Darielle Dexheimer, Beat Schmid, Jason Tomlinson, Susanne Glienke, Gourihar Kulkarni, Hardeep Mehta, Swarup China, Zezhen Cheng, Nurun Nahar Lata, *Pacific Northwest National Laboratory*
- 2AA.8 Global Simulations of Phase State and Equilibration Time Scales of Secondary Organic Aerosols with GEOS–Chem.** REGINA LUU, Meredith Schervish, Nicole June, Samuel O'Donnell, Shantanu Jathar, Jeffrey R. Pierce, Manabu Shiraiwa, *University of California, Irvine*
- 2AA.9 Advancing the Molecular Understanding of Primary and Aged Residential Biomass Emissions with CHARON–PTR–ToF–MS and EESI–ToF–MS.** YAMINA ALLOUCHE, Rachel Gemayel, Sergio Harb, Jérôme Beaumont, Serge Collet, Ali Hnaino, Nicolas Karoski, Vincent Fuvel, Jason Bardou, Adrien Dermigny, Laurent Meunier, Théo Claude, Robin Aujay–Plouzeau, Céline Ferret, Nathalie Bocquet, Andrea Baccarini, Nikunj Dudani, Pabrito Ray, Luka Drinovec, Griša Močnik, Brice Temime–Roussel, Barbara D'Anna, Alexandre Albinet, *INERIS*

2AA.10 Sensitivity of Ambient Secondary Organic Aerosol Formation to Perturbations Measured Using Parallel Photochemical Smog Chambers. RASHMI RAJPUT, Shenglun Wu, Benjamin Schulze, Ryan Ward, Qi Zhang, Christopher Cappa, John Seinfeld, Michael Kleeman, *University of California, Davis*

2AA.11 Observational Constraints on the Total Contributions of Biomass Burning to Ambient Organic Aerosol. MITCHELL ROGERS, Taekyu Joo, Lijin Zhang, Tori Hass-Mitchell, Benjamin Murphy, Ziheng Zeng, Theobard Habineza, Abhishek Anand, Dexter Resta, Catelynn Soong, Albert Presto, Havalala Pye, Drew Gentner, *Yale University*

2AA.12 Characterization of the Optical Properties of Nitroaromatic Brown Carbon Aerosols Using Single Particle Techniques. MALSHA AMUGODA, Pedro De Allende, Bilal Shokoor, James F. Davies, *University of California, Riverside*

2AA.13 Highly Oxidized Molecules Make a Significant Contribution to Enhanced Aromatic-Derived Secondary Organic Aerosol under a Humid Environment. ZHAOMIN YANG, *University of California, Irvine; Shandong University*

2AC AEROSOL CHEMISTRY 2: POSTERS

EXHIBIT HALL NORTH

2AC.1 Enhanced Light Absorption of Levitated Droplets of Methoxyphenols upon Uptake and Complexation of Benzoquinone. AHMADRAZA CHAUDHARY, Micah Miles, Colton Calvert, Elijah Schnitzler, *Oklahoma State University*

2AC.2 Linking the Physicochemical Properties of Brown Carbon to the Production of Singlet Oxygen and Organic Triplets Excited States in Atmospheric Aqueous PM_{2.5}. THEODORA NAH, Yuting Lyu, Yitao Li, Ruihan Ma, Tianye Zhou, *City University of Hong Kong*

2AC.3 Optimizing Aerosol Composition in Hygroscopic Burn-in-Place Flares: Advancing Cloud Seeding and Precipitation Enhancement. SWAFUVA SULAIMAN, Kurt Hibert, James Simmons, Hamed Sadi, Amir Nazem, Suryadev Singh, Andrei Vakhtin, Bruce Boe, Jesse Anderson, Charlie Harper, Raymond Shaw, Will Cantrell, *Michigan Technological University*

2AC.5 Chemical Composition of Fire Smoke-Emitted Organics in the Gas and Aerosol Phase During the Recent G-WISE-2 Prescribed Burn Experiments. VIGNESH VASUDEVAN GEETHA, Lee Tiszenkel, Rawad Saleh, Joseph O'Brien, Shanhu Lee, *University of Alabama Huntsville*

2AC.6 Impact of Photolysis-driven Aging on Chemical Transformations in Biomass Burning Organic Aerosol (BBOA) Particles. JANIE (YEASEUL) KIM, Willow Hwang, Manjula Canagaratna, Benjamin A. Nault, Anita Avery, Mitchell Alton, Lisa Azzarello, Elise Palombella, Christopher Cappa, Cora Young, Rachel O'Brien, *University of Michigan*

2AC.7 Comparing the Reactivity of Aqueous Brown Carbon Precursors in Aqueous Solutions and Levitated Droplets. ERIN BOWEY, Prakriti Singh, James F. Davies, Paula K. Hudson, *University of California, Riverside*

2AC.8 Modeling Secondary Organic Aerosol Formation During Daytime and Nighttime via Multiphase Reactions of Phenolic Compounds. TAMANNA TASNIM, Myoseon Jang, Quang Tran Vuong, *University of Florida*

2AC.9 Evaluating Approaches to Simplify Automatically Generated Oxidation Reaction Mechanisms. NAZIFA SAYEED, Jia Jiang, Kelley Barsanti, Gabriel Isaacman-VanWertz, *Virginia Tech*

2AC.10 Low-Temperature Flow Tube Studies of Secondary Organic Aerosol Formation. MATTHEW GOSS, Frank Keutsch, *Harvard University*

- 2AC.11 Implementation and Assessment of the Automated Model REduction (AMORE v2.0) Algorithm on Monoterpenes.** KATHERINE STEVENSON, Forwood Wiser, V. Faye McNeill, *Columbia University*
- 2AC.12 Understanding Key Oxidant and RO₂ Regime Combinations in Indoor Spaces.** ISABEL ALBORES, Hannah Kenagy, Jesse Kroll, *MIT*
- 2AC.13 Dark Ozonolysis of cis-Cycloalkenes (C5–C8): Investigating SOA Formation, Transition Temperatures, and Temperature Cycling Effects in the UCR Atmospheric Chamber.** DANIEL GONZALEZ, Sunandan Mahant, Yanyu Zhang, Markus Petters, David R. Cocker III, *University of California, Riverside*
- 2AC.14 Photochemical Aging of Lab-Generated Triclosan Aerosols in the Presence of •OH and Salts.** DIANA TRAN, Jonathan Slade, *University of California, San Diego*
- 2AC.15 Production of Dissolved Iron from Atmospheric Processing of Ultrafine and Fine Iron Oxides: Effects of Size and Mineralogy.** HEATH D.K. PATTERSON, Sarah C. Garrett, Jenny P.S. Wong, *Mount Allison University*
- 2AC.16 Effect of Mineral Dust Transition Metal Oxides on Photochemistry of Secondary Organic Aerosols.** ANTHONY JUE, Sergey Nizkorodov, *University of California, Irvine*
- 2AC.17 Simulating Prebiotic Earth Environments to Explore the Role of Aerosol Particles in Abiogenesis.** STEPHANIE SALAS, Aaron Palmisano, Thomas Preston, Alexander Logozzo, James F. Davies, *University of California, Riverside*
- 2AC.18 Volatility-Resolved Aerosol Chemical Composition using Fast-Switching Chemical Ionization Mass Spectrometry.** MANJULA CANAGARATNA, Mitchell Alton, Jenna DeVivo, Mitchell Rogers, Taekyu Joo, Neil Donahue, Andrew Lambe, Drew Gentner, *Aerodyne Research*
- 2AC.19 Long Term Trends in PM_{2.5} Particle Components Across New York.** OLIVER RATTIGAN, Kevin Civerolo, Amanda Teora, *New York State Department of Environmental Conservation*
- 2AC.20 Ambient Air Aerosol Test Facility (AATF): Capabilities and Referee Instrument Measurements from a Recent Test Event for PICARD Program.** Vasanthi Sivaprakasam, Paul Johns, Cathy S. Scotto, TOLU ADUROJA, Matthew B. Hart, Ken Grabowski, Jay Eversole, Landon Hernandez, *United States Naval Research Laboratory*
- 2AC.21 Ion Concentration Affects the Bubble-Bursting Mechanism for Freshwater Aerosols.** GRACE A. YOUNG, Rebecca L. Parham, Carlie Poworoznek, Andrew P. Ault, *University of Michigan*
- 2AC.22 Assessing Model Pathogen Localization and Stability in Levitated Simulated Respiratory Droplets Using Quadrupole Electrodynamic Trap Confocal Microscopy.** Michael Jacobs, LINDSEY SAENZ, *Texas State University*
- 2AC.23 Urban-Rural Gradients in Aerosol Liquid Water and pH during the CoURAGE Campaign.** AMIR BABAEI-GHAREHBAGH, Jemma Przybocki, Marissa Cuevas, Isaiah Smith, Maria A. Zawadowicz, Akua A. Asa-Awuku, Benjamin A. Nault, Peter F. DeCarlo, Christopher Hennigan, *University of Maryland, Baltimore County*

2AE AEROSOL EXPOSURE 2: POSTERS
EXHIBIT HALL NORTH

- 2AE.1 Does Wildfire Smoke Move Financial Markets? The Impact of Wildfire Smoke Across Cities on Equity Returns and Volatility.** KARTHICK MOHAN KUMAR, Jesse Burkhardt, Shantanu Jathar, *Colorado State University*
- 2AE.2 Introduction of Korea Air Pollutants EXposure (KAPEX) Model for PM_{2.5} and O₃.** KIYOUNG LEE, *Seoul National University*

- 2AE.3 Utilizing Low-Cost Clarity Node S Sensors Network to Monitor Local PM Concentrations in Lubbock, TX.** KARIN ARDON-DRYER, John Garber, Joshua Shankles, Adam Hernandez, *Department of Geosciences, Texas Tech University*
- 2AE.4 Characterization of Aerosol Emissions from Firsthand and Secondhand Vaping.** QIAN ZHANG, Maureen Meister, Xiaojia He, Joseph Hess, Mark Wilson, Christa Wright, *UL Research Institutes*
- 2AE.5 An Innovative Geo-AI Model: Improving Indoor PM Prediction for Child-Specific Households in a Highly-Polluted Area.** QUANG-OAI LU, Ching-Chang Lee, *National Cheng Kung University*

2AP AEROSOL PHYSICS 2: POSTERS
EXHIBIT HALL NORTH

- 2AP.2 Relation Between Spatial Age of Air Distribution and Indoor VOC Concentrations in a Classroom Assessed Using CFD.** SUWHAN YEE, Donghyun Rim, *Pennsylvania State University*
- 2AP.3 High Optical and Temporal Resolution Investigations into Non-Ideal Resuspension Phenomena.** EDWARD NEAL, Lukesh K. Mahato, Richard J. Thomas, Maurice Walker, Jack Vincent, Simon Parker, Virginia Foot, Emily Kruger, Jonathan P. Reid, *University of Bristol*
- 2AP.5 Contact Freezing Experiments and Temperature-Dependent Particle Viscosity Measurements Using a Sub-Freezing-Temperature Dual-Balance Electrodynamic Trap.** KYLE MCMILLAN, Dharma Johnson, Upasna B. Rai, Jingchuan Chen, Ryan Davis, Sarah D. Brooks, Margaret Tolbert, *University of Colorado Boulder*
- 2AP.6 Quantifying Electric Field Effects on Coarse Dust Settling in a Controlled Dust Plume Environment.** IAN NORWOOD, Kyle Gorkowski, Claudio Mazzoleni, *Michigan Technological University*
- 2AP.7 Measuring Microparticle Acceleration in Low-pressure Supersonic Nozzles.** AUSTIN ANDREWS, Nathan Bellefeuille, Hasan Celebi, Ioannis Pothos, Kaleb Siekmeier, Bernard Olson, Thomas Schwartzentruber, Christopher J. Hogan, *University of Minnesota*
- 2AP.8 The Effects of Jet Axis Switching and Aerodynamic Focusing on Deposition Patterns in Converging-Diverging Slit Impactors.** YENSIL PARK, Tomoya Tamadate, Bernard Olson, Thomas Schwartzentruber, Christopher J. Hogan, *University of Minnesota*
- 2AP.9 Liquid-Liquid Phase Separation in Secondary Organic Aerosols from Phenolic Compounds and Terpenes: Contrasting Daytime and Nighttime Generation.** SEPEHR NIKKHO, Melika Javanmardi, Julia Zaks, Allan K. Bertram, *University of British Columbia*
- 2AP.10 Coarse-Grained Models of Nanocluster Interaction Potentials: Application to Metal, Organic, and Carbon Materials.** JOSÉ MORÁN, Christopher J. Hogan, *University of Ottawa*
- 2AP.11 The Optical Properties of Aqueous Carbonate-Containing Aerosol.** KELSI RAMOS, Emily Werner, Alison Bain, *Oregon State University*
- 2AP.12 Interactions Between Electrostatic Atomized Water Nanodroplets and Bacterial Membranes.** YOHEI ISHIGAMI, Takafumi Seto, Tomoya Tamadate, Toshiaki Sakai, Ryo Igarashi, Yukihiro Masuda, Kagami Aso, Daiki Akashi, Ayako Kitauchi, Satoshi Okumoto, Takahiro Miyatake, Misa Katsuyama, Hiroshi Suda, Yoshiki Kanata, Motomasa Yonezumi, *Panasonic Corporation*
- 2AP.13 Characteristics of Airborne Water Cluster Generated by Polymer-Based Evaporation Device.** MIKI NAKANO, Yusuke Kuromiya, Tomoya Tamadate, Takafumi Seto, Hiroto Kato, Takayuki Mori, Yoko Adachi, Yuki Tabata, *Kanazawa University*

- 2BA.1 Title: Characterization of Human-Generated Infectious Aerosol to Improve the Understanding of Disease Transmission and Building-Level Interventions.** C.J. WOSLAGER, Vicki Herrera, Ashley R. Ravnholdt, Elizabeth A. Klug, Daniel N. Ackerman, Danielle N. Rivera, Joshua L. Santarpia, *University of Nebraska Medical Center*
- 2BA.2 Determination of pH and Other Physicochemical Properties of Respiratory Aerosols via Fluorescence Probe Spectroscopy.** ANGEL GIBBONS, Victoria Cover, Paul Ohno, *Auburn University*
- 2BA.3 Microbiology in Clouds at Whiteface Mountain with Analysis of Air Quality 2024.** SARA LOMBARDO, Archana Tripathy, Sridar V. Chittur, Andrew Hayden, Marcy Kuentzel, Paul Casson, Rudra Patel, Lily Hammond, Scott D. McKim, James Schlemmer, Sara Lance, *University at Albany*
- 2BA.4 Sargassum Influence on Coastal Bioaerosol Microbiota.** NOHHYEON KWAK, Shahar Tsameret, Mahdis Sobhanian, Brittany Mc Intyre, Helena Solo-Gabriele, Jiayu Li, *University of Miami*
- 2BA.5 Investigating the Ice Nucleating Macromolecules in Birch Pollen.** CHAMARI MAMPAGE, Miriam Freedman, *The Pennsylvania State University*
- 2BA.6 Abundance and Mixing State of Bioaerosols at the BNF Site: Insights from Microscopy and WIBS Analyses.** Nurun Nahar Lata, Ashfiquur Rahman, ZEZHEN CHENG, Darielle Dexheimer, Swarup China, *Pacific Northwest National Laboratory*
- 2BA.8 The Effect of Clinical Environment on the Transport and Antibiotic Resistance of Mycobacteria.** Meiyi Zhang, Aayushi Nangia, Jasim Ibrahim, Eduardo Escamilla Rodriguez, Juan Garcia Lunar, Sandun Fernando, MARIA KING, *Texas A&M University*
- 2BA.9 Respiratory Aerosol Measurements from Large Cohorts and a Longitudinal Study.** JONATHAN P. REID, Bryan R. Bzdek, Nan Zhou, Andrew Shrimpton, Tony Pickering, *University of Bristol*
- 2BA.10 Mapping Ecosystem Biodiversity Using Airborne Environmental DNA.** SHALLON MUTSA JOZI, Amira Hansch, Nicolas Gustafson, Roger Schürch, Scotty Yang, Gabriel Isaacman-VanWertz, *Virginia Tech*
- 2BA.11 3D Chemical Imaging Reveals Surface and Internal Heterogeneity of Airborne Fungal Spores.** ZEZHEN CHENG, Yingxiao Zhang, Gregory W. Vandergrift, Ashfiquur Rahman, Xena Mansoura, Valentina Sola, Tasneem Ahmadullah, Nurun Nahar Lata, Erin Bredeweg, Payton Beeler, Laura Fierce, Darielle Dexheimer, Qi Zhang, Alexander Laskin, Jerome Fast, Fan Mei, Scott Baker, Allison Steiner, Swarup China, Zihua Zhu, *Pacific Northwest National Laboratory*
- 2BA.13 Culture and Real-Time Quantitative PCR to Detect Environmental Nontuberculous Mycobacteria in a Clinical Care Center.** Meiyi Zhang, Brooke Smith, Rachel Wilsey, Tiana Koch, Elizabeth Dohanich, Pamela McShane, Jennifer Honda, BRANDON LINARES, Maria King, *Texas A&M University*
- 2BA.14 Integrated Electrowetting-on-dielectric and Electrostatic Precipitation for Monitoring Airborne Viruses in Real-world Indoor Environments.** SANGSOO CHOI, Seong-Jae Yoo, Amin Piri, Milad Massoudifarid, Sanggwon An, Yong-Jun Kim, Jungho Hwang, *Yonsei university*
- 2BA.15 Integration of Electrostatic Aerosol-to-Hydrosol Sampling With Microfluidic Sample Processing and Fluorescent Nanoprobe-Based Multiplexed Immunoassay for Airborne Virus Detection.** MILAD MASSOUDIFARID, Sangsoo Choi, Sojeong Lee, Seungjoo Haam, Jungho Hwang, *Yonsei university*
- 2BA.16 Modulation of Endotoxin Toxicity by Atmospheric Oxidants and VOC Biomarkers of Its Early Health Effects.** HUAYING LIU, Qisong Xing, Chenyu Zhu, Maosheng Yao, *Peking University*

- 2BA.17

Simultaneous Detection of Airborne Bacteria and Fungi Using ATP Bioluminescence for Real-Time Monitoring. HYUN SIK KO, Jaeho Oh, Jungho Hwang, *Yonsei University*
- 2BA.18

Electrochemical Biosensor for Sensitive Detection of Airborne Bacteria. DONGMIN SHIN, Jungho Hwang, *Yonsei University*
- 2BA.19

A Predictive Model for Indoor Culturable Bioaerosol Concentration Using Optimized Input Structure of Multivariate Time-Series Air Quality Data. DOHEON KIM, Dongmin Shin, Jungho Hwang, *Yonsei University*
- 2BA.20

Airborne Virus Collection Using the BioSampler at Various Sampling Conditions. CHAEWOON JUNG, Wonyoung Jeon, Vidhurathan Soundararajan, Jaesung Jang, *Ulsan National Institute of Science and Technology, Korea*
- 2BA.21

Effect of Particle Concentration on Collection Efficiency in the Condensational Growth Tube of VIVAS Air Sampler. AMIR R. SHARAFUDIN, Steven Spielman, Chih-Hsiang Chien, Weixing Hao, Sudheer Salana, Amin Shirkhani, Mohammad Washeem, Yang Wang, Chang-Yu Wu, *University of Miami*

2BQ BURNING QUESTIONS OF AEROSOL EMISSIONS, CHEMISTRY, AND IMPACTS FROM WUI FIRES 1: POSTERS
EXHIBIT HALL NORTH

- 2BQ.1

Measuring Particulate Matter Emissions from Prescribed Fires. ANNAMARIE GUTH, Marissa Dauner, Sean Benjamin, Evan Coffey, Alexandra Fowler, Spencer Hoel, Chad Hoffman, E. Louise Loudermilk, Peter Hamlington, Michael Hannigan, *University of Colorado Boulder*
- 2BQ.2

Chemical Speciation of Flaming and Smoldering Combustion from Sagebrush Ecosystem Vegetation. BIANCA MARTINEZ, Chiranjivi Bhattarai, Andrey Khlystov, *Desert Research Institute*
- 2BQ.3

Volatile Organic Compounds Profile from Laboratory Scale Combustion Emissions of Regionally Relevant Wood Types and Synthetic Building Materials. YIN YEE (CYNTHIA) CHOO, David Kalafut, Marilyn Black, William Goldsmith, Thomas Batchelor, Anand Ranpara, Timothy Nurkiewicz, Mark Wilson, *UL Research Institutes*
- 2BQ.5

Characterization of Emissions from Burned Residue in Post-wildfire Residential Zones: Analytical Approaches for Assessing the Impact of Wildland-Urban Interface (WUI) Fires. YAN WEN, Vera Samburova, Andrey Khlystov, *Desert Research Institute*
- 2BQ.6

Exploring Methods of Smoke Generation to Simulate Wildfire Health Impacts. HOVANNESS DINGILIAN, David R. Cocker III, David Lo, Veronica Penuelas, *University of California, Riverside*
- 2BQ.7

Oxidation of Eucalyptus Biomass Burning Emissions by Hydroxyl Radical in Cloud Water Mimics and Implications to Secondary Organic Aerosol. VIVIAN CAMPBELL, Haley Royer, Megan McRee, Marc Fiddler, Cade Christensen, Solomon Bililign, Jason Surratt, Barbara Turpin, *University of North Carolina at Chapel Hill*
- 2BQ.8

Oxidation of African Biomass Burning Emissions within Cloud Water Mimics as a Potential Source of Aqueous Secondary Organic Aerosol and Brown Carbon. HALEY ROYER, Vivian Campbell, Cade Christensen, Megan McRee, Marc Fiddler, Solomon Bililign, Barbara Turpin, Jason Surratt, *University of North Carolina at Chapel Hill*
- 2BQ.9

Effect of pH on the Optical Properties of Brown Carbon (BrC) Aerosols and Climate Change During Aging Process by Hydroxyl Radicals. YANRU HUO, Thomas Preston, *McGill University*
- 2BQ.10

Transformation of Polycyclic Aromatic Hydrocarbons (PAHs) Present on Firefighter's Personal Protective Equipment (PPE) During Ozone-Based Decontamination. ALEXANDRE ALBINET, Ahmad El Masri, Faustina Fuvel, Ophélie Simonin, Jean-Marc Lo Guidice, Samuel Trupin, Valérie Martial, Guillaume Garçon, Anne Platel, *INERIS*

- 2BQ.11 Formation of Reactive Oxygen Species by Plastic Burning Particulate Matter Formed Under Pyrolysis Conditions.** BRIANNA LAUPER-COOK, Manabu Shiraiwa, *University of California, Irvine*
-
- 2CA CARBONACEOUS AEROSOLS 1: POSTERS
EXHIBIT HALL NORTH
- 2CA.1 Generation of Light-Absorbing Carbonaceous Aerosol from Thermal Degradation of Plastics and Whitening through Atmospheric Aging.** ASMA SOOFI, Katrina Betz, Jace Barton, Elijah Schnitzler, *Oklahoma State University*
- 2CA.2 Photochemical Aging of Dark Brown Carbon Aerosols Using a PAM-OFR.** SHU-WEN YOU, Taveen S. Kapoor, Prabhav Upadhyay, Rajan K. Chakrabarty, *Washington University in St. Louis*
- 2CA.3 Chemical Diversity of Tar Balls in Wildfire-Influenced Aerosol: A Single-Particle Analysis of the 2017 Pacific Northwest Fires.** AMNA IJAZ, Kaitlyn J. Suski, Zezhen Cheng, Yuzhi Chen, Gouri Har Kulkarni, Sijia Liu, Tania Gautam, ManishKumar Shrivastava, Jerome Fast, John Shilling, Swarup China, Alla Zelenyuk, *Pacific Northwest National Laboratory*
- 2CA.4 X-Ray Detector Window Importance in the Characterization of Black Carbon Nanoparticles.** WILLIAM NICOLAS BACCA NOVOA, Cristina Cordoba, Cesar Diaz Pomar, Cristian Arango, *Universidad Distrital Francisco José de Caldas*
- 2CA.5 High-Time-Resolution Measurements of Total and Black Carbon and the Determination of Primary and Secondary Organic Carbon at the ASCENT South DeKalb (Atlanta, GA) Measurement Site.** MARTIN RIGLER, Matic Ivančič, Irena Ježek Breclj, Gašper Lavrič, Bálint Alföldy, Ruizhe Liu, Sohyeon Jeon, Longkun He, Pengfei Liu, Nga Lee Ng, Asta Gregorič, *Aerosol d.o.o.*
- 2CA.6 Black Carbon (BC) Measurements in Addis Ababa: Reconciling Aethalometer BC with Filter Based BC and FTIR-EC Measurements.** AHMAD JALIL, Sina Hasheminassab, Kyan Shlipak, Tesfaye Mamo, Araya Asfaw, Hossein Kazemian, Ann M. Dillner, *UNBC, UC Davis*
- 2CA.7 Backscattering by Soot Fractal Aggregates: A Model for Lidar Applications.** ROMAIN CEOLATO, Jerome Yon, Matthew Berg, *ONERA*

-
- 2CC AEROSOLS, CLOUDS AND CLIMATE 1: POSTERS - USING FIELD DATA TO CONSTRAIN AEROSOL CLOUD INTERACTIONS
EXHIBIT HALL NORTH
- 2CC.1 Potential Factors and Impacts of Long-Range Saharan Dust Transport on PM Concentrations in Central Europe.** VLADIMÍRA VOLNÁ, Daniel Hladký, Marie Glofáková, Adéla Šmejkalová Holubová, Jáchym Brzezina, Adriana Šindelářová, Eva Houbová, Hana Škáchová, *Czech Hydrometeorological Institute*
- 2CC.3 Investigating Alkylamine Content in Size-Resolved Aerosol Collected over the Yellow Sea During Fatima 2023.** CONNOR OVERTON, Leyla Salehpoor, Rachel Chang, Gianina Giacosa, Harindra J. Fernando, Ed Creegan, Kyung-Il Chang, Seok Lee, Trevor VandenBoer, *York University*
- 2CC.5 Contrasting Above and Below Cloud Aerosol Composition and Properties from ArcticShark Uncrewed Aerial System at the Bankhead National Forest Site.** SIJIA LIU, Zezhen Cheng, Nurun Nahar Lata, Gregory W. Vandergrift, Xena Mansoura, Valentina Sola, Alla Zelenyuk, Celia Faiola, Sergey Nizkorodov, Fan Mei, Damao Zhang, Zihua Zhu, Swarup China, *Pacific Northwest National Laboratory*
- 2CC.6 Elucidating the Complexity of Mass-Based Hygroscopicity and Photochemical Transformation of Himalayan Aerosols as Revealed by Piezoelectric Technique.** SHAILINA SRIVASTAVA, Aishwarya Singh, Tariq Ahmed, Amar Krishna Gopinath, Bin Bai, Christi Jose, Rizana Salim, Subrat Sharma, R. Ravikrishna, Pengfei Liu, Sachin S. Gunthe, *Indian Institute of Technology Madras, India*

- 2CC.7 Atmospheric Particle Fluxes in the High Arctic Across Three Surface Types.** THERESA MATHES, Heather Guy, John Prytherch, Julia Kojoj, Ian Brooks, Sonja Murto, Paul Zieger, Birgit Wehner, Michael Tjernström, Andreas Held, *Technische Universität, Berlin, Germany*
- 2CC.8 The U.S. DOE ARM User Facility Establishes a New Site for Studies of Land–Aerosol–Cloud Interactions in the Southeastern U.S.** CHONGAI KUANG, Scott Giangrande, Shawn Serbin, *Brookhaven National Laboratory*

2CE CHEMICALS OF EMERGING CONCERN IN INDOOR AND OUTDOOR AEROSOL: SOURCES, VECTORS, REACTIVITY, AND IMPACTS
2: POSTERS
EXHIBIT HALL NORTH

- 2CE.1 Beyond the Open Crop Residue Burn: Comprehensive Assessment of Fine Aerosol Emissions and Health Burden from Indian Agriculture.** ROSHAN KUMAR SINGH, Seema Prajapati, Indra Mohan Nigam, Tarun Gupta, Ran Zhao, *University of Alberta*
- 2CE.2 Detailed Characterization of Fine Aerosols from Crop Residue Burning of Major Indian Crops: Implications for Atmospheric Chemistry and Climate.** ROSHAN KUMAR SINGH, Indra Mohan Nigam, Rowshon Afroz, Shakiba Talebian, Seema Prajapati, Kerry Chen, Antonio Mirante, Jason S. Olfert, Tarun Gupta, Ran Zhao, *Indian Institute of Technology Kanpur*
- 2CE.5 Multiphase O3 and OH Oxidation of Benzotriazole Ultraviolet Stabilizers UV328.** YAO YAN HUANG, Jonathan Abbatt, Xinke Wang, Amila De Silva, Cassandra Brinovcar, Linna Xie, *University of Toronto*
- 2CE.6 Molecular Characterization and Quantification of Oxidized Volatile Methyl Siloxanes in Laboratory Generated and Ambient Aerosols.** JEEWANI MEEPAGE, Josie Welker, Saeideh Mohammadi, Handlei Lewine, Charles Stanier, Eleanor Browne, Elizabeth Stone, *University of Iowa*
- 2CE.7 Integrated Experimental and Modeling Investigation of Volatile Methyl Siloxane Oxidation and Secondary Organic Aerosol Formation.** SAEIDEH MOHAMMADI, *University of Iowa*
- 2CE.8 Individual Effects and Interactions Between Ultrafine Particles and Extreme Temperatures on Hospital Admissions of High Burden Diseases.** Quan Qi, Yukang Xue, Najm Madani, RANDY TANGANG, Fangqun Yu, Arshad Arjunan Nair, Xiaobo Romeiko, Gan Luo, Isa Brackett, Chris Thorncroft, Shao Lin, *University at Albany, State University of New York*
- 2CE.9 Realistic VOC Emissions and SOA Potential of Asphalt Pavement.** HUAWEI LI, Kyah Gracia, Yanyu Zhang, Daniel Gonzalez, John Williams, Hovanness Dingilian, Thomas Eckel, David R. Cocker III, *University of California, Riverside*
- 2CE.10 Indoor and outdoor profiles of atmospheric microplastics within an urban environment in Brazil.** ADMIR CRESO TARGINO, Gustavo Akutagawa, Anggraini Widyastuti, Jheng-Jie Jiang, *Federal University of Technology – UTFPR*

2CM CONTROL AND MITIGATION 1: POSTERS
EXHIBIT HALL NORTH

- 2CM.1 Development of a Theoretical Framework for Particle Charging and Transport in Two-Stage ESPs and Unipolar Ionizers.** HASAN AL TARIFY, Austin Andrews, Christopher J. Hogan, *University of Minnesota*
- 2CM.2 Evidence of pH Change in Impinger–Collected Aerosols Resulting from Non–thermal Plasma Exposure.** HUNTER RICHARDS, Zhenyu Ma, Herek L. Clack, *University of Michigan*

2CO COMBUSTION 1: POSTERS
EXHIBIT HALL NORTH

- 2CO.1

Characterization of Emissions from Residential and Commercial Heating Appliances Under Transient Operating Conditions. Stephen Galvin, CHETHANI ATHUKORALA, Rebecca Trojanowski, Thomas Butcher, *Brookhaven National Laboratory*
- 2CO.2

Reduction in nvPM Emissions of a Long-Range Business Jet Operating on Sustainable Aviation Fuel During Ground-Test Measurements. SERGIO DOMINGUEZ-MEDINA, Jennifer Klettlinger, Denise Ahrens, Edward Winstead, Bruce Anderson, Palmer Booth, Nicole Didyk-Wells, Richard Moore, *NASA Glenn Research Center*
- 2CO.3

Speciation & Quantification of Air Toxics From Tier II and Tier III Ocean-Going Vessels. KYAH GRACIA, Ryan W. Drover, Thomas Eckel, J. Wayne Miller, David R. Cocker III, *University of California, Riverside*
- 2CO.4

Gas-Phase Organic Compound Emissions Associated with a Malfunctioning Distributed Natural Gas Combustion Source in New York City. ADAM THOMAS, Paul Moon, Mia Tran, Mitchell Rogers, Jo Machesky, Minguk Seo, Taekyu Joo, Conner Daube, Mitchell Alton, Manjula Canagaratna, Jordan Krechmer, Andrew Lambe, Roisin Commane, Joseph Roscioli, Drew Gentner, *Yale University*

2DA ADVANCING AEROSOL SCIENCE THROUGH DATA ANALYSIS TOOLS 1: POSTERS
EXHIBIT HALL NORTH

- 2DA.1

An Analytical Framework for Characterizing Pollutant Source and Sink Mechanisms from Time-Resolved Indoor Air Quality Data. SAEED FARHOODI, Insung Kang, Kaveeta Jagota, Nancy Karpen, Zane Z. Elfessi, Israel Rubinstein, Mohammad Heidarinejad, Brent Stephens, *Illinois Institute of Technology*

2HR HEALTH RELATED AEROSOLS 1: POSTERS
EXHIBIT HALL NORTH

- 2HR.1

Effect of Volatilization of E-liquid on Electronic Cigarette Aerosol Composition. NATHAN EDDINGSAAS, Chamodhi Ravihansi Polgampola Ralalage, Edward Hensel, Risa Robinson, *Rochester Institute of Technology*
- 2HR.2

DIY Filters for Tuberculosis Surveillance and Infection Control. DAVID KORMOS, Jeffrey Siegel, Sarah Haines, Nehul Agarwal, *University of Toronto*
- 2HR.3

Size-Resolved Characterization of Secondhand Vaping Aerosols: Implications for Indoor Exposure and Toxicity. LINHUI TIAN, Wonsik Woo, Ying-Hsuan Lin, *University of California, Riverside*
- 2HR.4

Geekbar Brand Electronic Cigarette Aerosol Emissions Characterization. EDWARD HENSEL, Gloria Mbaka, Logan Kelly, Nathan Eddingsaas, Risa Robinson, *Rochester Institute of Technology*
- 2HR.5

The Lure of the 'Healthier Smoke': Physical, Chemical, and Toxicological Characterization of Emissions from Herbal and Tobacco Cigarettes. ALOK KUMAR THAKUR, P. S. Ganesh Subramanian, Vishal Verma, Sameer Patel, *Indian Institute of Technology Gandhinagar*
- 2HR.6

Investigation of Drug Delivery Rate of Three Different Nebulizers Using a Lung Simulator. Taewon Han, Michael Falvo, Daniel P. Wilhite, GEDIMINAS MAINELIS, *Rutgers, The State University of New Jersey*
- 2HR.7

Oxidative Potential and Lung-Deposition of Size-Resolved Aerosols Emitted from Common Indoor Sources. P. S. GANESH SUBRAMANIAN, Saman Haratian, Mohammad Heidarinejad, Brent Stephens, Vishal Verma, *University of Illinois Urbana-Champaign*
- 2HR.8

Albumin Adductome Profiling Uncovers PM2.5 Interference in β -Amyloid Peripheral Clearance: Connecting Ambient Particles to β -Amyloid Accumulation in Alzheimer's Disease. YALING ZENG, Xin Yang, *Southern University of Science and Technology*

- 2HR.9 Development of a High-Throughput multipattern Aerosol Deposition Device for Respiratory Toxicity and Health-Risk Assessment (mARTHA).** Amin Shirkhani, SUDHEER SALANA, Arantzazu Eiguren-Fernandez, Mohammad Washeem, Stavros Amanatidis, Gregory S. Lewis, Nathan Kreisberg, Chang-Yu Wu, *University of Miami*
- 2HR.10 Experimental Simulations of Thirdhand Smoke from Electronic Cigarettes.** KAITLYN HUNTER, Stephanie Jacoby, Nahin Ferdousi-Rokib, Akua A. Asa-Awuku, *University of Maryland, College Park*

2IA INDOOR AEROSOLS 1: POSTERS
EXHIBIT HALL NORTH

- 2IA.1 Low-Cost PM Sensor for Indoor Air Quality Monitoring: Improving Reliability and Accessibility of In-Situ Microenvironment-Based Calibration.** JALIL MOKHTARIAN MOBARAKEH, C. Victoria McCrary, Sara Jones, Perry Hystad, Molly Kile, Parichehr Salimifard, *Oregon State University*
- 2IA.4 Investigating the Effectiveness of a Ventilation Intervention on Air Quality in a Commercial Kitchen.** YINGXI LU, Riley Benko, Tyler Cargill, Zhiyao Li, Jay R. Turner, Jenna Ditto, *Washington University in St. Louis*
- 2IA.5 Partitioning of Reactive Oxygen Species Among Indoor Surfaces.** Zhenduo Yao, GLENN MORRISON, *UNC-Chapel Hill*
- 2IA.6 Evaluating Plate-Based dPCR Methods for Indoor Bioaerosol Analysis.** Patricia Watanabe, Nehul Agarwal, Sumaiya Hassan, David Kormos, SARAH HAINES, *University of Toronto*
- 2IA.7 Assessment of Indoor Air Quality in Schools: Variability, Determinants, and Mitigation Strategies.** AZHAR SIDDIQUE, M. Rami Alfarra, Feras Mestariheh, Maryam Yousuf Al-Shamlan, Tamer Nada, *Hamad Bin Khalifa University, Doha, Qatar*

2IM INSTRUMENTATION AND METHODS 2: POSTERS
EXHIBIT HALL NORTH

- 2IM.1 Visualization and Characterization of Aged Organic-Inorganic Aerosols with Vapor-Phase Transmission Electron Microscopy.** MARTIN AHN, Yuhang Wang, Liza-Anastasia DiCecco, Jennifer Gray, Amy Chen, Akua A. Asa-Awuku, Taylor J. Woehl, *University of Maryland, College Park*
- 2IM.2 Development and Evaluation of a High-Volume Virtual Impactor with a Circumferential Slit Nozzle.** SUSMITA ISLAM, Qingqing Fu, Li Li, Bernard Olson, Christopher J. Hogan, *University of Minnesota*
- 2IM.3 Characterization of Size-Resolved Charge Distributions for Tribologically Charged Particles by Differential Mobility Analysis Coupled to Optical Particle Spectrometry.** RAHAF A. BAHAJRY, Christopher J. Hogan, *University of Minnesota*
- 2IM.4 Understanding the Long-term Performance and the Reject Counts for the Alphasense OPC-N3.** TRISTALEE MANGIN, Kamaljeet Kaur, Nancy Daher, Kerry Kelly, *University of Utah*
- 2IM.5 Improving Low-Cost Optical PM Sensor Accuracy in Humid Conditions via Aerosol Liquid Water Estimation Using U.S. EPA CSN Data.** YUHANG GUO, Alexandra Catena, Janie Schwab, Nga Lee Ng, Amanda Teora, Oliver Rattigan, Violet Harder, Yasi Hassanzadeh, James Schwab, Jie Zhang, *Atmospheric Sciences Research Center, University at Albany*
- 2IM.6 Systematic Integration of Laboratory Insights Into Chemical Mechanisms Development for SOA Formation.** JIA JIANG, Lesly Franco Deloya, Erik Helstrom, Havala Pye, T. Nash Skipper, Rebecca Schwantes, Jesse Kroll, *Massachusetts Institute of Technology*

- 2IM.7 VOCentinel – a Novel Solution for Automated Real-time Monitoring of Atmospheric VOCs.** MARKUS MUELLER, Martin Graus, Tobias Reinecke, Klaus Winkler, Todd Rogers, Andreas Herburger, Jens Herbig, *IONICON Analytik GmbH, Innsbruck, Austria*
- 2IM.8 Characterization of a Novel Laminar-Flow Oxidation Reactor for Simulating Atmospheric Multiple-Day Oxidation.** TOBIAS REINECKE, Markus Leiminger, Andreas Klinger, Todd Rogers, Martin Graus, Markus Mueller, *IONICON Analytik GmbH, Innsbruck, Austria*
- 2IM.9 Development and Optimization of a Low-Detection Limit Array-Type Beta Attenuation Monitor.** I-CHEN CHANG, Qi-Xiang Li, Chih-Wei Lin, Sheng-Hsiu Huang, Chih-Chieh Chen, *National Taiwan University*
- 2IM.10 PM2.5 Morphology and Speciation Analysis of BAM Tape During Wildfire Smoke Events.** Kelly Cheng, ZHONG-MIN WANG, Jeff Wagner, Kazukiyo Kumagai, *California Department of Public Health*
- 2IM.12 Impact of Flow Rate on the Dilution Factor of Capillary Dilution Systems.** Lars Hillemann, Daniel Göhler, SCOTT HYDE, Tyler Beck, Stephan Grosse, Jan Müller, *Particle Instruments LLC*
- 2IM.13 How to Deduce an Overall Particle Size Distribution from Scanning Electron Microscopic Images of Multiple Magnifications.** Daniel Göhler, Petra Fiala, Benno Wessely, Lars Hillemann, SCOTT HYDE, Tyler Beck, Michael Stintz, Frank Babick, *Dresden Technical University*
- 2IM.14 Novel Balloon-Borne Devices for Experimental Investigation of Stratospheric Aerosols.** STEPHANIE EILTS, Lauren Wheeler, Philip Miller, Andrew Glen, Patrick Burton, Bryan Weaver, Nathan Wolff, Jessica Tran, Jake Zenker, Andres Sanchez, Erika Roesler, Daniel Bowman, Raymond Friddle, *Sandia National Laboratories*
- 2IM.15 A Low-cost In-Situ Instrument for Organic Aerosol Speciation Using Thermal Desorption.** Yaping Zhang, Xin Yang, XIAOFEI WANG, *Fudan University*
- 2IM.16 Enhanced Ion Delivery from a Surface-Discharge Microplasma Aerosol Charger Using Tangential Airflow.** RYO SHIBUI, Tomoya Tamadate, Toshiaki Sakai, Takafumi Seto, *Kanazawa University*
- 2IM.17 Development of a Low-Cost Optical Trap for Studying Phase Transitions of Single Suspended Aqueous Inorganic Microdroplets.** ALI ALOTBI, Evan Dalton, Cara Waters, Ryan Davis, Andrew P. Ault, *University of Michigan*
- 2IM.18 Bipolar Charging of Sub-20 nm Particles: High-Accuracy Measurements of Particle Charge Fractions and Ion Mobility Distributions.** FABIAN SCHMIDT-OTT, Robert T. Nishida, Jason S. Olfert, George Biskos, Juha Kangasluoma, *University of Helsinki, The Cyprus Institute*
- 2IM.19 Comparative Analysis of Low-Cost Particulate Matter Sensors in the Indoor Environment.** SALVATORE MILLETICH, Kirsten Koehler, *Johns Hopkins University*
- 2IM.20 High Pressure Bipolar Electrospray, Towards Simple nanoparticle Sources.** LUIS-JAVIER PEREZ-LORENZO, Christian Luebbert, *Yale University*
- 2IM.21 Widefield Fluorescence-Detected Photothermal Infrared Spectroscopy for Characterizing Aerosol Particles.** RANDI LIBIN-STRAUB, Abbygail Ayala, Eoghan Dillon, Rebecca L. Parham, Andrew P. Ault, *University of Michigan*

2NP NANOPARTICLES AND MATERIALS SYNTHESIS 1: POSTERS

EXHIBIT HALL NORTH

- 2NP.1 Determining Gas Temperature and Electron Density in Spark Discharge: Insights Into Nanoparticle Nucleation and Growth in the Gas Phase.** QINGQING FU, Ji Yung Ahn, Griffin Trayner, Tasnim Akbar Faruquee, Yiwei Zhu, Marien Simeni Simeni, Christopher J. Hogan, *University of Minnesota*

- 2NP.2 Crumpled Graphene Oxide (CGO)-Based Drug Delivery System.** YIMING XI, Shalinee Kavadiya, Daniel Bilbao, Russo Marco, Pratim Biswas, *University of Miami*
- 2NP.3 One-Step Synthesis of Nanostructured Spinel-Type High Entropy Oxide (HEO) Materials by the Flat Premixed Droplet-Seeded Flame (FPDSF) Method.** Owen S. Fuhr, Serdar Yildirim, TYLER PARK, Xiao-Dong Zhou, Francesco Carbone, *University of Connecticut*
- 2NP.4 Stable, High-Performance, and CO2 Tolerant High-Temperature Water Gas Shift (HT-WGS) Catalysts Using Multiple Promoters.** MOHD ASHHAR KHAN, Mark Swihart, *University at Buffalo – SUNY*

2RA REDUCING AEROSOL EXPOSURE WITH CONTROL TECHNOLOGIES AND INTERVENTIONS 1: POSTERS
EXHIBIT HALL NORTH

- 2RA.3 Optimizing Indoor Pollutant Exposure, Energy Consumption, and Thermal Comfort Using Deep Reinforcement Learning Agent.** NISHCHAYA KUMAR MISHRA, Nipun Batra, Sameer Patel, *Indian Institute of Technology Gandhinagar, India*
- 2RA.4 A Comparative Evaluation of Regeneration in Electret Filters.** HUI-JING LI, Ying-Chi Lin, Wei-Hung Chen, Sheng-Hsiu Huang, Chih-Wei Lin, Chih-Chieh Chen, *National Taiwan University*
- 2RA.5 Using Size-Resolved PM Measurements to Determine Fine and Ultrafine Particle Infiltration and Filtration Patterns in Older Educational Buildings.** JIANING BAO, Nigel Kaye, Ehsan Mousavi, Christopher Post, Andrew Metcalf, *Clemson University*
- 2RA.6 Experimental Evaluation of Additively Manufactured High-Efficiency Cyclones for Condensed Aerosol Removal.** Rafael Venancio Durand, Roberto Guido, Stefano Zago, PAOLO TRONVILLE, *Politecnico di Torino*
- 2RA.7 Spatiotemporal Size Distribution of Secondhand Cigarette Smoke in an Indoor Environment: A Manikin-Based Study.** JUDITH ARTHUR, Joseph Nyakundi, Michael Yermakov, Jun Wang, Sripriya Nannu Shankar, *University of Cincinnati*
- 2RA.8 Environmental Detection of Airborne Methicillin-Resistant Staphylococcus Aureus (MRSA) in Healthcare Environments and Laboratory Testing of MRSA Inactivation.** Xinyi Niu, Perminder Kaur, Judith Arthur, Joseph Nyakundi, Jagjit Yadav, Elizabeth Mckinley, Vivek Narendran, Missy Nurre, Arantzazu Eiguren-Fernandez, Chang-Yu Wu, SRIPRIYA NANNU SHANKAR, *University of Cincinnati*

2RM REMOTE AND REGIONAL ATMOSPHERIC AEROSOL 1: POSTERS – EXAMIING AEROSOL PHYSICOCHEMICAL PROPERTIES IN THE REMOTE ENVIRONMENT
EXHIBIT HALL NORTH

- 2RM.1 Assessing Black Carbon and Iron Oxide Aerosols: A Comparative Study Between Urban and Rural Environments in the Southeastern U.S.** SHREYA SURI, Lifei Yin, Bin Bai, Yuhan Yang, Dongli Wang, Andrew Metcalf, Nathan Chellman, James Sherman, Pengfei Liu, *Georgia Institute of Technology*
- 2RM.2 A Seasonal Investigation of Ambient Air Quality in the Mississippi Delta.** AMELIA SMITH, Samuel Smith, Abigail Barnett, Katarina Lindskog, Ryan Chartier, Tracy Dombek, Courtney Roper, *RTI International*
- 2RM.3 Aerosol Acidity Size-Dependence in a Remote Marine Environment.** KAYLEIGH REILLY, Tiantian Zhu, Cara Waters, Clare Murphy, Andreas Schmitt, Ruhi Humphries, Christina S. McCluskey, Kerri Pratt, Andrew P. Ault, *University of Michigan*
- 2RM.4 Advancing Airborne PFAS Characterization Near Industrial Sources Through Integrated Targeted and Non-targeted Offline Mass Spectrometry Analysis.** YOONSUB KIM, Yufan Hu, Michael Davern, Sahir Gagan, Margot Francini, Miska Olin, Xiangxinyue Meng, Sining Niu, Alana Doderio, Sarah D. Brooks, Yue Zhang, Jason Surratt, Barbara Turpin, *University of North Carolina at Chapel Hill*

- 2RM.5 Assessment of Wildfire Impact on Secondary Organic Aerosol Formation Using CMAQ–UNIPAR.** GANGHAN KIM, Myoseon Jang, Tamanna Tasnim, *University of Florida*
- 2RM.6 High–resolution Mass Spectrometric Analysis of Ultrafine Marine Aerosol Composition During the Eastern Pacific Cloud Aerosol Precipitation Experiments (EPCAPE).** TERESA PALACIOS DIAZ, Kristen Cramer, Anna Kapp, James Smith, *University of California, Irvine*
- 2RM.7 Observations of Particle Growth and Composition in the Mojave Desert.** KRISTEN CRAMER, Sanjeevi Nagalingam, Alex Guenther, James Smith, *University of California, Irvine*
- 2RM.8 Influence of Temperature Variations on PM2.5, Secondary Organic Aerosol (SOA), and SOA Precursor Loading in Urban and Rural Baltimore Region.** NAHIN FERDOUSI–ROKIB, Ayreanna Pettijohn, Omara Rosenfeld, Daniel C. Blomdahl, Keelie N. Steiner, Amira Yassine, Maria A. Zawadowicz, Akua A. Asa–Awuku, Christopher Hennigan, Benjamin A. Nault, Peter F. DeCarlo, *Johns Hopkins University*

2SA SOURCE APPORTIONMENT 1: POSTERS

EXHIBIT HALL NORTH

- 2SA.2 Machine Learning–Based Prediction of ICP–MS Results Using XRF Data.** HYEJIN SHIN, Taeyeon Kim, Seung–Muk Yi, Kwon Ho Jeon, Kyungmi Lee, Hyeog Ki Chae, *Seoul National University, Seoul, Korea*
- 2SA.3 Comparison of Carbon Analysis Protocols in PM2.5 Source Apportionment.** SUNGHWAN SHIM, Seung–Muk Yi, Kwon Ho Jeon, Taeyeon Kim, Minsu Kang, Sujung Han, Hyejin Shin, Jinwoo Choi, Jaewook Hwang, Yein Kim, *Seoul National University, Seoul, Korea*
- 2SA.4 Machine Learning Approaches for Replacing Missing Values in PM2.5 constituents.** SUJUNG HAN, Taeyeon Kim, Seung–Muk Yi, *Seoul National University, Seoul, Korea*
- 2SA.5 New Particle Formation from Biosolid Processing Plants.** SANGHEE HAN, Lintong Cai, Markus Petters, *University of California, Riverside*

2UA URBAN AEROSOLS 2: POSTERS

EXHIBIT HALL NORTH

- 2UA.1 Temporal Variability of Black Carbon in Jakarta and Bandung, Indonesia.** Muhayatun Santoso, Asta Gregorič, Martin Rigler, PHILIP K. HOPKE, *National Innovation and Research Agency (BRIN), Indonesia*
- 2UA.3 Integrated Energy and Air Quality Assessment of Clean Energy Initiatives in the New York State.** RICHARD MAHUZE, Bo Yuan, K. Max Zhang, *Cornell University*
- 2UA.5 Mapping Air Pollution Concentrations in Greater Boston Using Hyperlocal Mobile Sensing and Machine Learning.** ABIR SAHA, Mars Keeseey, Yang Zhang, Shang Liu, *Northeastern University*
- 2UA.6 Relative Importance of Primary Organic Aerosol Source Types across Spatiotemporal Scales in New York City.** LIJIN ZHANG, Mitchell Rogers, Taekyu Joo, Tori Hass–Mitchell, Catelynn Soong, Havalala Pye, Benjamin Murphy, Drew Gentner, *Yale University*
- 2UA.7 Urban Railroad Yards: An Underappreciated Source of Urban Black Carbon Particles.** PHILIP K. HOPKE, Marjan Savadkoohi, Kamsi Oparaugo, *Clarkson University and University of Rochester*
- 2UA.8 Aerosol Chemical Composition at an Urban Core Location in Nairobi, Kenya.** ABHISHEK ANAND, Godwin Opinde, Tedy Mustisya Mwendwa, Theobard Habineza, Albert Presto, Peter F. DeCarlo, Benjamin A. Nault, Daniel Westervelt, Leah Williams, *Columbia University*

2UA.9 An Integrated Global Assessment of Particle Number Concentrations: Spatiotemporal Variations, Source Contributions, Severe Air Pollution Episodes, Spatial Homogeneity, and the Pandemic Effects (2000–2024). MEHDI AMOUEI TORKMAHALLEH, Ali Darvishi Omrani, Marziyeh Kashani, Milad Malekitabrizi, Farzaneh Jafarigol, Faezeh Darvish Omrani, Hamed Sharifi, Mahsa Alishiri, Enoch Adotey, Philip K. Hopke, Lidia Morawska, Luca Ferrero, Martine Collaud Coen, Markku Kulmala, Tareq Hussein, Motahareh Naseri, Hilkka Timonen, Ville Vakkari, Armin Sorooshian, Tuukka Petäjä, Stergios Vratolis, Gulden Ormanova, Jarkko Niemi, Luca Stabile, et al., *University of Illinois at Chicago*

Tuesday 3:00 PM – 3:30 PM
Coffee Break (Exhibit Hall North)

Tuesday 3:30 PM – 5:00 PM
Session 3: Platform

3AC AEROSOL CHEMISTRY 3: AEROSOL TRANSFORMATIONS IN THE ATMOSPHERE: MECHANISMS AND LABORATORY EXPERIMENTS
101 DE – Anita Avery and Chris Kenseth, chairs

- 3AC.1 New Perspectives on Decades of SOA Formation Studies: A Comprehensive Laboratory Data Review from 3:30 UCR.** YANYU ZHANG, David R. Cocker III, *University of California, Riverside*
- 3AC.2 The Critical Role of Synthetic Chemistry in Identifying Isoprene–Oxidation Products Beta–HPALD in Isoprene–3:45 Derived Secondary Organic Aerosol.** REBECCA L. RICE, Zhenfa Zhang, Avram Gold, *University of North Carolina at Chapel Hill*
- 3AC.3 Particle–Phase Peroxides Form Carboxylic Acids in Pinene Secondary Organic Aerosol.** CHRISTOPHER KENSETH, 4:00 Jing Chen, Olivia Hakan, Donterrio Moore, Matthieu Riva, Michael Kamrath, Yuzhi Chen, John Shilling, Henrik Kjaergaard, Joel A. Thornton, *University of Washington*
- 3AC.4 Composition of Aerosols Formed by OH, Cl, or Ozone–initiated Oxidation of Limonene.** ANITA AVERY, Mitchell 4:15 Alton, Manjula Canagaratna, Andrew Lambe, *Aerodyne Research, Inc.*
- 3AC.5 Dependence of Reactive Oxygen Species Formation on Oxidation State of Biogenic Secondary Organic 4:30 Aerosols.** Kasey Edwards, LENA GERRITZ, Meredith Schervish, Manjula Canagaratna, Anita Avery, Mitchell Alton, Lisa Wingen, Jackson Ryan, Celia Faiola, Andrew Lambe, Sergey Nizkorodov, Manabu Shiraiwa, *University of California, Irvine*
- 3AC.6 Rethinking the Sources of Secondary Organic Aerosol: The Case of Sesquiterpenes and β –Caryophyllene.** 4:45 ANGELIKI MATRALI, Christina N. Vasilakopoulou, Stella Eftychia Manavi, Petro Uruci, Damianos Pavlidis, Elena Voutsina, Spyros N. Pandis, *University of Patras, Greece*

3AP AEROSOL PHYSICS 3: AEROSOL OPTICAL PROPERTIES & DIAGNOSTICS
106 AD – Matthew Berg and Georgios Kelesidis, chairs

- 3AP.1 Observation and Real–Time Monitoring of Soot Superaggregates with Small Angle Light Scattering.** RAIYA 3:30 EBINI, Justin Maughan, Kurt Ehlers, Prakash Gautam, Hans Moosmüller, Christopher M. Sorensen, *American Ecotech*
- 3AP.2 The Color of Aerosols: In Situ Imaging with Color Digital Holography.** MATTHEW BERG, *Kansas State University* 3:45
- 3AP.3 Infrared Spectral Modeling for Detection of Aerosols using the Complex Refractive Indices.** Jessica Salcido, 4:00 Schuyler Lockwood, Tracy Baker, Alla Zelenyuk, Tanya Myers, TIMOTHY JOHNSON, *Pacific Northwest National Laboratory*

- 3AP.4 High-Resolution Measurements of Mineral Dust Light Absorption.** TOMMASO ISOLABELLA, Clarissa Baldo, Marco Brunoldi, Mathieu Cazaunau, Claudia Di Biago, Paola Formenti, Federico Mazzei, Edouard Panguì, Franco Parodi, Paolo Prati, Bénédicte Picquet-Varrault, Virginia Vernocchi, Dario Massabò, *University of Genoa*
- 3AP.5 The Impact of Particle Size and Volatile Organics on the Light Absorption of Wildfire-like Brown Carbon Emissions from Wood Combustion.** Constantinos Moularas, Irini Tsiodra, Nikolaos Mihalopoulos, Philip Demokritou, GEORGIOS A. KELESIDIS, *Delft University of Technology*
- 3AP.6 Modeled and Observed Relationships Between Mass Absorption Cross Section (MAC) and Absorption Ångström Exponent (AAE).** Marjan Savadkoohi, Aki Virkkula, Marco Pandolfi, Andrés Alastuey, PHILIP K. HOPKE, *Institute of Environmental Assessment and Water Research*

3CE CHEMICALS OF EMERGING CONCERN IN INDOOR AND OUTDOOR AEROSOL: SOURCES, VECTORS, REACTIVITY, AND IMPACTS
3: INFLUENCE OF EMERGING CONTAMINANTS ON HEALTH AND THE ENVIRONMENT
101 CF – Meredith Schervish and Paul Ziemann, chairs

- 3CE.1 Global and Regional Simulations of EPFR Concentrations From Biomass Burning and Anthropogenic Sources Using GEOS-Chem and Their Contribution to ROS Production in the Lung Lining Fluid.** MEREDITH SCHERVISH, Pascale Lakey, Regina Luu, Manabu Shiraiwa, *University of California, Irvine*
- 3CE.2 Characterization of PM2.5-Bound Carcinogenic PAHs and Their Emission Sources on the Western Coast of India.** JAMSON MASIH, Lorraine Tellis, Sachin Gupta, *Chemistry Department, Wilson College*
- 3CE.3 Application of Aerosol Techniques to Measure Nanoscale Particles Leached from Plastic Infant Feeding Products.** STEPHANIE JACOBY, Chun-Ning Mao, James Radney, Akua A. Asa-Awuku, *University of Maryland*
- 3CE.4 Aerosol Mass Spectrometry Analysis of Common Nanoplastic Particles.** LIN KONG, Michael A.R. Tawadrous, Alex K.Y. Lee, Man Nin Chan, Arthur W. H. Chan, *University of Toronto*
- 3CE.5 Remote Sensing of Microplastic Aerosols Using GRASP Open Spheroid Modeling.** CAMILLE TEDDER, Alexandria Johnson, Gouri Prabhakar, Olga Kalashnikova, *Purdue University*
- 3CE.6 Characterizing the Atmospheric Oxidation and Cloud Condensation Nuclei Activity of the Polystyrene Nanoplastic Particles.** SAHIR GAGAN, Alana Doderò, Miska Olin, Ruizhe Liu, Zezhen Cheng, Sining Niu, Janie (Yeaseul) Kim, Andrew Lambe, Yuzhi Chen, Swarup China, Yue Zhang, *Texas A&M University*

3HR HEALTH RELATED AEROSOLS 2: ASSESSMENTS OF AEROSOL HEALTH EFFECTS
106 BC – Ying-Hsuan Lin and Sinan Sousa, chairs

- 3HR.1 Simultaneous Puff and Puff Associated Respiration Topography in the Natural Environment for Juul Ecig.** RISA ROBINSON, Shehan Jayasekera, Edward Hensel, *Rochester Institute of Technology*
- 3HR.2 Effects of Power and E-Liquid Constituents on Secondhand Electronic Cigarette Emissions.** SARAH FRESQUEZ, Gabriela Gabriela, Emma Piner, Talia Chavis, Sinan Sousan, *Department of Public Health, East Carolina University*
- 3HR.3 Formation of Tobacco-Specific Nitrosamines from the Atmospheric Aging of Nicotine.** WONSIK WOO, Linhui Tian, Ying-Hsuan Lin, *University of California, Riverside*
- 3HR.4 Development and Application of a Novel Aerosol Respiratory Deposition Method to Assess Health Risks of Metals in E-Cigarette Aerosol.** WEI-CHUNG SU, Jinho Lee, *University of Texas Health Science Center at Houston*

- 3HR.5

A Comprehensive Approach for Detecting and Locating Black Carbon in Human Placentae.

DENISE IVEY, Amanda Sanko, Barbara Tisdale, Philip Katzman, Thomas O'Connor, Kaye Thomas, Tanzy Love, Rogelio Perez-D'Gregorio, Carolyn Salafia, Ronald Wood, Atsuo Chiu, Richard Miller, Philip K. Hopke, *University of Rochester School of Medicine and Dentistry*
- 4:30
- 3HR.6

A High-throughput Lung Air-blood Barrier Assay for Aerosol Toxicity Evaluation.

SEONGBIN JO, Liang-Hsin Chen, Shuichi Takayama, Nga Lee Ng, *Georgia Institute of Technology*
- 4:45

3IM INSTRUMENTATION AND METHODS 3

101 AH – Fan Mei and Jingkun Jiang, chairs

- 3IM.1

Bridging the Gap Between Single-Particle Measurements and Aerosol Models With SPIN-Sim.

KYUHAENG LEE, Maria A. Zawadowicz, Xiaoli Shen, Daniel Cziczo, Arthur J. Sedlacek, Matthew West, Nicole Riemer, *University of Illinois at Urbana-Champaign*
- 3:30
- 3IM.2

Online Water-to-Air Ammonia and Amine Flux Measurement System using Chemical Ionization Mass Spectrometry.

CHRISTINE TROLLER, Coty Jen, *Carnegie Mellon University*
- 3:45
- 3IM.3

Re-Analysis of Long-Term Aerosol Mass Spectrometer Data: Homogenizing 13 Years of Measurements.

JULIETTE BROCHET, Hasna Chebaicheb, Yunjiang Zhang, Laura Cadeo, Valerie Gros, Philip Croteau, Olivier Favez, Jean-Eudes Petit, *LSCE*
- 4:00
- 3IM.4

Bipolar FUSION PTR-TOF Mass Spectrometer: Advantages of Multiple Reagent Ions to Characterize Oxidation and Secondary Organic Aerosol Formation.

TOBIAS REINECKE, Markus Leiminger, Andreas Klinger, Todd Rogers, Martin Graus, Markus Mueller, *IONICON Analytik GmbH, Innsbruck, Austria*
- 4:15
- 3IM.5

Exploring Ionization Mechanisms and Accelerated Chemical Reactivity with Droplet Assisted Ionization-Mass Spectrometry.

BRYAN R. BZDEK, Joshua Harrison, Edward Neal, Jim Walker, *University of Bristol*
- 4:30
- 3IM.6

Rapid In-Situ Detection of Aerosolized Chemicals of Interest by Single Particle Mass Spectrometry.

SCHUYLER LOCKWOOD, Alla Zelenyuk, *Pacific Northwest National Laboratory*
- 4:45

3UA URBAN AEROSOLS 3: URBAN PM SPATIAL AND TEMPORAL SCALES

101 BG – Mitchell Rogers and Jie Zhang, chairs

- 3UA.1

Spatial Heterogeneity in Urban Heat and PM2.5 Co-variation: A Multi-site Sensor Study in Pittsburgh.

TZUCHI LIN, Albert Presto, *Carnegie Mellon University*
- 3:30
- 3UA.2

Evaluating Fine-Scale Air Quality Heterogeneity Using a Low-Cost Multi-pollutant Sensor Network in Twin Cities, Minnesota.

Varuni Abhayaratne, WEIXING HAO, Anjana Yatawara, Philip K. Hopke, Jiayu Li, Yang Wang, *University of Miami*
- 3:45
- 3UA.3

Spatiotemporal Variation in Ambient Particulate Metal Concentrations from Heavy Firework Activity in the Los Angeles Area Associated with the Independence Day Holiday: Initial Analysis of Filter Samples and ASCENT Data.

DANIEL B. CURTIS, Zeinab Khalil, Tyler Deflin, Haroula D. Baliaka, Ryan Ward, John Seinfeld, Richard Flagan, Bradley Ries, Yumeng Cui, Roya Bahreini, Eleanor Bentley, Lelia Hawkins, Nga Lee Ng, Ann M. Dillner, Armistead G. Russell, *California State University, Fullerton*
- 4:00
- 3UA.4

Elevated Aerosol and VOC Concentrations in Imperial Beach, California, Associated with Sewage Discharges to the Tijuana River and Ocean.

LEA EL KHOURY, Shihao Zhai, Katarina Konon, Daniel Sung, Chou-Hsien Lin, Evelyn Deveraux, Kimberly Prather, Pawel K. Misztal, Lea Hildebrandt Ruiz, *University of Texas at Austin*
- 4:15

- 3UA.5 Episodic Air Pollution and Environmental Pressures from Industrialization in Qaragandy City, Central Kazakhstan.** 4:30 GULDEN ORMANOVA, Philip K. Hopke, Fatma Ozturk, Alexey Alexeyev, Yertay Otarov, Nurxat Nuraje, Gulzat Demeuova, *Renewable Energy Lab, National Lab Astana, Nazarbayev Univ.*
- 3UA.6 Urban Aerosol Properties Measured in Southeast Asian During the 2024 NASA ASIA-AQ Flight Campaign.** 4:45 SAYANTEE ROY, Francesca Gallo, Carolyn Jordan, Edward Winstead, Elizabeth Wiggins, Michael Shook, Raphael Maerkl, Guy Symonds, Dongwook Kim, Seonsik Yun, Douglas A. Day, Pedro Campuzano-Jost, Jose-Luis Jimenez, Luke Ziemba, Richard Moore, *NASA Langley Research Center*

Tuesday 5:00 PM – 6:00 PM
Working Group Meetings 1: Aerosol Chemistry (101 DE)

Tuesday 5:00 PM – 6:00 PM
Working Group Meetings 1: Combustion and Materials Synthesis (101 CF)

Tuesday 5:00 PM – 6:00 PM
Working Group Meetings 1: Indoor Aerosols and Aerosol Exposure (101 BG)

Tuesday 5:00 PM – 6:00 PM
Working Group Meetings 1: History of Aerosol Science (106 BC)

Tuesday 5:00 PM – 6:00 PM
Working Group Meetings 1: Instrumentation and Methods (106 AD)

Tuesday 6:00 PM – 8:00 PM
Welcome Reception (Exhibit Hall North)

Tuesday 7:00 PM – 8:00 PM
Mentor/Mentee Meet-Up (During Welcome Reception in Exhibit Hall North)

Tuesday 6:00 PM – 8:00 PM
Session 4: Meet the Job Seekers (Exhibit Hall North)

- 4JS MEET THE JOB SEEKERS: POSTERS
EXHIBIT HALL NORTH
- 4JS.1 Caroline Frischmon, Ph.D. Candidate in Mechanical Engineering, seeking postdoctoral research position.**
CAROLINE FRISCHMON, *University of Colorado Boulder*
- 4JS.2 Tristalee Mangin, Project Manager and PhD Candidate at the University of Utah Chemical Engineering Department, Looking for Post-Doctoral or National Laboratory Position.** TRISTALEE MANGIN, *University of Utah*
- 4JS.3 Sudheer Salana, Postdoc at the University of Miami, Seeking Positions in R&D Institutions, and Faculty Jobs.**
SUDHEER SALANA, *University of Miami*
- 4JS.4 Uzzal K. Dash, Postdoc at The Ohio State University, Seeking Postdoctoral/Research Scientist/Engineer Position in the Field of Atmospheric Chemistry/Modeling.** UZZAL KUMAR DASH, *Ohio State Univiersity*
- 4JS.5 Mohammad Washeem, Ph.D. Candidate in Environmental Engineering – Seeking Research Roles in Aerosol Science and Public Health.** MOHAMMAD WASHEEM, Chang-Yu Wu, *University of Miami*
- 4JS.6 Alok Kumar Thakur, Ph.d. Candidate in Earth and Environmental Engineering, Seeking a Postdoctoral/ Research Associate/Scientist Position.** ALOK KUMAR THAKUR, *Indian Institute of Technology Gandhinagar*
- 4JS.7 Nishchaya Kumar Mishra, PhD Candidate in Civil Engineering Seeking a Postdoctoral/Research Associate/ Scientist Position.** NISHCHAYA KUMAR MISHRA, *Indian Institute of Technology Gandhinagar*

- 4JS.8 Yixiang Wang, Postdoctoral Research Associate, Seeking Faculty or Research Scientist Position in Air Pollution and Environmental Health.** YIXIANG WANG, *College of Health, Lehigh University*
- 4JS.9 Pradeep Kumar, PhD Candidate in Environmental Health, Seeking Postdoctoral Position in Bioaerosols and Air Quality Research.** PRADEEP KUMAR, *South Dakota State University*
- 4JS.11 Katherine (Katie) Kolozsvari, Graduate Student at University of Michigan, Seeking a PostDoc Position.** KATHERINE KOLOZSVARI, *University of Michigan*
- 4JS.12 Nohhyeon Kwak, Ph.D. Student in Mechanical Engineering, Seeking a Postdoctoral, Research Associate, Scientist, or National Lab Position in the U.S. Starting Fall 2026.** NOHHYEON KWAK, *University of Miami*
- 4JS.13 Jianing Bao, Ph.D. Candidate in Environmental Engineering, Seeking Industry or Consulting Position near Atlanta, GA.** JIANING BAO, *Clemson University*
- 4JS.14 P. S. Ganesh Subramanian, Ph.D. Candidate, University of Illinois at Urbana-Champaign, Seeking Postdoctoral Positions in Aerosol Measurements/Health Effects/Epidemiology.** P. S. GANESH SUBRAMANIAN, *University of Illinois Urbana-Champaign*
- 4JS.15 Yaling Zeng + Research Assistant Professor + Health Effects of Aerosols.** YALING ZENG, *Southern University of Science and Technology*
- 4JS.16 Archana Tripathy, Ph.D. Candidate in Atmospheric Science – Seeking Postdoc or Research Scientist Role in Atmospheric Chemistry.** ARCHANA TRIPATHY, *University at Albany*
- 4JS.17 Chemical Engineering PhD Candidate Seeking Research Scientist Roles.** CHRISTINE TROLLER, *Carnegie Mellon University*
- 4JS.18 Dongli Wang, Ph.D Candidate Seeking Postdoctoral or Industry Positions.** DONGLI WANG, *Clemson University*
- 4JS.19 Aerosol Scientist.** WAJIH UR REHMAN, *COMSATS University Islamabad*
- 4JS.20 Sining Niu, Ph.D, Student, Industry/Government/Postdoc Positions.** SINING NIU, *Texas A&M University*
- 4JS.22 Lena Gerritz, PhD Candidate in Atmospheric Chemistry Seeking Post-Doctoral or Government Research Position.** LENA GERRITZ, *University of California, Irvine*
- 4JS.23 Sofie Schwink, Environmental Engineering PhD Candidate, Postdoctoral Researcher/Research Scientist.** SOFIE SCHWINK, *University of Colorado Boulder*
- 4JS.24 Evan Dalton, Ph.D., Postdoctoral Scholar, Looking for Career Opportunities for Analytical Chemists in the Midwest.** EVAN DALTON, *University of Michigan*
- 4JS.26 Sithumi M. Liyanage, Ph.D. Candidate in Atmospheric Chemistry – Seeking Research Scientist or Postdoctoral Role in Atmospheric Chemistry.** SITHUMI LIYANAGE, *Oklahoma State University*
- 4JS.27 Minghao Han, Ph.D. Candidate, Seeking Postdoctoral, Research Scientist, or Aerosol Instrumentation Development Roles in Atmospheric Chemistry & Aerosol Science.** MINGHAO HAN, *University of California, Riverside*
- 4JS.28 Rebecca Parham, Graduate Student at University of Michigan, Looking for Federal or Industrial Position in Midwestern or Southern U.S.** REBECCA L. PARHAM, *University of Michigan*

- 4JS.29 Advancing Respiratory Protection and Exposure Assessment Through Applied Aerosol Science.** XINYI NIU, *University of Cincinnati*
- 4JS.30 Laura Heinlein, PhD Candidate at the University of California, Davis Seeking Postdoc/Government Positions.** LAURA MARIE DAHLER HEINLEIN, *University of California, Davis*
- 4JS.31 Esther Olonimoyo, Ph.D. Candidate, University of Maryland College Park, Postdoctoral/Industry Positions.** ESTHER OLONIMOYO, *University of Maryland*
- 4JS.32 Kiran Reddy Pitta, Ph.D. Candidate, Seeking Postdoctoral, Research Scientist, or Industry Positions.** KIRAN REDDY PITTA, *The Pennsylvania State University*
- 4JS.33 Cara Waters, Graduate Student at University of Michigan, Seeking Postdoctoral Position.** CARA WATERS, *University of Michigan*
- 4JS.34 Komal Jaswal, Ph.D. Candidate, Seeking Postdoctoral, Research Scientist, or Industry Positions.** KOMAL JASWAL, *The Pennsylvania State University*
- 4JS.35 Ajmal Rasheeda Satheesh, Ph.D Student Seeking Industry or Postdoctoral Positions.** AJMAL RASHEEDA SATHEESH, *North Carolina State University*
- 4JS.36 Sahir Gagan, Ph.D, Student, Industry/Government/Postdoc Positions.** SAHIR GAGAN, *Texas A&M University*

Wednesday

Wednesday 6:30 AM – 7:30 AM
AAAR Fun Run/Walk (Hotel Lobby)

Wednesday 7:00 AM – 8:00 AM
Committee Meetings 3 – Education (Room 103)

Wednesday 7:00 AM – 8:00 AM
Committee Meetings 3 – Finance (Room 104)

Wednesday 7:00 AM – 8:00 AM
Committee Meetings 3 – Newsletter (Room 105)

Wednesday 8:00 AM – 9:15 AM
Plenary 2 (Ballroom)

8:00 Lundgren–Marple Lecture: Aerosol Transport Phenomena: A Tale of Two Knudsen Numbers Christopher J. Hogan, *University of Minnesota*

Moderator Carlos Larriba-Andaluz, *Purdue University*

9:00 Liu and Whitby Awards Presentation, AS&T Outstanding Publication and Outstanding Reviewer Awards Presentation Gabriel Isaacman–VanWertz and Jonthan P. Reid, *Virginia Tech and the University of Bristol*

Wednesday 9:00 AM – 4:00 PM
Exhibits Open (Exhibit Hall North)

Wednesday 9:15 AM – 9:45 AM
Coffee Break (Exhibit Hall North)

Wednesday 9:45 AM – 11:30 AM
Session 5: Platform

5AC AEROSOL CHEMISTRY 4: AQUEOUS CHEMISTRY: AEROSOLS, DROPLETS, INTERFACES, AND BULK SOLUTIONS

101 DE – Bryan Bzdek and Lexy LeMar, chairs

5AC.1 Exploring Solvation and Aggregation Effects in Microdroplets Using Time-Resolved Fluorescence. MIN-HSIEN (TONY) KAO, Conlan Broderick, Jim Walker, Thomas A. A. Oliver, Andrew J. Orr-Ewing, Bryan R. Bzdek, *University of Bristol*

5AC.2 Salting Effects Alter the Gas-Aqueous Partitioning and SOA Potential of Formic and Acetic Acid. AMIR BABAEI-GHAREHBAGH, Rose Taylor, Vikram Pratap, Annmarie Carlton, Christopher Hennigan, *University of Maryland, Baltimore County*

5AC.3 Time-resolved Photochemistry of Pyruvic Acid. CONLAN BRODERICK, Min-Hsien (Tony) Kao, Bryan R. Bzdek, Andrew J. Orr-Ewing, *University of Bristol*

5AC.4 Water Surfaces and Multiphase Chemistry in/on Droplets: Towards a Molecular View of Atmospheric Chemistry at the Air-Aqueous Solution Interface. ALEXANDRA DEAL, Franky Bernal, Andreas Siebert, Alexander Prophet, Mauricio Lopez Luna, Monika Blum, Richard Saykally, Kevin R. Wilson, *Lawrence Berkeley National Laboratory*

5AC.5 Aqueous Processing of Volatile Organoselenium-derived Secondary Aerosols Results in Reactive Oxygenated Species Production. MICHAEL LUM, Ying Zhou, Erin Bowey, Lillian Tran, Linhui Tian, Wonsik Woo, Dimitri Niks, Aiden Pianalto, Yiwen Zhu, Yujie Men, Don Collins, Roya Bahreini, Ying-Hsuan Lin, *University of California, Riverside*

5AC.6 Probing Reaction Pathways of RO₂ Radicals in the Atmospheric Aqueous Phase. LEXY LEMAR, Seamus Frey, Yaowei Li, Frank Keutsch, Jesse Kroll, *MIT*

5AC.7 Using a Particle-Resolved Model to Design Cloud Chamber Experiments for IEPOX-SOA Formation. MANISHKUMAR SHRIVASTAVA, Jie Zhang, Steven Krueger, John Shilling, Alla Zelenyuk, Yuzhi Chen, Richard Flagan, Mikhail Ovchinnikov, Raymond Shaw, Will Cantrell, Tania Gautam, Gourihar Kulkarni, Mikhail Pekour, *Pacific Northwest National Laboratory*

5AP AEROSOL PHYSICS 4: AEROSOL INTERFACIAL PHENOMENA

106 AD – Jonathan Reid and Alison Bain, chairs

5AP.1 The Role of Interfacial Processes in Accelerated Reaction Kinetics in Aqueous Microdroplets. Shu Yang, Meng Li, Justin Wang, Vicki Grassian, Satish Kumar, CARI DUTCHER, *University of Minnesota*

5AP.2 Surface and Interfacial Tensions Affect Size-dependent Phase Separation in Droplets. ANDREAS ZUEND, Ryan Schmedding, *McGill University*

5AP.3 Describing the Surface Tension of Aerosol Droplets Containing Mixtures of Organic Solutes. ALISON BAIN, *Oregon State University*

5AP.4 Influence of Surfactants on Morphology and Phase State of Internally Mixed Atmospheric Aerosol Particles. REENA JAGLAN, Miriam Freedman, *The Pennsylvania State University*

5AP.5 Single-Droplet Techniques for Analysis of Evaporation Kinetics and Particle Morphology in Spray Dryers. Barnaby Miles, Lukesh K. Mahato, Rachael E.H. Miles, Emmanuelle Costard, Jewe Schröder, Arend Dubbelboer, JONATHAN P. REID, *University of Bristol*

5AP.6 Chemical Composition Dependent Morphology of Model Bioaerosols Generated in Aerovirological Studies. DEEPAK SAPKOTA, Yuhui Guo, Zhenpeng Qin, Hui Ouyang, *The University of Texas at Dallas*

5AP.7 Evaporation Kinetics and Dried Agglomerate Particles Morphology of Aqueous Aerosol Droplet Containing Nanoparticles. LUKESH K. MAHATO, Panagiotis Georgiou, Barnaby Miles, Sorrel K. Haughton, Rachael E.H. Miles, Steven P. Armes, Jonathan P. Reid, *University of Bristol*

11:15

5CE CHEMICALS OF EMERGING CONCERN IN INDOOR AND OUTDOOR AEROSOL: SOURCES, VECTORS, REACTIVITY, AND IMPACTS
4: IMPROVED METHODOLOGIES AND ADVANCED UNDERSTANDING OF THE CHEMICAL REACTIVITY OF EMERGING CONTAMINANTS
101 CF – Trevor VandenBoer and Yue Zhang, chairs

5CE.1 Gas and Aerosol Phase PFAS Measured with Iodide HR-ToF-CIMS in Houston. Zachary Watson, Lee Tiszenkel, Vignesh Vasudevan Geetha, SHANHU LEE, *The University of Alabama in Huntsville*

9:45

5CE.2 Heterogeneous Reaction of Perfluorinated Carboxylic Acids (PFCAs) with Aerosol Proxies: Implications for Aerosol-Mediated Long-Range Transport. TREVOR VANDENBOER, Nasrin Dashti, Elizabeth Gaona-Colmán, Jeremy Wentzell, John Liggio, Cora Young, *York University*

10:00

5CE.3 Condensed-phase Hydrolysis of Per- and Polyfluoroalkyl Substances (PFAS). EMMA D'AMBRO, Benjamin Murphy, Ivan Piletic, Havala Pye, Jesse Bash, *US Environmental Protection Agency*

10:15

5CE.4 Real-Time Detection of Particle-Phase Per- and Polyfluoroalkyl Substances (PFASs) Using Aerosol Mass Spectrometry. XIANGXINYUE MENG, Sahir Gagan, Barbara Turpin, Jason Surratt, Yue Zhang, *Texas A&M University*

10:30

5CE.5 Effects of an Ether Group on the Mechanism, Products, and Nitrate and Secondary Organic Aerosol Yields for the Reaction of Dioctyl Ether with OH/NOx. Anna Ziola, John Orlando, PAUL ZIEMANN, *University of Colorado Boulder*

10:45

5CE.6 Variable-Depth Surface Composition Measurements of Micro- and Nano-Plastics Using Matrix Assisted Laser Desorption Ionization (MALDI) Mass Spectrometry. SAMANTHA KRUSE, Andre Benally, Mohammad Shohel, Steven Storch, Jake Zenker, Andres Sanchez, Jess Kustas, Ryan Davis, *Sandia National Laboratories*

11:00

5CE.7 Mobile Metals Measurements Using a New Microwave-Induced Plasma Time-of-Flight Mass Spectrometer examining Roadways and Industrial Sites. EDWARD FORTNER, Alexander Gundlach-Graham, Martin Tanner, Conner Daube, Jay G. Slowik, André S. H. Prévôt, John Jayne, Douglas Worsnop, *Aerodyne Research, Inc.*

11:15

5ES EXHIBITOR AND INSTRUMENT APPLICATION SHOWCASE 1
EXHIBIT HALL NORTH – Amy Sullivan and Julie Stone, chairs

5ES.1 PTR-TOF: Real Time Analysis of Volatile and Condensed Organics on a Molecular Composition Level. MARKUS MUELLER, Todd Rogers, Tobias Reinecke, *IONICON Analytik GmbH., Innsbruck, Austria*

9:45

5ES.2 Designing a Successful Community-Engaged Particulate Matter Sampling Campaign with the Ultrasonic Personal Air Sampler. JESSICA TRYNER, Gabe Neymark, Luis Hernandez Ramirez, Mollie Phillips, Xiaoying Li, Daniel Dean, Grant Erlandson, Bonnie Young, Sherry WeMott, Nayamin Martinez, Sheryl Magzamen, *Access Sensor Technologies*

10:30

5ES.3 The TSI Portable Water CPC: OmniCount 3002. JUSTIN S. KOCZAK, Daniel R. Troolin, Andrea J. Tiwari, Noah Bock, Aaron Avenido, *TSI Incorporated*

11:00

5HR HEALTH RELATED AEROSOLS 3: TOXICITY OF OUTDOOR AND INDOOR AEROSOLS
106 BC – Tran Nguyen and Roby Greenwald, chairs

- 5HR.1 Salivary Metabolomics and Air Pollution Exposure in Toddlers: Black Carbon and PM2.5 are Associated with Pathways Related to Inflammatory Regulation.** ROBY GREENWALD, Yu Jung Lin, Bisan Hammid, Nadia Alhadidi, Patrick Chepaitis, Donghai Liang, *Georgia State University*
9:45
- 5HR.2 Modeling the Formation of Reactive Oxygen Species in SOA Using Explicitly Predicted Organic Products and Its Comparison with Chemical Assay Data.** ANTHONY CHUNG, Myoseon Jang, *University of Florida*
10:00
- 5HR.3 Reduced Organic Nitrogen Dominates Atmospheric Organic Particle Toxicity.** YALING ZENG, Xin Yang, *Southern University of Science and Technology*
10:15
- 5HR.4 Assessing the Toxicological Interactions Between Two Biotic and Abiotic Components of Indoor Aerosols: Mold and Air Fresheners.** SUDHEER SALANA, Avraham Moshe Friedman, Jess Austin, Luis Angel Nino Barreat, Mohammad Washeem, Chang-Yu Wu, *University of Miami*
10:30
- 5HR.5 Chemical and Oxidative Properties of Indoor PM: Discerning the Influence of Residential Characteristics.** P. S. GANESH SUBRAMANIAN, Alice Oloo, Vinh Vo, Brenda Koester, Vishal Verma, Sheena E. Martenies, *University of Illinois Urbana-Champaign*
10:45
- 5HR.6 Seasonal Variation and Source Contribution to PM2.5 Oxidative Potential and Environmentally Persistent Free Radicals in Atlanta, GA at the ASCENT Site.** MINHAN PARK, Ma. Cristine Faye Denna, Kasey Edwards, Ruizhe Liu, Sohyeon Jeon, Seongbin Jo, Anna Kaehr, Nga Lee Ng, Manabu Shiraiwa, Pengfei Liu, Rodney J. Weber, *Georgia Institute of Technology*
11:00
- 5HR.7 Superoxide Release from Macrophages upon Exposure to Secondary Organic Aerosols, Biomass Burning, Plastic Combustion, and Brake Wear Particles.** Kasey Edwards, Ting Fang, Rizana Salim, Caitlyn Cruz, Sukriti Kapur, Sachin S. Gunthe, James Smith, Sergey Nizkorodov, MANABU SHIRAIWA, *University of California, Irvine*
11:15

5IM INSTRUMENTATION AND METHODS 4
101 AH – Coty Jen and Jia Jiang, chairs

- 5IM.1 What Ten Years of Evaluating "Low-Cost" Particulate Matter Sensors Can Tell Us About Coarse Fraction and Humidity Biases.** NAMRATA SHANMUKH PANJI, Noel Ruiz, Xiaobi M. Kuang, Victor Rocha Jr., Brandon Feenstra, Wilton Mui, *South Coast Air Quality Management District*
9:45
- 5IM.2 Assessing the Accuracy and Reliability of a New Ambient Ultrafine Particle Monitor for Quantifying Total Particle Number Concentration at Three ASCENT Sites.** DAVID HAGAN, Can Barut, Sohyeon Jeon, Ruizhe Liu, Nga Lee Ng, Haroula D. Baliaka, Vine Blankenship, Ryan Ward, Purushottam Kumar, John Seinfeld, Richard Flagan, Mitchell Rogers, Lijin Zhang, Tori Hass-Mitchell, Taekyu Joo, Drew Gentner, *QuantaQ, Inc.*
10:00
- 5IM.3 Calibration of Low-Cost Particulate Matter (PM2.5) Sensors under West Africa Weather: A Year-Long Evaluation Integrating K-Kohler Hygroscopic Correction and Machine Learning.** JAMES NIMO, Yusif Ibrahim-Anyass, Mathias A. Borketey, Nancy Owusuaa, Nathaniel Obeng Anim, Emmanuel Banahene Asante, Selina Amoah, Esi Nerquaye-Tetteh, Victoria Owusu-Tawiah, Michael R. Giordano, Daniel Westervelt, Md. Aynul Bari, Raphael E. Arku, Allison Felix Hughes, *University at Albany, State University of New York*
10:15
- 5IM.4 Characterization of a Novel, Mid-Cost Device for Ambient Monitoring of Ultrafine Particles.** UNA TRIVANOVIC, Osnan Maragoto Rodriguez, Kevin Auderset, Florian Huewe, Konstantina Vasilatou, *Federal Institute of Metrology METAS*
10:30
- 5IM.5 Enabling Real-Time, Low-Cost Measurement of Hazardous Air Pollutants: A Multidimensional Approach.** TALHA JUBAIR, James Hurley, Anum Khan, Namrata Shanmukh Panji, Amanda Gao, Jesse Kroll, Gabriel Isaacman-VanWertz, *Virginia Tech*
10:45

5IM.6 Fundamental Understanding of Low-Cost Sensor Response.	SREEKESH KOOKKAL, Suresh Dhaniyala, <i>Clarkson University</i>
5IM.7 Automated Measurement of Particle-Phase Organic Compounds Using Chip-Scale Gas Chromatography.	VIKAS GOEL, Nipun Thammatam, Nathan Kreisberg, Zinoy Manappadan, Jyothi Chintalapalli, Suman Dewanjee, John Michalek, Chien Nguyen, Masoud Agah, Gabriel Isaacman-VanWertz, <i>Virginia Tech</i>
5UA URBAN AEROSOLS 4: URBAN PM CHEMISTRY 101 BG – Justin Hamlin and Benjamin Nault, chairs	
5UA.1 Gas-Particle Distribution of D5 Oxidation Products in New York City During Summertime.	JOSIE WELKER, Jeewani Meepage, Charles Stanier, Elizabeth Stone, <i>University of Iowa</i>
5UA.2 Secondary Aerosol Formation under Variable Relative Humidity and OH Exposure: Field Observations Using an Oxidation Flow Reactor in Bakersfield, California.	YING ZHOU, Alexander B. MacDonald, Xuanlin Du, Roya Bahreini, Don Collins, <i>University of California, Riverside</i>
5UA.3 Can Acid-Base Aerosol Nucleation Be Applied to All Urban Settings in the World?	Lee Tiszenkel, James Flynn, Alana Doder, SHANHU LEE, <i>University of Alabama Huntsville</i>
5UA.4 Aerosol Chemical Composition Within the Paris Region, France: What Can We Learn from 13 Years of Continuous Online Measurements?	JEAN-EUDES PETIT, Juliette Brochet, Yunjiang Zhang, Hasna Chebaicheb, Olivier Favez, <i>LSCE</i>
5UA.5 PM2.5 Composition, Sources, Chemistry and Volatility over Manila: Insights from the ASIA-AQ Campaign.	GUY SYMONDS, Pedro Campuzano-Jost, Dongwook Kim, Douglas A. Day, Seonsik Yun, Eric Apel, Rebecca Hornbrook, Alan Hills, Daun Jeong, Taehyoung Lee, Taehyun Park, Jihee Ban, Armin Wisthaler, Felix Piel, Tobias Reinecke, Wojciech Wojnowski, Richard Moore, Luke Ziemba, Michael Shook, ASIA-AQ Science Team, Maria Cambaliza, Melliza Cruz, James Simpas, James Crawford, Jose-Luis Jimenez, <i>University of Colorado Boulder</i>
5UA.6 A Coupled Condensational-Growth Colorimetric Approach for Direct Field Measurements of Ambient Aerosol Acidity.	EVAN DALTON, Yao Xiao, Cara Waters, Emily Costa, Drew Gentner, Andrew P. Ault, <i>University of Michigan</i>
5UA.7 Tracking Variations in Heatwave-Induced Aerosol Concentration and Chemical Composition Following Emission Reductions in NYC's Downwind Region.	JIE ZHANG, Tianyu Zhu, Qi Zhang, Nga Lee Ng, Alexandra Catena, Janie Schwab, Jorge E. Gonzalez-Cruz, Shan Zhou, Jianzhong Xu, Julia Stuart, Amanda Teora, Dirk Felton, James Schwab, <i>Atmospheric Sciences Research Center, University at Albany</i>

Wednesday 11:30 AM – 1:00 PM
AS&T Editorial Board Luncheon (Board Meeting Room)

Wednesday 11:30 AM – 1:00 PM
Early Career Event (Exhibit Hall South)

Wednesday 12:00 PM – 1:00 PM
Committee Meetings 4 – Development (Room 103)

Wednesday 12:00 PM – 1:00 PM
Committee Meetings 4 – Membership (Room 104)

Wednesday 12:00 PM – 1:00 PM
Committee Meetings 4 – Bylaws (Room 105)

Wednesday 1:00 PM – 3:00 PM
Session 6: Platform

6AC AEROSOL CHEMISTRY 5: AEROSOL PH AND PHASE

101 DE – Michael Jacobs and Cara Waters, chairs

6AC.1 Direct Measurement of the Acidity of Model Marine Aerosol Particles Using Carbon Quantum Dots. VICTORIA
1:00 ADEKUNLE, Komal Jaswal, Miriam Freedman, *The Pennsylvania State University*

6AC.2 Expanding Aerosol Acidity Measurements to the Water-Limited Regime and Complex Chemical Systems: A Coupled Condensational Growth and Colorimetric Approach. CARA WATERS, Mia B. Kauffman, Evan Dalton, Zhenfa Zhang, Avram Gold, Jason Surratt, Andrew P. Ault, *University of Michigan*

6AC.3 Direct Determination of Aerosol Acidity in Model Continental Aerosol Particles. KOMAL JASWAL, Victoria
1:30 Adekunle, Miriam Freedman, *The Pennsylvania State University*

6AC.4 Understanding Surface pKa of Molecules in Macroscale Solution and Microdroplets: A partitioning perspective. Rebika Tamang, Jacob Twichell, Madelyn Johnston, MICHAEL JACOBS, *Texas State University*

6AC.5 Measurements of Surrogate Respiratory Sessile Droplet pH and Implications for Exhaled Respiratory Aerosol and Airborne Disease Transmission. Jiangnan Tian, Beiping Luo, Aidan Rafferty, Allen E. Haddrell, Ulrich Krieger, JONATHAN P. REID, *University of Bristol*

6AC.6 Influence of Inorganic Ions on the Phase Behavior of Organic Rich Aerosol Particles. KIRAN REDDY PITTA, Komal
2:15 Jaswal, Sylvain Foisy, Miriam Freedman, *The Pennsylvania State University*

6AC.7 Unveiling the Mixing Behavior of Secondary Organic Aerosols from Isoprene and Trimethyl Benzene. YUZH
2:30 CHEN, Rahul Zaveri, Alla Zelenyuk, Claire E. Moffett, Gregory W. Vandergrift, Swarup China, John Shilling, *Pacific Northwest National Laboratory*

6AC.8 Controlling the Morphology of Microparticles Formed by Evaporation of Aerosol Droplets Containing Polymer Nanoparticles. SORREL K. HAUGHTON, Panagiotis Georgiou, Lukesh K. Mahato, Steven P. Armes, Jonathan P. Reid, *University of Bristol*

6BQ BURNING QUESTIONS OF AEROSOL EMISSIONS, CHEMISTRY, AND IMPACTS FROM WUI FIRES 2: STRUCTURE FIRES

106 AD – Kevin Ridgway and Sergey Nizkorodov, chairs

6BQ.1 Emerging Pollutant Emissions from the Combustion of Built Materials. Hongru Shen, Bradley H. Isenor, Carolyn
1:00 Liu-Kang, Mohamad H. Al-Jabiri, Rowshon Afroz, Amanda Hanashiro Moraes, Shakiba Talebian, Oscar Olfert, Ginny Marshall, Alex K.Y. Lee, Samar Moussa, Sumi Wren, Jeremy Wentzell, Amy Leithead, Jason S. Olfert, Ran Zhao, John Liggio, ARTHUR W. H. CHAN, Jonathan Abbatt, *University of Toronto*

6BQ.2 Aerosol Emission Factors for Structural Fuels in Wildland-Urban-Interface Fires. KEVIN RIDGWAY, Anna
1:15 Helfrich, Lily Cast, Amy P. Sullivan, Aika Davis, Ryan Falkenstein-Smith, Thomas Cleary, Rodney Bryant, Mathew Bundy, Christian L'Orange, Shantanu Jathar, *Colorado State University*

6BQ.3 Characterization of Speciated Aerosol Emissions from Combustion of Furnished Structures. MICHAEL MILAZZO,
1:30 Nathan Kreisberg, Robert Weber, Wuquan Cui, Bryce Bathras, Siyan Wang, Faraz Hedayati, Michael Gollner, Allen Goldstein, *University of California, Berkeley*

6BQ.4 Flying Through Fire: Drone-Based Emissions Measurements From Structure and Prescribed Fires. ABIGAIL
1:45 MABEN, Karthick Mohan Kumar, Emilio Molina Rueda, John Flynn, Misa Soto, Clara McMullin, Gabriel Isaacman-VanWertz, Christopher Robertson, Jack Gottschalk, Jessica Tryner, Tami Bond, John Volckens, Christian L'Orange, Shantanu Jathar, *Colorado State University*

- 6BQ.5 Chemical Composition and Photolytic Aging of Urban Material Burning Smoke.** SERGEY NIZKORODOV, Matt Zaragoza, Luis Ruiz Armenta, Noam Levi, Katherine Hopstock, Manabu Shiraiwa, Abigail Smith, Qiaorong Xie, Alexander Laskin, Gregory W. Vandergrift, Swarup China, Zezhen Cheng, Shantanu Jathar, Zoë Golay, Evan Chartrand, Allan K. Bertram, *University of California, Irvine*
- 6BQ.6 Impact of Flame Retardants on the Physical and Chemical Properties of Residential Combustion Aerosol from Furniture Foams.** Riley Weatherholt, Bailey Bowers, Amila De Silva, Heather Stapleton, Carrie McDonough, RYAN SULLIVAN, *Carnegie Mellon University*
- 6BQ.7 Optical Properties of Aerosols Generated from a Simulated Structural Burn.** GEOFFREY SMITH, Ryan Poland, John Allen, Muhammad Abdurrahman, Michael Caraway, Thomas Carroll, Mike Lesiak, Mac A. Callaham, Joseph O'Brien, Andrew Metcalf, Pengfei Liu, Rawad Saleh, *University of Georgia*
- 6BQ.8 Environmentally Persistent Free Radicals, Reactive Oxygen Species, and Oxidative Potential of Fine Particulate Matter Generated From Burning Natural Fuels and Building Materials.** BRADLEY H. ISENR, Hongru Shen, Lena Gerritz, Brianna Lauper-Cook, Amanda Hanashiro Moraes, Ginny Marshall, Manabu Shiraiwa, Jason S. Olfert, Ran Zhao, Jonathan Abbatt, Arthur W. H. Chan, *University of Toronto*

6CC AEROSOLS, CLOUDS AND CLIMATE 2: USING FIELD DATA TO CONSTRAIN AEROSOL CLOUD INTERACTIONS
101 BG – RuiChen Zhou and Francesca Gallo, chairs

- 6CC.1 Aerosol Fluxes and Boundary-Layer Coupling in New Particle Formation: Case Studies from the ARM ArcticShark Measurements.** RUOYU ZHANG, Fan Mei, Damao Zhang, Yang Wang, *University of Miami*
- 6CC.2 ASIA-AQ Flight Campaign Reveals Impacts of Transboundary Aerosol Transport in Southeast Asia.** FRANCESCA GALLO, Gangwoong Lee, Meehye Lee, Taehyoung Lee, Carolyn Jordan, Sayantee Roy, Michael Shook, Elizabeth Wiggins, Edward Winstead, Luke Ziemba, Richard Moore, *NASA Langley*
- 6CC.3 Aircraft Observations of Ice Nucleating Particles in the Arctic and Sub-Arctic Boundary Layer and Free Troposphere.** RUSSELL PERKINS, Ryan Patnaude, Camille Mavis, Kevin Barry, Kerri Pratt, Vanessa Selimovic, Andrew Holen, Logan Forshee, Paul DeMott, Sonia Kreidenweis, Paquita Zuidema, Bart Geerts, Greg McFarquhar, Sebastian Schmidt, *Colorado State University*
- 6CC.4 Seasonal Variability, Sources, and Parameterization of Ice-Nucleating Particles in the Rocky Mountain Region During SAIL.** RUICHEN ZHOU, Russell Perkins, Drew Juergensen, Kelton Ayars, Oren Dutton, Paul DeMott, Sonia Kreidenweis, *Colorado State University*
- 6CC.5 The Role of Aerosol Properties in Determining Deep Convection Cloud Properties.** SARAH D. BROOKS, Seth Thompson, Bo Chen, Taylor Peña, Brianna Matthews, Anita Rapp, Christopher Nowotarski, Ziying Lei, Milind Sharma, *Texas A&M University*
- 6CC.6 Aerosol Particle Measurements and Cloud Properties During the Southern Ocean Clouds (SOC) Campaign in November and December 2024.** LEAH WILLIAMS, James Allan, Michael Flynn, David Beddows, James Brean, Simone Louw, Irina Gorodetskaya, Timothy Onasch, Stephen Jones, Mark Tarn, Imogen Wadlow, Nina Kinney, Manuel Dall'Osto, Amélie Kirchgaessner, Thomas Lachlan-Cope, *Aerodyne Research, Inc.*
- 6CC.7 Quantifying Timescales for Below-Cloud Removal of Particles by Precipitation.** CHRISTOS STAMATIS, Chenyang Bi, Gabriel Isaacman-VanWertz, *Virginia Tech*
- 6CC.8 Long-Term Trends in Aerosol Optical Properties and Biomass Burning Influence at the Southern Great Plains.** MANISHA MEHRA, Yang Wang, Sujana Shrestha, Arthur J. Sedlacek, Yan Feng, Janek Uin, *University of Miami*

6CE CHEMICALS OF EMERGING CONCERN IN INDOOR AND OUTDOOR AEROSOL: SOURCES, VECTORS, REACTIVITY, AND IMPACTS
5: NON-EXHAUST TRAFFIC EMISSIONS AND URBAN AIR QUALITY

- 6CE.1 Tire, Road or Both – Examining the Sources of Ultrafines at the Tire–Road Interface.** Siriel Saladin, Josh Hassim, 1:00 Molly J. Haugen, David O'Loughlin, Chiara Giorio, ADAM M. BOIES, *University of Cambridge*. INVITED.
- 6CE.2 Secondary Organic Aerosol Formation from Gaseous Tire Emissions: Laboratory Characterization and Real–World Implications.** MINGHAO HAN, Don Collins, *University of California, Riverside* 1:30
- 6CE.3 Probing the Molecular Composition of Organic Particulate Matter from Automotive Braking and Identification of Brake Tracers in Near–Roadway Ambient Environments.** BERENICE ROJAS, Adam Thomas, Lisa Wingen, 1:45 Madeline Cooke, Véronique Perraud, Samuel La Salle, Sanjeevi Nagalingam, Barbara Finlayson–Pitts, James Smith, *University of California, Irvine*
- 6CE.4 Chemical Characterization of Tire Wear Particles: Size–Resolved Composition and Source Signatures in Near–Road PM Samples.** XING WANG, Yushan Su, Colman Wong, Michael A.R. Tawadrous, Chelsea Rochman, Bonnie 2:00 Hamilton, Alex K.Y. Lee, Greg J. Evans, Arthur W. H. Chan, *University of Toronto*
- 6CE.5 Secondary Organic Aerosol from Anthropogenic Terpenes and Terpenoids and Contributions to Air Quality in United States Cities.** Masoud Akbarzadeh, Huiying Luo, Abraham Dearden, Havala Pye, Lauren A. Garofalo, 2:15 Delphine K. Farmer, Tucker Melles, Cort Zang, Megan Willis, Matthew Coggon, Carsten Warneke, Damien Ketcherside, Lu Hu, Nga Lee Ng, James Hurley, Gabriel Isaacman–VanWertz, Benjamin Murphy, SHANTANU JATHAR, *Colorado State University*
- 6CE.6 High–Resolution Spatial and Temporal Characterization of Particulate Matter in Kigali Using Mobile Sampling.** THEOBARD HABINEZA, Albert Presto, Allen Robinson, *Carnegie Mellon University* 2:30
- 6CE.7 Urban VOCs: Novel Chiral Measurements of Monoterpenes and AVOCs in Los Angeles.** JACKSON RYAN, Thaomy 2:45 Vo, William Berelson, Celia Faiola, *University of California, Irvine*

6IM INSTRUMENTATION AND METHODS 5

101 AH – Ogochukwu Enekwizu and Coty Jen, chairs

- 6IM.1 Comparison Sulfuric Acid Measurements at the DOE SGP Field Site by a Transverse and Parallel Flow Chemical Ionization Inlet Coupled With a Time–Of–Flight Mass Spectrometer.** JOY KIGURU, Dominic Casalnuovo, Christine 1:00 Troller, Jenna DeVivo, Nirvan Bhattacharyya, Coty Jen, *Carnegie Mellon University*
- 6IM.2 Continuous Chemical Characterization and Variability of Ultrafine Particulate Matter (PM_{0.1}) at one Urban and one Background Site.** GEORGIA A. ARGYROPOULOU, Christina N. Vasilakopoulou, Kalliopi Florou, Christos 1:15 Kaltsonoudis, Angeliki Matrali, Andreas Aktypis, Maria Georgopoulou, Katerina Seitanidi, Christina Christopoulou, Panagiotis Kalkavouras, Nikolaos Mihalopoulos, Spyros N. Pandis, *Institute of Chemical Engineering Sciences, Greece*
- 6IM.3 Performance Evaluation of an Optical Particle Counter in Mexico City.** ANIL NAMDEO, Elizabeth Vega, A. Mezza, 1:30 Ann Wellens, *Northumbria University and Particles Plus Inc.*
- 6IM.4 Optimizing PurpleAir PM_{2.5} Data in a South Asian Megacity: One–Year Machine Learning Calibration and Correction Factor Development in Dhaka, Bangladesh.** JAMES NIMO, Md. Aynul Bari, Lauren Riviere, Kaylia 1:45 Morgan, Abhijeet Sarkar, Chowdhury Arafat Hossain, Sanjeev Delwar, Abdus Salam, Provat Saha, *University at Albany, State University of New York*
- 6IM.5 Performance Analysis of Nested Inlet for Sampling Stratospheric Aerosol (NISSA) on a NASA WB–57 High Altitude Aircraft during SABRE 2025 Test Flights.** NAGARAJAN RADHAKRISHNAN, Charles Brock, Suresh Dhaniyala, 2:00 Frank Keutsch, Sophie Abou–Rizk, Michael Greenberg, *Clarkson university*

- 6IM.6

Evaluating Low-Cost Instrumentation for Ultrafine Particle Number Monitoring in Urban and Suburban Environments.

AARON COLLINS, Rob Caldow, *OpenAeros LLC*

2:15
- 6IM.7

Integrating Low-Cost Sensors with the New York State Mesonet for Continuous, Dense PM2.5 Monitoring in New York City.

ELLIE HOJEILY, Jason Covert, Scott Miller, Kit Moore, Md. Aynul Bari, Cheng-Hsuan Lu, Janie Schwab, *Atmospheric Sciences Research Center, University at Albany*

2:30
- 6IM.8

OPERA: A New Platform for Next Generation Aerosol Sensing.

SURESH DHANIYALA, Ajay Sonar, Sreekesh Kookkal, Brandon Beattie, Claire Fortenberry, *Clarkson University*

2:45

6RA REDUCING AEROSOL EXPOSURE WITH CONTROL TECHNOLOGIES AND INTERVENTIONS 2: FILTRATION

106 BC – Jeffrey Siegel and David Kormos, chairs

- 6RA.1

Uncovering Real-World Implementation of HEPA Portable Air Cleaners in Schools: A Bayesian Latent Class Approach to Improve Exposure Assessment.

NASIM ILDIRI, Kevin Josey, Nathaniel Ramirez, Anna Segur, Julia Poje, Bowen Du, Jeffrey Siegel, Thomas Jaenisch, Mark Hernandez, *University of Colorado at Boulder*. INVITED.

1:00
- 6RA.2

Performance of Portable Air Cleaners During a Randomized Crossover Trial in Three Multi-Unit Residential Buildings.

ALEXANDER MENDELL, Seungjae Lee, Jeffrey Siegel, *University of Toronto*

1:30
- 6RA.3

Not All Boxes Are Equal: Investigation of Parameters Affecting Removal of PM2.5 Particles by Corsi-Rosenthal Box.

ANTONIO BARATTA, Taewon Han, Gediminas Mainelis, *Rutgers, The State University of New Jersey*

1:45
- 6RA.4

Improving Classroom Air Quality in Schools: Field Study of Air Filtration, Ventilation, Monitoring, and Implications for Energy Performance.

TANYA SHIRMAN, Sissi Liu, *VP of Materials*

2:00
- 6RA.5

Improving Classroom Indoor Air Quality with DIY Corsi-Rosenthal Boxes.

Misti Zamora, Sharmin Akter, Marina Creed, Jessica Hollenbach, Angela Jiang, Noah Kosh, Britney Russell, Alexis West, Martin Wolek, KRISTINA WAGSTROM, *University of Connecticut*

2:15
- 6RA.6

Long-Term Size Dependent Filtration Efficiency Test (ASHRAE 52.2) and Clean Air Delivery Rate Test (CADR) of 5" MERV 16 Air Filters Used in DIY Air Cleaners Operated in K-12 Schools.

DEVABHAKTUNI SRIKRISHNA, Christopher Barnes, *PatientKnowhow.com*

2:30
- 6RA.7

An Integral Approach to Quantifying the Clean Air Delivery Rate (CADR) of Indoor Air Cleaning Devices.

SAMAN HARATIAN, P. S. Ganesh Subramanian, Vishal Verma, Mohammad Heidarinejad, Brent Stephens, Max Sherman, *Illinois Institute of Technology*

2:45

Wednesday 3:00 PM – 3:30 PM

Coffee Break (Exhibit Hall North)

Wednesday 3:30 PM – 5:00 PM

Session 7: Platform

7AC AEROSOL CHEMISTRY 6: AMBIENT AEROSOL CHEMISTRY AND NEW PARTICLE FORMATION

101 DE – Trevor vandenBoer and Archana Tripathy, chairs

- 7AC.1

PM2.5 Composition at the Houston-Liberty ASCENT Site.

ANANDI WILLIAMS, Subin Yoon, Eugenia Velasco-Cunningham, Sergio Alvarez, Robert Griffin, James Flynn, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Nga Lee Ng, Fangzhou Guo, *University of Houston*

3:30

- 7AC.2 Characteristics of Size – Resolved Organic Aerosols Using Offline Aerosol Mass Spectrometry: NYC–METS, Part of the 2023 AEROMMA Campaign.** XU HE, Corin Tyler, Yao Xiao, Emily Costa, Delaney Schulteiss, Kayleigh Reilly, Ruizhe Liu, Athena Xu, Nga Lee Ng, Drew Gentner, Andrew P. Ault, Rachel O'Brien, *University of Michigan*
3:45
- 7AC.3 Abundance and Gas–Particle Partitioning of Inorganic Bromine in the Remote Atmosphere.** DONGWOOK KIM, Pedro Campuzano–Jost, Benjamin A. Nault, Jason Schroder, Douglas A. Day, Michael Cubison, Jack Dibb, Patrick Veres, J. Andrew Neuman, Jin Liao, Greg Huey, Yuk Chun Chan, Lyatt Jaegle, Alan Fried, Thomas Ryerson, Andrew Weinheimer, Glenn Diskin, Eric Apel, Rebecca Hornbrook, Alan Hills, Donald Blake, Rainer M. Volkamer, Jose–Luis Jimenez, *CIRES & University of Colorado Boulder*
4:00
- 7AC.4 Molecular–Level Understanding of New Particle Formation Processes Under the Conditions Relevant to Mixed Forests in the Southeastern United States.** LEE TISZENKEL, Vignesh Vasudevan Geetha, Astrid Pedersen, Jonas Elm, Shanhu Lee, *The University of Alabama in Huntsville*
4:15
- 7AC.5 The Detection Efficiency of Sulfuric Acid Using a Nitrate–CIMS: Impacts of Base Molecules.** JUN ZHENG, *Nanjing University of Information Science and Technology*
4:30
- 7AC.6 Characterizing the Stability and Composition of Size Resolved MSA–Amine Aerosol Nanoclusters from 1 – 2.5 nm.** COLLEEN MILLER, Paulus Bauer, Véronique Perraud, Barbara Finlayson–Pitts, James Smith, *University of California, Irvine*
4:45

7BQ BURNING QUESTIONS OF AEROSOL EMISSIONS, CHEMISTRY, AND IMPACTS FROM WUI FIRES 3
106 AD – Parichehr Salimifard, chair

- 7BQ.2 Indoor Building Materials as Reservoirs for Prolonged Wildfire Sourced VOC Exposure.** RACHEL HURLEY, Shichao Liu, Anita Avery, Manjula Canagaratna, Chenyang Bi, *Worcester Polytechnic Institute*
3:45
- 7BQ.3 Impact of Wildfire Smoke on the Performance of Air Purifiers.** DONGRYUL PARK, Shibo Wang, Qisheng Ou, Kiwon Seo, Hyungho Park, David Y. H. Pui, *LG Electronics*
4:00
- 7BQ.4 Wildfire and Prescribed Burn Smoke Preparedness and Indoor Air Quality in Schools: Long–Term Air Quality Monitoring in Schools.** PARICHEHR SALIMIFARD, Jalil Mokhtarian Mobarakeh, C. Victoria McCrary, Sara Jones, Perry Hystad, Molly Kile, *Oregon State University*
4:15
- 7BQ.5 Measuring Particulate Matter Emissions from Prescribed Fires.** ANNAMARIE GUTH, Marissa Dauner, Sean Benjamin, Evan Coffey, Alexandra Fowler, Spencer Hoel, Chad Hoffman, E. Louise Loudermilk, Peter Hamlington, Michael Hannigan, *University of Colorado Boulder*
4:30
- 7BQ.6 High–Resolution PM2.5 Metals in Pittsburgh: Trends, Fireworks, and Wildfire Impacts from the ASCENT Network.** ZIHENG ZENG, Abhishek Anand, Theobard Habineza, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Nga Lee Ng, Coty Jen, Albert Presto, *Carnegie Mellon University*
4:45

7CC AEROSOLS, CLOUDS AND CLIMATE 3: LABORATORY AND MODELING TOOLS TO EXAMINE AEROSOL CLOUD INTERACTIONS
101 BG – Miriam Freedman, chair

- 7CC.1 Hygroscopicity of Organic Aerosol from Wildfire Emissions.** NAGENDRA RAPARTHI, Anthony S. Wexler, Ann M. Dillner, *University of California, Davis*
3:30
- 7CC.2 Diffusion and Salting in Effects on Isoprene–Derived Secondary Organic Aerosol Mixture Proxy Hygroscopicity.** NAHIN FERDOUSI–ROKIB, Stephanie Jacoby, N. Cazimir Armstrong, Alana Dodero, Martin Ahn, Ergine R. Remy, Zhenfa Zhang, Avram Gold, Joseph Woo, Yue Zhang, Jason Surratt, Akua A. Asa–Awuku, *University of Maryland, College Park*
3:45

- 7CC.3 Urban Aerosol Particles from One of the Largest Tropical Megacities Are Able to Act as Ice Nucleating Particles Facilitating Cirrus Cloud Formation.** SEBASTIÁN MENDOZA-TÉLLEZ, Bingbing Wang, Jiyu Gao, Graciela Binimelis de Raga, Luis A. Ladino, *Universidad Nacional Autónoma de Mexico*
4:00
- 7CC.4 A GPU-Enabled Aerosol Model for Global Kilometer-Scale Earth System Modeling.** JEROME FAST, Balwinder Singh, Oscar Diaz-Ibarra, James Overfelt, Michael Schmidt, Brian Gaudet, Meng Huang, Chandru Dhandapani, Kai Zhang, Mingxuan Wu, Shuaiqi Tang, Kyle Pressel, Jaelyn Litzinger, Po-Lun Ma, *Pacific Northwest National Laboratory*
4:15
- 7CC.5 Oxygen Vacancies as Features of Ice-Nucleating Metal Oxides.** RYAN MITCH, Ayat Tassanov, Brendan Troesch, Mikyung Hwang, Konstantinos Alexopoulos, James Hodges, Miriam Freedman, *The Pennsylvania State University*
4:30
- 7CC.6 Ice Nucleation Activity of Polyvinyl Alcohol/Polyvinyl Acetate Polymer Solutions.** Heidi L. Busse, Anjali Baikerikar, MIRIAM FREEDMAN, *The Pennsylvania State University*
4:45

7DA ADVANCING AEROSOL SCIENCE THROUGH DATA ANALYSIS TOOLS 2
101 CF – Geoffrey Smith and Abishek Anand, chairs

- 7DA.1 Using Machine Learning to Derive Long-Term Aerosol Liquid Water Concentrations from Aerosol Optical Properties.** LIFEI YIN, Bin Bai, Shreya Suri, Yuhan Yang, James Sherman, Robert Swarthout, Pengfei Liu, *Georgia Institute of Technology*
3:30
- 7DA.2 A Lagrangian Time-Series Machine Learning Framework for Predicting Concentrations and Exploring Drivers of Cloud Condensation Nuclei in Marine Boundary Layer.** Shengqian Zhou, Dong Qi, Hanyang Liu, Chenyang Lu, Yevgeniy Vorobeychik, JIAN WANG, *Washington University in St. Louis*
3:45
- 7DA.3 Identifying Local Emission Sources via an Integrated Computer Vision and Vision-Language Models (VLMs) Approach.** JINTAO GU, Hongpufan Huang, Boyuan Niu, K. Max Zhang, *Cornell University*
4:00
- 7DA.4 Application of Clustering Algorithms for Improved Source Apportionment with Photothermal Infrared Spectra from Individual Particles Collected in New York City.** ABBYGAIL AYALA, Yao Xiao, Eduardo Ochoa Rivera, Kayleigh Reilly, Emily Costa, Xu He, Corin Tyler, Drew Gentner, Rachel O'Brien, Ambuj Tewari, Andrew P. Ault, *University of Michigan*
4:15
- 7DA.5 Multiview Conformal Prediction (MVCP) Utilizes Infrared and Raman Spectra for Improved Atmospheric Microplastic Identification.** REBECCA L. PARHAM, Eduardo Ochoa Rivera, Madeline E. Clough, Abbygail Ayala, Anne J. McNeil, Ambuj Tewari, Andrew P. Ault, *University of Michigan*
4:30
- 7DA.6 A Machine Learning Model for Automating Soot Morphology Analysis from TEM Images.** TIMOTHY DAY, Khaled Mosharraf Mukut, Somesh Roy, *Marquette University*
4:45

7IM INSTRUMENTATION AND METHODS 6
101 AH – Suresh Dhaniyala and Schuyler Lockwood, chairs

- 7IM.1 Capture and Preservation of Single Aerosol Particles Through an Aerosol-Into-Emulsion Transition Approach.** YI-BO ZHAO, Li Li, Bernard Olson, Christopher J. Hogan, *University of Minnesota*
3:30
- 7IM.2 Development and Validation of an Extractive Dilution System for In-situ Measurement of Residential Wood Heating Appliance PM Emissions Using a TEOM.** GEORGE ALLEN, Mark Champion, *NESCAUM*
3:45
- 7IM.3 Understanding Surface Mediated Redox Chemistry in Charged Microdroplets.** Michael Jacobs, FIROZ AHMED, *Texas State University*
4:00

- 7IM.4 Development and Characterization of a Hydration Spectrometer (HySpec) System for Studying Aerosol Cloud Interactions.** OGOCHUKWU ENEKWIZU, Ernie R. Lewis, Arthur J. Sedlacek, *Brookhaven National Laboratory*
4:15
- 7IM.5 Investigations of Particle Evaporation Kinetics Using Ultra-High Purity Aerosolization and Heating.** DEREK OBERREIT, Jikku Thomas, Michael Walker, *Kanomax FMT, Inc.*
4:30
- 7IM.6 Diffusion Constriction Study to Provide Virtually Limitless Resolution in Ion Mobility on Structures for Lossless Ion Manipulation (SLIM) Platforms.** CARLOS LARRIBA-ANDALUZ, Mohsen Latif, *Purdue University*
4:45

7RA REDUCING AEROSOL EXPOSURE WITH CONTROL TECHNOLOGIES AND INTERVENTIONS 3: BEYOND FILTRATION
106 BC – Sarah Haines and Christine McCool, chairs

- 7RA.1 Multi-City Equity Assessment of Air Quality Intervention Policies.** MOHAMMED AHMED, Daniel Gingerich, Andrew A. May, *The Ohio State University*
3:30
- 7RA.2 Lactic Acid-Based Chemical Air Interventions Disrupt Aeroallergen Structure and Immunodetection.** TESS EIDEM, Kristin Rugh, Mark Hernandez, *University of Colorado at Boulder*
3:45
- 7RA.3 In-Situ Performance of an Electrostatic Precipitator in a Swine Facility and Its Comparison to Fibrous Filters.** HASAN AL TARIFY, Qingqing Fu, My Yang, Bernard Olson, Christopher J. Hogan, Montserrat Torremorell, *University of Minnesota*
4:00
- 7RA.4 Bridging the Biosecurity Gap: High-Efficiency Air Cleaning in Confined Animal Feeding Operations Using Cyclone Plasma Technology.** ANTONIO BARATTA, Raj Singh, Hema Ravindran, Gediminas Mainelis, *KiposTech LLC*
4:15
- 7RA.5 In-Situ Filtration and Air Cleaning.** JEFFREY SIEGEL, *University of Toronto*
4:30
- 7RA.6 Assessing Window AC and Portable AC Filter Performance on Removing Particulate Matter from Wildfire Smoke.** RILEIGH ROBERTSON, Henrik Helmig, Marina Vance, *CU Boulder*
4:45

Wednesday 5:00 PM – 6:00 PM
Working Group Meetings 2: Aerosol Physics (101 DE)

Wednesday 5:00 PM – 6:00 PM
Working Group Meetings 2: Atmospheric Aerosols (101 CF)

Wednesday 5:00 PM – 6:00 PM
Working Group Meetings 2: Bioaerosols (106 BC)

Wednesday 5:00 PM – 6:00 PM
Working Group Meetings 2: Control and Mitigation Technology (101 BG)

Wednesday 5:00 PM – 6:00 PM
Working Group Meetings 2: Health Related Aerosols (106 AD)

Wednesday 6:00 PM – 7:00 PM
Annual Business Meeting (Ballroom)

Wednesday 7:00 PM – 10:00 PM
AAAR Musical Bingo & Dinner Bash (Exhibit Hall South)

Thursday

Thursday 7:00 AM – 8:00 AM

Committee Meetings 5 – Conference (Room 103)

Thursday 7:00 AM – 8:00 AM

Committee Meetings 5 – Publications (Room 104)

Thursday 7:00 AM – 8:00 AM

Committee Meetings 5 – Representation and Equity Affairs (Room 105)

Thursday 8:00 AM – 9:15 AM

Plenary 3 (Ballroom)

8:00 **AEESP Lecture: US and Global Aerosol Speciation Monitoring Networks: Successes and Opportunities** Ann M. Dillner, *University of California, Davis*

Moderator Roya Bahreini, *University of California, Riverside*

9:00 **Sinclair and Teaching, Mentoring, and Training Awards Presentation, Announcement of Mercer Award** Gabriel Isaacman–VanWertz, *Virginia Tech*

Thursday 9:00 AM – 3:30 PM

Exhibits Open (Exhibit Hall North)

Thursday 9:15 AM – 9:45 AM

Coffee Break (Exhibit Hall North)

Thursday 9:45 AM – 11:30 AM

Session 8: Platform

8AC AEROSOL CHEMISTRY 7: AEROSOL TRANSFORMATIONS IN THE ATMOSPHERE: MECHANISMS AND LABORATORY EXPERIMENTS II

101 DE – Hannah Kenagy and Rebecca Rice, chairs

8AC.1 Chlorine Production from Photocatalysis of Iron Chloride Aerosol as a Potential Methane Sink. JIN YAN, Marie K. Mikkelsen, Luisa Pennacchio, Maarten van Herpen, Matthew S. Johnson, Mingyi Wang, *University of Chicago*

8AC.2 Modeling the Impacts of Volatile Chemical Products (VCPs) on Ozone and Secondary Organic Aerosol Using the SAPRC Mechanism. JESSICA COATS, Amirashkan Askari, Craig Stroud, Arthur W. H. Chan, *University of Toronto*

8AC.3 Illuminating Chemical Mechanism Gaps through Modeling Secondary Pollutants from Volatile Chemical Products. AMEL KSAIBATI, Huiying Luo, Abraham Dearden, Matthew Coggon, Katelyn Rediger, Carsten Warneke, Lu Tan, Damien Ketcherside, Lu Hu, Cort Zang, Tucker Melles, Audrey Lawrence, Megan Willis, Lauren A. Garofalo, Brett Palm, Julia Lee–Taylor, Shantanu Jathar, *Colorado State University*

8AC.4 Oxidative History Controls the Composition and Fate of Biomass–Burning–derived Phenolic compounds: Sequential OH and NO₃ Oxidation. MADELEINE SZE IN NG, David Pando, Bin Bai, Heather O. LeClerc, Pengfei Liu, Drew Gentner, Andrew Lambe, Nga Lee Ng, *Georgia Institute of Technology*

8AC.5 Photooxidation of Dimethyl Selenide by OH and OH+NO_x: Chemical Products and Bulk Aerosol Properties. ERIN BOWEY, Linhui Tian, Lillian Tran, Alexa Canchola, Michael Lum, Yumeng Cui, Ying Zhou, Don Collins, Ying–Hsuan Lin, Roya Bahreini, *University of California, Riverside*

8AC.6 Comparing the Heterogeneous Reactivity of Viscous and Gel State Particles. STEPHANIE SALAS, Craig Sheldon, Teresa Palacios Diaz, Katie Morton, Kyle McMillan, Ryan Davis, James F. Davies, *University of California, Riverside*

8AC.7 A Comparison of Ambient and Chamber Organic AMS Spectra Under Varying RO₂ Regimes. Elinor Caballero, Nadia Tahsini, Matthew Goss, Lesly Franco Deloya, Erik Helstrom, Jesse Kroll, HANNAH KENAGY, *University of Minnesota*

- 8BA.1 Understanding the Size and Prevalence of Respiratory Viruses in Hospital Settings.** KERRY KELLY, Md. Tanvir Ahmed, Kamaljeet Kaur, Elizabeth Myers, Darrah Sleeth, Selah Willis, Chase Crimmins, Kristi Warren, *University of Utah*
9:45
- 8BA.2 Weekly HVAC Filter Surveillance of Respiratory Viruses in University Settings: Linking Viral Loads to Airborne Viral Concentrations and Infection Risk.** ZHOUYUAN WANG, Liang Zhao, Irene Xagorarakis, Kaisen Lin, *Michigan State University*
10:00
- 8BA.3 Measurement of Airborne Respiratory Viruses Using an Electrostatic Particle Concentrator and Paper Immunosensors in Laboratory and School Environments.** JAEGIL LEE, Chanhwi Park, Wonyoung Jeon, Jaesung Jang, *Ulsan National Institute of Science and Technology (UNIST)*
10:15
- 8BA.4 Detailed Physical and Chemical Characterization of Respiratory Aerosol: Implications for Airborne Viral Viability.** RYAN DAVIS, Paul Tumminello, Andres Sanchez, Samantha Kruse, Stephen House, Monica Manginell, Jesse Cahill, Nisha Duggal, Linsey Marr, George Bachand, *Sandia National Laboratories*
10:30
- 8BA.5 Loss of Infectivity of Influenza Virus During Aerosol Sampling.** JIN PAN, Nisha Duggal, Seema Lakdawala, Meher Sethi, Nahara Vargas Maldonado, Vedhika Raghunathan, Anice Lowen, Linsey Marr, *Virginia Tech*
10:45
- 8BA.6 Comparing the Impacts of Aerosolization and Sampling Techniques on the Structural Integrity and Antigenicity Retention of Influenza A Virus-Like Particles.** YUEZHI (AUGUST) LI, Ananya Benegal, Joseph V. Puthussery, Shu-Wen You, Michael Vahey, Rajan K. Chakrabarty, *Washington University in St. Louis*
11:00
- 8BA.7 Impact of Carbon Dioxide and Relative Humidity on the Viability of Airborne E. coli and Bacteriophage MS2.** Haocheng Sun, KAISEN LIN, *Michigan State University*
11:15

- 8BQ.1 Ambient Air Quality Impacts During and After the 2025 Los Angeles Wildfires.** PROVAT SAHA, Christopher Lim, Yumeng Cui, Steven Boddeker, Joseph Salazar, Zihan Zhu, Julia Montoya-Aguilera, Mohammad Sowlat, Payam Pakbin, Andrea Polidori, Jason Low, *South Coast Air Quality Management District*
9:45
- 8BQ.2 PM Exposure Associated With Burned Buildings During the Los Angeles Wildfires in 2025.** MICHAEL KLEEMAN, Sean Raffuse, David T. Allen, Yosuke Kimura, Colette Schissel, *University of California, Davis*
10:00
- 8BQ.3 Real-Time Trace Element Insights from ASCENT During the 2025 Los Angeles Urban Wildfires.** HAROULA D. BALIAKA, Ryan Ward, Sean Raffuse, Can Barut, Armistead G. Russell, Bradley Ries, Yumeng Cui, Roya Bahreini, Eleanor Bentley, Lelia Hawkins, David Hagan, John Seinfeld, Paul Wennberg, Richard Flagan, Nga Lee Ng, *California Institute of Technology*
10:15
- 8BQ.4 Metals in Wind-Dispersible Dust and Ashes During and After the 2025 Los Angeles Fires.** JING LI, Yuan Yao, Haoxuan Chen, Qiao Yu, Priscilla Boo, Yifang Zhu, *University of California, Los Angeles*
10:30
- 8BQ.5 Particulate Matter Composition and Sources in the Urban-Wildland Interface After the 2025 Southern California Wildfire.** CHUN-YING CHAO, Albert Kyi, Katarina Konon, Shihao Zhai, Chou-Hsien Lin, Evelyn Deveraux, Anna Neville, Daniel Sung, Pawel K. Misztal, David T. Allen, Lea Hildebrandt Ruiz, *University of Texas at Austin*
10:45

- 8BQ.6 Fine and Ultrafine Particle Emissions and Dynamics in the Burn Zone Following the 2025 Los Angeles Fires.**
11:00 HAOXUAN CHEN, Qiyue Nie, Jing Li, Yuan Yao, Qiao Yu, Muchuan Niu, Vine Blankenship, Haroula D. Baliaka, Richard Flagan, Nga Lee Ng, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Yifang Zhu, *University of California, Los Angeles*
- 8BQ.7 Post-Wildfire Indoor Pollution in WUI Areas: Establishing Baseline Contaminant Levels Before Home Reoccupation.** EHSAN GOFTARI, Hanyang Li, *San Diego State University*
11:15

8DA ADVANCING AEROSOL SCIENCE THROUGH DATA ANALYSIS TOOLS 3
101 CF – Geoffrey Smith and Abishek Anand, chairs

- 8DA.1 Integrated Screening Techniques Reveal Insight into Non-Traffic Emissions Sources.** Michelle S. Hui, JINTAO GU, Timothy Baker, Mohammed I. Mead, K. Max Zhang, *Cornell University*
9:45
- 8DA.2 Deploying a Comprehensive Air Quality Sensor Network in Elizabeth, NJ: Insights and Early Findings.**
10:00 GEDIMINAS MAINELIS, Catherine J. Hart, Jennifer Senick, Jackie Park-Albaum, John Evangelista, Clinton J. Andrews, Jie Gong, Sunyoung Kim, Abigail Andrews, Holly Josephs, Vijay Maddila, Deborah Plotnik, Jenna Myers, Yitong Li, Ge Gao, Carmen Rosario, Phaneendra Sivangula, Yousaf Shahid, *Rutgers, The State University of New Jersey*
- 8DA.3 Agent-Based Framework for Modelling Hyperlocal Air Quality in Urban Spaces.** SATHISH SWAMINATHAN, Raghunathan Rengaswamy, V. Faye McNeill, *Columbia University*
10:15
- 8DA.4 High-Resolution PM2.5 Exposure Analysis in Africa: Assessing Long Term Trends for Effective Air Quality Management.** PAA SEY, Paulina Jaramillo, Albert Presto, *Carnegie Mellon University*
10:30
- 8DA.5 Leveraging Satellite Measurements, Surface Monitors, and Machine Learning for Estimating 20 Years of High-Resolution Gridded PM2.5 in Ghana.** ABHISHEK ANAND, Joe Adabouk Amooli, Daniel Westervelt, *Columbia University*
10:45
- 8DA.6 Predicting Current and Future Concentrations of Biogenic Aerosol Precursors Using Machine Learning and Detailed Chemical Modeling.** SINA TAYYEBI NIA, Nazifa Sayeed, Namrata Shanmukh Panji, Chenyang Bi, Gabriel Isaacman-VanWertz, *Virginia Tech*
11:00
- 8DA.7 Quantifying Aerosol Deposition Under Non-standard Environmental Conditions: Combined Experimental Measurement and Computational Modeling Techniques.** REN GARITY, James Henry, Moein Mousavi, Andrew Metcalf, Prasad Rangaraju, John Saylor, *Clemson University*
11:15

8ES EXHIBITOR AND INSTRUMENT APPLICATION SHOWCASE 2
EXHIBIT HALL NORTH – Amy Sullivan and Cameron Martin, chairs

- 8ES.1 TARTA: A Portable, Inexpensive Instrument for Real-Time Detection of Airborne Metal Particulates.** BRENDA LOPEZ, Ehsan Goftari, Evan Gittings, Junbeom Jang, Christopher Wallis, Anthony S. Wexler, Hanyang Li, *San Diego State University*
9:45
- 8ES.2 A Trace-Element Mass Spectrometer for Quantifying the Metal and Mineral Compositions of Single Particles in Real Time.** Edward Fortner, JOHN JAYNE, Douglas Worsnop, Philip Croteau, Manjula Canagaratna, Alexander Gundlach-Graham, Martin Tanner, *Aerodyne Research, Inc.*
10:30
- 8ES.3 Chemical Characterization and Quantification of Sub-Micrometer Aerosols Using NEMS-FTIR Spectroscopy with EMILIE.** NIKLAS LUHMANN, Jelena Timarac-Popović, Tatjana Penn, Johannes Hiesberger, Veljko Vukićević, Mihnea Surdu, Radiance Calmer, Erine Alvino Démolis, Lionel Favre, Hajrudin Bešić, Silvan Schmid, Josiane P. Lafleur, Satoshi Takahama, Julia Schmale, *Invisible-Light Labs GmbH, Austria*
11:00

- 8IM.1 Measurements of Atmospheric Transport and Convection of Dust for High-Impact Numerical Emission Simulations (MATACHINES).** SAMUEL JURADO, Franklyn Telles, Nour Kastoun, Helena Tsigos, Evelyn Keefe, *Yale University*
9:45
- 8IM.2 Portable, Tippable, and Water-Based: TSI's OmniCount CPC 3002.** Noah Bock, Aaron Avenido, JUSTIN S. KOCZAK, Daniel R. Troolin, Andrea J. Tiwari, *TSI Incorporated*
10:00
- 8IM.3 Optimized Substrates for Single-Particle Analysis with Multiple Microscopy and Spectroscopy Techniques.** KATHERINE KOLOZSVARI, Emily Costa, Holly Lawson, Andrew P. Ault, *University of Michigan*
10:15
- 8IM.4 A Low-Cost Solid Aerosol Generator of High Stability.** RYAN WARD, Miranda Hack, V. Faye McNeill, *Columbia University*
10:30
- 8IM.5 Standoff Aerosol Measurements Using Mid-Infrared Dual Frequency Comb Absorption Spectroscopy.** GARRETT MATHEWS, Alyssa Lalko, Anna Ziola, Amanda Makowiecki, Kevin Williamson, Douglas A. Day, Masayuki Takeuchi, Scott Egbert, Graeme Gillespie, Anthony Harness, Robert Wright, Anne V. Handschy, Nazanin Hoghooghi, Peter Chang, Satoshi Takahama, Daven Henze, Jose-Luis Jimenez, Scott Diddams, Gregory Rieker, *University of Colorado*
10:45
- 8IM.6 Regulatory Application of Microscopic Techniques to Understand Particle Morphology and Composition.** CYNTHIA BERG, Cat Buhl, Angela Haar, Joshua Scheel, Hedy Ward, Selina Ibarra, *South Coast Air Quality Management District*
11:00
- 8IM.7 Self-Calibrating Aerosol Absorption Using TDLAS with Tunable-Laser Photothermal Interferometry.** JOEL CORBIN, Alireza Moallemi, Daniel Poitras, Timothy Sipkens, Jalal Norooz Oliabee, *National Research Council Canada*
11:15

- 8SA.1 Chemical Aging of Urban Aerosol: The POSEIDON-2024 Campaign.** Christina N. Vasilakopoulou, ANGELIKI MATRALI, Andreas Aktypis, Christos Kaltsonoudis, Katerina Seitanidi, Kalliopi Florou, Georgia A. Argyropoulou, Maria Georgopoulou, Aikaterini Bougiatioti, Nikolaos Mihalopoulos, Spyros N. Pandis, *FORTH Institute of Chemical Engineering Sciences*
9:45
- 8SA.2 Source Apportionment of Volatile Organic Compounds with Initial Concentrations of Continuous Speciation Monitoring Data and Time-integrated Measurements of Organic Markers.** YI-HSIEN LIU, Kuan-Lin Lai, Chia-Yang Chen, Chang-Fu Wu, *National Taiwan University*
10:00
- 8SA.3 Continuous Source Apportionment of Ultrafine Particulate Matter (PM0.1) at an Urban Site at Wintertime.** GEORGIA A. ARGYROPOULOU, Christina N. Vasilakopoulou, Andreas Aktypis, Maria Georgopoulou, Christos Kaltsonoudis, Angeliki Matrali, Katerina Seitanidi, Christina Christopoulou, Panagiotis Kalkavouras, Nikolaos Mihalopoulos, Spyros N. Pandis, *Institute of Chemical Engineering Sciences, Greece*
10:15
- 8SA.4 Real Time Source Apportionment in Four Chinese Cities Integrating Data from the AXA (ACSM-Xact-Aethalometer) Set Up.** OLGA ZOGRAFOU, Manousos Ioannis Manousakas, Yuemei Han, Shaofei Kong, Yang Chen, Shuyan Xing, Jay G. Slowik, Kaspar R. Daellenbach, Rui Wang, Ningning Zhang, Qiyan Wang, Jie Tian, Zhen Yang, Lei Cao, Fei Gao, Chongzhi Zhai, Zhenliang Li, Chao Peng, Feng Ding, Linjun Li, Konstantinos Eleftheriadis, Junji Cao, André S. H. Prévôt, *NCSR Demokritos, Athens, Greece*
10:30

- 8SA.5 Chemical Characterization and Source Apportionment of Winter Organic Aerosols in Fresno, California, Through Combined FIGAERO-CIMS and SP-AMS Measurements.** WENQING JIANG, Ashutosh Kumar Shukla, Douglas Worsnop, Anita Avery, Harald Stark, Manjula Canagaratna, Mitchell Alton, Qi Zhang, *University of California, Davis*
- 8SA.6 A Comprehensive Study of Particulate Matter (PM) in the Eastern Coachella Valley (ECV) Community: Physico-Chemical Characterization and Source Apportionment.** JOSEPH SALAZAR, Yumeng Cui, Julia Montoya-Aguilera, Christopher Lim, Mohammad Sowlat, Steven Boddeker, Freyja Berg Lopez, Laura Saucedo, Cynthia Berg, Angela Haar, Stephen Dutz, James Rothchild, Eric Holden, Sina Hasheminassab, Matic Ivančič, Martin Rigler, Payam Pakbin, Andrea Polidori, Jason Low, *South Coast Air Quality Management District*
- 8SA.7 Characterizing Spatio-Temporal Variability and Sources of Particle-Bound Metals through Fixed-Site and Mobile Monitoring in Two Communities in the South Coast Air Basin.** PROVAT SAHA, Christopher Lim, Mohammad Sowlat, Steven Boddeker, Julia Montoya-Aguilera, Zihan Zhu, Sina Hasheminassab, Payam Pakbin, Andrea Polidori, Jason Low, *South Coast Air Quality Management District*

Thursday 11:30 AM – 1:00 PM
AS&T Editorial Advisory Board Lunch (Board Meeting Room)

Thursday 11:30 AM – 1:00 PM
Light Take-Away Box Lunch (Exhibit Hall North)

Thursday 12:00 PM – 1:00 PM
Committee Meetings 6 – Early Career (Room 103)

Thursday 12:00 PM – 1:00 PM
Committee Meetings 6 – Long-Range Planning (Room 104)

Thursday 12:00 PM – 1:00 PM
ASCENT Network Meeting (101 DE)

Thursday 12:00 PM – 1:00 PM
LGBTQIA and Ally Event (Exhibit Hall South)

Thursday 1:00 PM – 3:00 PM
Session 9: Poster (Exhibit Hall North)

9AA AEROSOL PROCESSES AND PROPERTIES IN CHANGING ENVIRONMENTS IN THE ANTHROPOCENE 2: POSTERS
 EXHIBIT HALL NORTH

- 9AA.1 Evaluating Higher Temporal Observations in PM_{2.5} in Relationship with Lower Temporal Long-Term Trends--Initial Observations from the Baltimore Social-Environmental Collaboration.** BENJAMIN A. NAULT, Lalitha Aiyar, Daniel C. Blomdahl, Jewel Grant, Ayreanna Pettijohn, Mina Tehrani, Benjamin Werden, Amira Yassine, Kirsten Koehler, Peter F. DeCarlo, James Hunter, Benjamin Zaitchik, *Johns Hopkins University*
- 9AA.3 Exploring the Influence of Environmental Conditions on the Gas-Particle Partitioning of Organic Acids and Bases in the Greater Toronto Area.** OLIVIA DRIESSEN, Ye Tao, Xiaoying Yang, Matthew Davis, Yutong Wang, Laura-Helena Rivellini, Jonathan Abbatt, Jennifer Murphy, Mayré Rodriguez Ramirez, RenXi Ye, Cora Young, Trevor VandenBoer, Sumi Wren, Jeremy Wentzell, Michael Wheeler, Alex K.Y. Lee, Elisabeth Galarneau, *University of Toronto*
- 9AA.4 Seasonal Differences in the Phase States of Coastal Aerosols and the Role of Chemical Composition.** KANURI ROUNDTREE, Renee Niles, Paul Tumminello, Maya Morris, Diana Tran, Rachel Tseng, Xitlali Ventura, Adam Cooper, Benjamin Carr, Jonathan Slade, *University of California San Diego*
- 9AA.5 Investigating Organic Aerosol Composition, Phase State, and Miscibility Across Two Cities with Evolving Vehicle Fleets.** Kinjal Kolhe, Kamal Sahu, Harish C. Phuleria, JENNA DITTO, *Washington University in St. Louis*

- 9AA.6 Trace Metal-Containing Aerosols in the Atmosphere of the Indian Ocean.** JOHANNES PASSIG, Aleksandrs Kalamasnikovs, B Praphulla Chandra, Haseeb Hakkim, Marco Schmidt, Robert Irsig, Sven Ehler, Andreas Walte, Thomas Fennel, Eric Achterberg, Ralf Zimmermann, *Mass Spectrometry Centre;Rostock University/Helmholtz Munich*
- 9AA.7 Photochemically, Traffic-, and Boundary Layer-Influenced New Particle Formation in the Urban Atmosphere of Ljubljana, Slovenia.** KUMAR SARANG, Kristijan Vidovic, Petra Dolšak Lavrič, Samo B. Hočevar, *National Institute of Chemistry, Ljubljana, Slovenia*
- 9AA.8 A Novel Approach for the Spectral Based Source Apportionment of Carbonaceous Particulate Matter in the Atmosphere.** TIBOR AJTAI, Csilla Gombi, Szabolcs Hodovány, István Magashegyi, Zoltán Bozóki, Abdul Rahman, Gábor Szabó, *University of Szeged, Hungary*
- 9AA.9 An Uncertain Future for the Climate and Health Impacts of Anthropogenic Aerosols in Africa.** JOE ADABOUK AMOOLI, Marianne T. Lund, Bjørn H. Samset, Sourangsu Chowdhury, Gunnar Myhre, Anne N. Johansen, Daniel Westervelt, *Columbia University/Lamont-Doherty Earth Observatory*
- 9AA.10 Quantification of Biomass Burning Organic Aerosol in the Greater Atlanta Area: Insights From Historic Data and ASCENT Measurements.** RUIZHE LIU, Sohyeon Jeon, Alison Fankhauser, Yutong Liang, David Pando, Lu Xu, Ting Fang, Rodney J. Weber, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Nga Lee Ng, *Georgia Institute of Technology*
- 9AA.11 Aerosol-based Synthesis of Carbon Dots from Sargassum Waste.** YIMING XI, Caitlin Cherenfant, Pratim Biswas, *University of Miami*
- 9AA.12 Single-Particle Characterization of Aerosol Physicochemical Mixing State in the Southeastern United States.** HOLLY LAWSON, Xu He, Rachel O'Brien, Andrew P. Ault, *University of Michigan*
- 9AA.13 Determination of a Tracer for Non-tailpipe Emissions Using an Aerosol Chemical Speciation Monitor.** DHIVYA MANICKAM, Samuel La Salle, Madeline Cooke, Lisa Wingen, Adam Thomas, Berenice Rojas, Véronique Perraud, Sanjeevi Nagalingam, Alex Guenther, Barbara Finlayson-Pitts, James Smith, *University of California, Irvine*

9AC AEROSOL CHEMISTRY 8: POSTERS

EXHIBIT HALL NORTH

- 9AC.2 Halogen Activation by Photosensitized Processes in Atmospheric Aerosol Particles.** ELEANOR MIKO, Sergey Nizkorodov, *University of California, Irvine*
- 9AC.3 Identifying Gas- and Particle-Phase Tracers to Quantify the Extent of Chlorine Oxidation in the Remote Atmosphere.** SEAMUS FREY, Hannah Kenagy, Yaowei Li, Frank Keutsch, Jesse Kroll, *MIT*
- 9AC.4 Measurements and Modeling of Urban Secondary Organic Aerosol as a Function of Precursor Volatility Class in the Los Angeles Area During Summer 2022.** MELISSA MORRIS, Benjamin Schulze, Andrew Jensen, Douglas A. Day, Pedro Campuzano-Jost, Anne V. Handschy, Melinda Schueneman, Seonsik Yun, Dongwook Kim, Donna Sueper, Harald Stark, Benjamin Murphy, T. Nash Skipper, Havala Pye, John Crounse, Joost A. de Gouw, John Seinfeld, Paul Wennberg, Jose-Luis Jimenez, *CIRES & University of Colorado Boulder*
- 9AC.5 Insights on the Importance of Intermediate and Semi-volatile Organic Precursor Compounds in the Formation of Ambient SOA.** MARKUS MUELLER, Tobias Reinecke, Markus Leiminger, Todd Rogers, Martin Graus, *IONICON Analytik GmbH, Innsbruck, Austria*
- 9AC.6 How Size-Dependent Aerosol Surface Tension Descriptions Impact Predictions of Hygroscopic Growth and Cloud Droplet Activation.** EMILY WERNER, Makaila Hammond, Alison Bain, *Oregon State University*

- 9AC.7 Liquid-Liquid Phase Separation of Atmospheric Aerosols: Effect of Oxygen to Carbon Ratios on Dynamics of Partitioning.** NATHAN EDDINGSAAS, Jay Denison, *Rochester Institute of Technology*
- 9AC.8 Using Tryptophan as an Indicator of pH in Bioaerosol Particle Fluorescence for Temporal Resolution of Aerosol Chemistry.** HUNTER RICHARDS, Zhenyu Ma, Allen E. Haddrell, Herek L. Clack, *University of Michigan*
- 9AC.9 Measuring Protein Dynamics in Levitated Microdroplets.** VIOLA FIELGEIN, Michael Jacobs, *Texas State University*
- 9AC.11 Characteristics of Size – Resolved Organic Aerosols Using Offline Aerosol Mass Spectrometry: NYC-METS, Part of the 2023 AEROMMA Campaign.** XU HE, Corin Tyler, Yao Xiao, Emily Costa, Delaney Schulteiss, Kayleigh Reilly, Ruizhe Liu, Athena Xu, Nga Lee Ng, Drew Gentner, Andrew P. Ault, Rachel O'Brien, *University of Michigan*
- 9AC.12 Understanding Secondary Organic Aerosol (SOA) Formation over the Southeast USA in the Context of the DOE AMF3 Field Measurements at the Bankhead National Forest (BNF).** MANISHKUMAR SHRIVASTAVA, Brian Gaudet, Alla Zelenyuk, Jerome Fast, Sijia Liu, Sergey Nizkorodov, Celia Faiola, Gregory W. Vandergrift, Zezhen Cheng, Swarup China, *Pacific Northwest National Laboratory*
- 9AC.13 Measurements of Aqueous-Phase Secondary Organic Aerosol Processing.** JOHN SHILLING, Jesse Anderson, Will Cantrell, Richard Flagan, Jose Fuentes, Gourihar Kulkarni, Mikhail Pekour, Hamed Sadi, Raymond Shaw, Suryadev Singh, ManishKumar Shrivastava, Jaemin Yeom, Maria A. Zawadowicz, Alla Zelenyuk, Yuzhi Chen, Tania Guatam, *Pacific Northwest National Lab*
- 9AC.14 Formation of Aqueous SOA From Water-Soluble Gaseous Products of Monoterpene Oxidation.** MATT ZARAGOZA, Lisa Wingen, Sergey Nizkorodov, Annmarie Carlton, *University of California, Irvine*
- 9AC.15 Phthalate Transfer and Enrichment in Artificial Sea Spray Aerosols.** MOLLY HEDIN, Kanuri Roundtree, Diana Tran, Maya Morris, Xitlali Ventura, Jonathan Slade, *University of California, San Diego*
- 9AC.16 Acidity-Driven Shifts in Aerosolized Sodium Sulfate Crystal Structure via Raman Microspectroscopy and Implications for Isoprene-Derived Secondary Organic Aerosol Formation.** MADELINE COOKE, Ali Alotbi, Cara Waters, Lindsay Heagle, N. Cazimir Armstrong, Carlie Poworoznek, Zhenfa Zhang, Avram Gold, Jason Surratt, Andrew P. Ault, *University of Michigan*
- 9AC.17 Reactions Between Small Atmospheric Carbonyls and Ammonium Sulfate.** MELISSA GALLOWAY, Brian Henesey, Stephanie Ingwer, Hope Tracey, Lily Gaskill, Shirin Abbasi, Lotus Medley, Grace Tomasetti, Elizabeth Obarow, Rachael Holappa, Adelaide King, Daniel Griffith, Heidi Hendrickson, *Lafayette College*
- 9AC.18 Chemical Pathways of Humidity-enhanced Organic New Particle Formation in Monoterpenes: Methodology and Mechanism.** TIJESUNI ADEOYE, *University of Vermont*
- 9AC.19 Effect of Relative Humidity on Biogenic New Particle Formation in the Presence of a Seed Aerosol.** ADAM BUDZYN, Giuseppe Petrucci, *University of Vermont*
- 9AC.20 Nucleation Closure Study from 2023 Pittsburgh Field Campaign.** DARREN CHENG, Dominic Casalnuovo, Christine Troller, Coty Jen, *Carnegie Mellon University*
- 9AC.21 Gas-Phase Photooxidation of Dimethyl Selenide (DMSe): Mechanistic Insights and Comparison to Dimethyl Sulfide (DMS).** LINHUI TIAN, Erin Bowey, Michael Lum, Don Collins, Roya Bahreini, Ying-Hsuan Lin, *University of California, Riverside*
- 9AC.22 Photochemically-driven Property Changes of Irradiated Carbonyl-Containing Volatile Organic Aerosol Mimic Solutions.** AVA BATTAGLIA, Kira Baker, Maia Merriman, Erin O'Leary, Michael Haines, Melissa Galloway, Joseph Woo, *Lafayette College*

- 9AC.23 Dynamic Surface Tension Measurements of VOC-Exposed Hanging Droplet Aerosol Mimics.** MICHAEL HAINES, Tzu-An Kuan, Bruno Loyola San Martin, Joseph Woo, *Lafayette College*
- 9AC.24 Heterogenous Nitration and Oligomerization Reaction of BSA Protein with Urban Air.** RILEY SMITH, Aleksandra Volkova, Rachel L. Davey, Erick Mattson, J. Alex Huffman, *University of Denver*

9AE AEROSOL EXPOSURE 3: POSTERS
EXHIBIT HALL NORTH

- 9AE.1 Modeling the Development of Coccidioides Spores in Convective Dust Plumes Using the Flux-Gradient Method.** EVELYN KEEFE, Samuel Jurado, Franklyn Telles, Toby Ault, Nour Kastoun, Helena Tsigos, Tyler Sanders, Kylie Miller, Simran LaBore, Jack Halberstadt, *Cornell University*
- 9AE.2 Finger Lake Effect Precipitation and Its Influence on Pollen Levels and Public Health.** KYLIE MILLER, Jack Halberstadt, *Cornell University*
- 9AE.3 Surface Charge-Dependent Electrostatic Interactions in Cellular Uptake of Nanoparticles.** SATSUKI TAKAI, Taiki Nagaya, Emi Fukuda, Yasuto Matsui, *Kyoto University*
- 9AE.4 Development of a Simplified In-Vitro Aerosol Exposure Chamber for Enhanced Dispersion and Deposition Efficiency.** SEOYEON PARK, Chang-gyu Woo, *KOREATECH*
- 9AE.5 Elemental and Organic Carbon at Three Sampling Sites Surrounding a Wood-Pellet Manufacturer in a Rural North Carolina Town.** CLAUDIO SANCHEZ, Zhenduo Yao, Dylan James, Andrew George, Kathleen Gray, William Vizuite, Glenn Morrison, *University of North Carolina, Chapel Hill*

9AP AEROSOL PHYSICS 5: POSTERS
EXHIBIT HALL NORTH

- 9AP.1 Visualization and Optimization of Charged Particle Dynamics in Electrostatic Precipitators.** WEI-CHUN WANG, Chih-Wei Lin, Chih-Chieh Chen, Sheng-Hsiu Huang, *National Taiwan University*
- 9AP.2 Practical Concerns Add Potential Risk Factors for Stratospheric Aerosol Injection Strategies.** MIRANDA HACK, V. Faye McNeill, Dan Steingart, Gernot Wagner, *Columbia University*
- 9AP.3 Understanding the Hygroscopicity of Organosulfates through Density Functional (DFT) Calculations and Molecular Dynamics (MD) Simulations.** SHEUNG KI CHAN, Tianren Zhu, Ying-Lung Steve Tse, Man Nin Chan, *The Chinese University of Hong Kong*
- 9AP.4 Smoldering Eucalyptus Leaves and Wood Results in Both High Viscosity Tar Balls and Low Viscosity Biomass Burning Organic Aerosol.** CHANGDA WU, Evan Chartrand, Hamed Nikookar, Julia Zaks, Mei Fei Zeng, Steven Rogak, Allan K. Bertram, *University of British Columbia*
- 9AP.6 Impact of Particle Phase State on the Competition Between Condensation and Coagulation.** KIEUDIEM NGUYEN, Meredith Schervish, Pascale Lakey, James Smith, Manabu Shiraiwa, *University of California, Irvine*
- 9AP.7 Investigating Influence of Particle Size on Volatility of Aerosols.** SUNANDAN MAHANT, Markus Petters, *University of California, Riverside*
- 9AP.8 Study of Linear Depolarization Ratios Across a Wide Range of Scattering Angles for Particles of Diverse Sizes, Shapes, and Complex Refractive Indices.** PRAKASH GAUTAM, Justin Maughan, Hans Moosmüller, Kurt Ehlers, Raiya Ebini, Christopher M. Sorensen, *Desert Research Institute*

- 9AP.9 Determination of Complex Particulate Refractive Index Spectra Using Colloids.** Justin Maughan, KURT EHLERS, Christopher M. Sorensen, Prakash Gautam, Raiya Ebini, Hans Moosmüller, *Desert Research Institute*
- 9AP.10 Angle-Resolved Light Scattering Study of Spherical and Non-Spherical Particles.** Prakash Gautam, ANDREW RAMIREZ, Hans Moosmüller, *Desert Research Institute*
- 9AP.11 Characterization of Particle Deliquescence and Aerosol Hygroscopic Growth using a Bipolar Aerosol Charge Conditioner.** SANGHEE HAN, Sunandan Mahant, Markus Petters, *University of California, Riverside*
- 9AP.12 Influence of Humidification on the Light Absorption by Aerosols: Laboratory Measurements and Model Calculations.** ZEWEN ZHENG, Christopher Cappa, *University of California, Davis*

9BA BIOAEROSOLS 3: POSTERS
EXHIBIT HALL NORTH

- 9BA.1 Towards Real-Time Surveillance of Airborne Allergens Using a Biosensor-based Indoor Air Quality Monitoring Platform.** DAS BEDADEEP, Meng Xu, Joshin Kumar, Shu-Wen You, Rajan K. Chakrabarty, *Washington University in St. Louis*
- 9BA.2 Infectivity of Non-Enveloped Viruses Depends on Initial Droplet Size.** RACHAEL SNODGRASS, Alexandra Longest, Aaron Prussin II, Linsey Marr, *Virginia Tech*
- 9BA.3 Performance Evaluation of Bioaerosol Samplers in an Environmentally Controlled Chamber.** MARINA NIETO-CABALLERO, Kevin Barry, Emily Kraus, Kristin Rugh, Mark Hernandez, Sonia Kreidenweis, *Colorado State University*
- 9BA.4 Microbial Resistance in Saharan Dust: Identification of Antibiotic-Resistant Bacteria in Aerosol Samples Collected at Puerto Rico.** DYLAN TRISTANI-RODRIGUEZ, Travis Santana, Francees Barreto, Janet K. Hatt, Claribel Luciano-Montalvo, Borja Riquelme, Konstantinos T. Konstantinidis, Natasha DeLeon-Rodriguez, *Interamerican University of Puerto Rico, Metropolitan Campus*
- 9BA.5 Evaluating the BioCascade – Viable Virus Aerosol Sampler’s Size-Separation Efficiency and Ability to Maintain Virus Viability.** MD. TANVIR AHMED, Kamaljeet Kaur, Kerry Kelly, *University of Utah*
- 9BA.6 Characterization of Airborne Microbial Pathogens Associated with Crop Plants.** WILSON MASI, Harison Masih, *St. John’s Inter College, Hospital Road, Agra, India*
- 9BA.7 Development of a Disposable dLAMP Chip for Respiratory Syncytial Virus RNA Quantification.** YUHUI GUO, Deepak Sapkota, Zhenpeng Qin, Hui Ouyang, *The University of Texas at Dallas*
- 9BA.8 Establishing the Dynamics of Environmental Influenza Virus Loads During Human Infection in a Tightly Controlled Indoor Setting.** KARIN BRETT, Sterling Knight, Zachariah Broemmell, Byron Hauser, Elizabeth Petzold, Christopher Woods, Nicole C. Rockey, *Duke University*
- 9BA.9 Survival Mechanisms Triggered in Escherichia coli by HVAC-Aerosolization Induced Stress- A Molecular Dynamics Study.** LEILY KHALEGHI, *Texas A&M University*
- 9BA.10 Zeolite for Passive Control of Poultry Bioaerosols.** JOHN CATE, Maria King, *Texas A&M University*
- 9BA.11 Impact of Hydration Levels on Respiratory Aerosol Emissions.** MAHENDER SINGH RAWAT, Dinushani Senarathna, Byron Erath, Sumona Mondal, Sarah K. Sirsat, Andrea Ferro, *Clarkson University*
- 9BA.12 Reducing In-Cabin Exposure To Pollen Allergens- A Controlled Study of Cabin Filter Performance Against Key Asthma Triggers.** John McKeon, MATTHEW HARDWICK, John Ryan, Angela Southey, Oliver Dsa, *Allergy Standards Ltd*

- 9BA.13 Bioaerosol Deposition across Different Scales.** JAMES BURKE, *Defence Science and Technology Laboratory*
- 9BA.14 Heterogeneous Ice Nucleation of Bacteria.** DEVAKA ARIYASENA, Heidi L. Busse, Mozhde Hamidizade, Carolee Bull, Miriam Freedman, *The Pennsylvania State University*
- 9BA.15 A Fully Integrated System for Rapid On-Site Monitoring of Airborne Culturable Bacteria Using Machine Learning and On-Chip Microscopy.** IN HO KIM, Hyun Sik Ko, Ki Joon Heo, Jae Hak Shin, Jae Hee Jung, *Sejong University*
- 9BA.16 Advancing Real-Time Bioaerosol Monitoring and Forecasting in Ireland Using Novel Optical Instrumentation and Machine Learning: The Bohemian Project.** DAVID O'CONNOR, Jiayao Chen, Gemma Davis, Padraig Flattery, Emma Delemere, Shirley Coyle, Mingming Liu, *Dublin City University*
- 9BA.17 Development of a Condensation-Growth-Based High-Concentration Liquid Sampling System for Effective Management of Viral Aerosols.** JAE HAK SHIN, In Ho Kim, Joon Young Park, Jae Hee Jung, *Sejong University*
- 9BA.18 Transmission from Sink to Patient: An Evaluation of Sink Generated Bioaerosols and their Role in Hospital Acquired Bacterial Infections.** JoHannah Buehrer, Qing Dai, Kayla Fericy, Joshua Granek, Claudia Gunsch, A-Andrew Jones, Joe Brown, Glenn Morrison, BARBARA TURPIN, *University of North Carolina at Chapel Hill*
- 9BA.19 Bioaerosol Generation Due to Water Splashing in Handwash Basins in Clinical and Non-clinical Settings.** SUDHEER SALANA, Amin Shirkhani, Adriana Jimenez, Bhavarth Shukla, Chang-Yu Wu, *University of Miami*
- 9BA.20 Exhaled Breath Sample Recovery Comparison Between Samplers for SARS-CoV-2 and Influenza Virus.** ANNA PULLEY, Petri Kalliomäki, Jianyu Lai, S.-H. Sheldon Tai, Jennifer German, Filbert Hong, Barbara J. Albert, Yi Esparza, Aditya Kiran Srikakulapu, Denwash Rastogi, Maria Schanz, Isabel Sierra Maldonado, Molly Oertel, Naja Fadul, Arantzazu Eiguren-Fernandez, Gregory S. Lewis, Kathleen McPhaul, Kristen K. Coleman, Donald K. Milton, *School of Public Health, University of Maryland, College Pk*
- 9BA.21 An Electrostatic Sampler for Continuous Collection of Airborne Respiratory Viruses.** NHAN DINH NGO, Aija Zhou, Thanh H. Nguyen, Vishal Verma, *University of Illinois at Urbana-Champaign*

9BQ BURNING QUESTIONS OF AEROSOL EMISSIONS, CHEMISTRY, AND IMPACTS FROM WUI FIRES 5: POSTERS
EXHIBIT HALL NORTH

- 9BQ.1 Prescribed Burning in the WUI: PM Household Infiltration.** SEAN BENJAMIN, Evan Coffey, Michael Schaezlein, Malena Touns, Michael Hannigan, *University of Colorado Boulder*
- 9BQ.2 Predicting Solar Photovoltaic Generation Impacted by Severe Wildfire Smoke.** ALI AMADEH, Fenya Bartram, Bo Yuan, K. Max Zhang, *Cornell University*
- 9BQ.4 Regional Radiative Impacts of Dark Brown Carbon in the Southeast United States.** ALEXANDRA NG, ManishKumar Shrivastava, Brian Gaudet, Cenlin He, Zezhen Cheng, William Vizuete, *University of North Carolina at Chapel Hill*
- 9BQ.6 Stabilization of Low Solubility Brown Carbon at the Air-Water Interface by Stearic Acid.** ANNABEL EDWARDS, Elizabeth Lyon, *Denison University*
- 9BQ.7 Improving Wildfire Emission Representation in Global Models: Lessons from the May 2023 Canadian Fires.** FARZANEH TAKSIBI, Benjamin Gaubert, Alma Hodzic, William Vizuete, *University of North Carolina at Chapel Hill*
- 9BQ.8 Evolution of Black Carbon upon Coating at the Wildland-Urban Interface with Biomass Burning Organic Aerosol Versus Coatings of Volatile Chemical Products in Urban Environments.** CHRISTIAN ESCRITT, Katrina Betz, Micah Miles, Elijah Schnitzler, *Oklahoma State University*

- 9BQ.9 Wildfire Smoke Fungal Bioaerosols Include Disease–Causing Pathogens Confirmed in Mouse Models.** LEDA KOBZIAR, Borna Mehrad, Krista Bonfantine, Zifan Zhao, Phinehas Lampman, Nicolas Anger, Karen Garrett, Sam Fox, Ashish Adhikari, Michael Remke, Jason Smith, *University of Idaho College of Natural Resources*
- 9BQ.10 Evidence of New Particle Formation from Plastic Combustion During Biomass Burning Events.** MARWA EL-SAYED, Zezhen Cheng, Yuzhi Chen, Qian Zhao, Nurun Nahar Lata, Gregory W. Vandergrift, Alla Zelenyuk, Swarup China, *Embry–Riddle Aeronautical University*
- 9BQ.11 Real–Time Quantification of Refractory Brown–Carbon Tarballs Using the SP2.** JOEL CORBIN, Fengshan Liu, Brett Smith, Alireza Moallemi, Rym Mehri, John Liggio, Jalal Norooz Oliiae, Keyvan Ranjbar, Timothy Sipkens, *National Research Council Canada*
- 9BQ.12 Impact of Local Wildland–Urban Interface Fires on PM1 Concentration and Composition in an Indoor Environment.** BENJAMIN WERDEN, Michael Link, Benjamin A. Nault, Dustin Poppendieck, Peter F. DeCarlo, *Johns Hopkins University*

9CA CARBONACEOUS AEROSOLS 2: POSTERS
EXHIBIT HALL NORTH

- 9CA.2 Determination of Organic Tracers in Atmospheric Particulate Matter Using Thermal Desorption – Pyrolysis with Gas Chromatography.** ALENA KUBATOVA, Brett Nespor, Richard Cochran, Haewoo Jeong, David Delene, Frank Bowman, Evguenii Kozliak, *University of North Dakota*
- 9CA.3 Airborne Organic Aerosol Characterization in the Los Angeles Basin, California, During the AEROMMA 2023 Summer Campaign.** SARAH ALBERTIN, Alison Piasecki, Ann M. Middlebrook, Science Team AEROMMA, *CU–CIRES/NOAA CSL*
- 9CA.4 Report of Concentration, Optical Characteristics, and Source Identification of Brown Carbon Emissions in Tehran.** Ali Darvishi Omrani, Gulden Ormanova, Motahareh Naseri, Yousef Rashidi, MEHDI AMOUEI TORKMAHALLEH, *Independent Researcher, Sari, Mazandaran, Iran*
- 9CA.5 Black Carbon Trends Reflect Changing Particulate Matter Emissions in SoCAB Since 2010.** ANNE PERRING, Ekaterina Balsan, Joshua P. Schwarz, Georgia Michailoudi, Jeff Peischl, Nell Schafer, Steven Wofsy, Josh DiGangi, Glenn Diskin, *Colgate University, CIRES CU Boulder*
- 9CA.6 Investigating Air Quality Impacts of Rocket Emissions at Cape Canaveral Using Low–Cost Sensors.** SPARTACUS STEPHENS, Marwa El–Sayed, Tonmoy Ghosh, *Embry–Riddle Aeronautical University*
- 9CA.7 Exploring the Charge State of Black Carbon–Containing Aerosol.** MEGAN NEUMANN, Joshua P. Schwarz, Samantha DeLone, Matthew Forbes, Steven Ciciora, *National Oceanic and Atmospheric Administration*
- 9CA.8 Characterizing Aviation Fuel Emissions Using Low–Cost Air Quality Sensors.** TONMOY GHOSH, Marwa El–Sayed, *Embry–Riddle Aeronautical University*
- 9CA.9 Microscopic Evolution of Soot and Sulfur–Induced Particles in Urban Aerosols: A Fractal and Chemical Perspective.** VAISHNAV BARTARIA, Auroop Ratan Ganguly, Ashok Jangid, Ranjit Kumar, *Dayalbagh Educational Institute Dayalbagh Agra*

9CC AEROSOLS, CLOUDS AND CLIMATE 4: POSTERS – LABORATORY AND MODELING TOOLS TO EXAMINE AEROSOL CLOUD INTERACTIONS
EXHIBIT HALL NORTH

- 9CC.1 Atmospheric Aging Impacts on the Ice Nucleation Abilities of Mineral Dust in the Cirrus Cloud Regime.** CAROLINA RAMIREZ–ROMERO, Luis A. Ladino, Sebastián Mendoza–Téllez, Jonathan Abbatt, *University of Toronto*

9CC.3 Advancing Black Carbon Mass Absorption Cross-section Estimation Using Machine Learning Models. UZZAL KUMAR DASH, Andrew A. May, Haikal Rozaidi, Dominic Blackston, Aadit Shah, *The Ohio State University*

9CC.4 Relating Physicochemical Properties of the Aerosols Emitted from Jet Aircraft to Contrail Formation. ANSON REGI, Connor Malley, Sungho Hwang, Tonghun Lee, Vishal Verma, *University of Illinois Urbana Champaign*

9CC.5 Effect of Salts on Protein Aggregation and Ice Nucleation Efficiency. ROYA SAFA, Sarah D. Brooks, Daniel Thornton, *Texas A&M University*

9CC.6 A Contact Nucleation Study of Levitated Supercooled Water Droplets upon Collision with Mineral Dust Particles. UPASNA B. RAI, Jingchuan Chen, Kyle McMillan, Ryan Davis, Margaret Tolbert, Sarah D. Brooks, *Texas A&M University*

9CC.8 A Comprehensive Analysis of Ice Nucleating Particles in a Subarctic Urban Environment during the ALPACA Campaign. SAMANTHA GREENEY, Evelyn Buxton, Russell Perkins, Sonia Kreidenweis, Paul DeMott, Ezra Levin, Emily Costa, Kerri Pratt, Brice Temime-Roussel, Barbara D'Anna, Kathy Law, Rodney J. Weber, Jessie Creamean, *Colorado State University*

9CE CHEMICALS OF EMERGING CONCERN IN INDOOR AND OUTDOOR AEROSOL: SOURCES, VECTORS, REACTIVITY, AND IMPACTS
6: POSTERS
EXHIBIT HALL NORTH

9CE.1 The Effect of Flavoring and Coil Choice on Toxic Emissions from Electronic Cigarettes. BIANCA MARTINEZ, Elham Fazeli, Yeongkwon Son, Andrey Khlystov, *Desert Research Institute*

9CE.3 Investigating Atmospheric Emissions of Nanoplastic Fibers from Domestic Tumble Dryer Activities: A Study Using Aerosol Mass Spectrometry. MICHAEL A.R. TAWADROUS, Alex K.Y. Lee, Arthur W. H. Chan, *University of Toronto*

9CE.4 Detection of and Protection from VOC "Spikes" Generated during Everyday Cooking, Cleaning, and Artistic Activities. Sonam Devabhaktuni, Sathyaraj Devabhaktuni, DEVABHAKTUNI SRIKRISHNA, *PatientKnowhow.com*

9CE.5 Coupling a Gas Chromatograph to a Chemical Ionization Mass Spectrometer for Isomer-resolved Measurements of Airborne PFAS. CHENYANG BI, Yufan Hu, Michael Davern, Joji Sherman, Mitchell Alton, Anita Avery, Nathan Kreisberg, Barbara Turpin, Jason Surratt, John Jayne, Manjula Canagaratna, *Aerodyne Research Inc.*

9CE.6 Measuring Atmospheric Plastic and PFAS Nanoparticles with the High-Resolution Time-of-Flight Aerosol Mass Spectrometer. ADAM DEITSCH, D. Orsini, Jie Zhang, Archana Tripathy, Sara Lance, *University at Albany*

9CE.7 Design of an Active Sampler for Characterization of Total Ionic Per- and Polyfluoroalkyl Substances (PFAS) in Indoor Air. MARGOT FRANCINI, Naomi Chang, Barbara Turpin, *UNC-Chapel Hill*

9CE.8 Micro- and Nano-plastic Particles in Ambient Aerosol Detected from 2002 – 2014 Using Single-Particle Mass Spectrometry. MARYJANE ITEGHETE, Francesca Saraniti, Maja Urban, Deborah Gross, *Carleton College*

9CE.9 Scented Volatile Chemical Products: Emerging Indoor Pollutants Driving Rapid Atmospheric Nanoparticle Formation and Growth. SATYA PATRA, Nusrat Jung, Brandon E. Boor, *Purdue University*

9CM CONTROL AND MITIGATION 2: POSTERS

9CM.1 Accelerated Degradation and Low-Latency Continuous Monitoring of PFAS Using Microdroplet Oxidation and Open Port Mass Spectrometric Sampling. Nathan Bays, SAMANTHA KRUSE, Trinity Griffus, Paul Tumminello, Ryan Davis, *Sandia National Laboratories*

9CM.2 Filtration Efficiency and Deposition Behavior of Nanoparticles Through Electret Filter Media. GENHUI JING, Sean Vanlandingham, Thaddeus Ptak, Shawn (Sheng-Chieh) Chen, *Virginia Commonwealth University*

9CO COMBUSTION 2: POSTERS
EXHIBIT HALL NORTH

- 9CO.1 Characteristics of Particulate Matter from Sustainable Aviation Fuel Combustion in a miniCAST Soot Generator.** RAPHAEL MAERKL, Edward Winstead, Bruce Anderson, Matthew Brown, Eva-Lou Edwards, Carolyn Jordan, Francesca Gallo, Susan Mathai, Sayantee Roy, Michael Shook, Elizabeth Wiggins, Luke Ziemba, Richard Moore, *NASA Langley Research Center*
- 9CO.2 Exploring VOC Emissions from Structure and Prescribed Fires.** CLARA MCMULLIN, Sungwoo Kim, Abigail Maben, Shantanu Jathar, Gabriel Isaacman-VanWertz, *Virginia Tech*
- 9CO.3 Smoke and the City: Differentiating Aged Wildfire Smoke and Urban PM2.5 Using Integrated Air Quality Measurements.** RYAN DURUISSEAU-KUNTZ, Cheol H. Jeong, Christi Jose, Bradley H. Isenor, Greg J. Evans, SOCAAR, *University of Toronto*
- 9CO.4 Effect of SAF on Particle Emissions from Gas Turbine Engine.** HIROYUKI YAMADA, Toshiki Kaneko, *Tokyo Denki University Graduate School*
-

9DA ADVANCING AEROSOL SCIENCE THROUGH DATA ANALYSIS TOOLS 4: POSTERS
EXHIBIT HALL NORTH

- 9DA.3 Identification of Viruses in Complex Air Metagenomes.** LUIS ANGEL NINO BARREAT, Chang-Yu Wu, *University of Miami*
- 9DA.4 Enabling Community Aerosol Science with the ACT Python Library for ARM and Beyond.** ADAM THEISEN, Zachary Sherman, Kenneth Kehoe, *Argonne National Laboratory*
-

9HR HEALTH RELATED AEROSOLS 4: POSTERS
EXHIBIT HALL NORTH

- 9HR.1 Ineffective Quality Control Measures Could Affect Electronic Cigarette E-Liquids’ Secondhand Aerosol Emissions.** SARAH FRESQUEZ, Daniel Walker, Talia Chavis, Sinan Sousan, *Department of Public Health, East Carolina University*
- 9HR.2 A Numerical Model of Pollen Dispersion in an Allergen Exposure Chamber.** LAURA HAYA, Nick Ogrodnik, Suzanne Kelly, Edgar Matida, William Yang, *Red Maple Trials*
- 9HR.3 Ambulatory Puff Topography of Participants in a Weeklong Natural Environment Observation Study.** GLORIA MBAKA, Edward Hensel, Logan Kelly, Leo Holman, Nathan Eddingsaas, Risa Robinson, *Rochester Institute of Technology*
- 9HR.4 Effect of Non-Thermal Plasma on the Allergenicity of Airborne Allergens.** HUNTER RICHARDS, Zhenyu Ma, Herek L. Clack, *University of Michigan*
- 9HR.5 In Vitro Neurotoxicity Analysis for Mapping Alzheimer's Disease Risk Due to Particulate Matter Exposure.** Yuezhi (August) Li, Joseph V. Puthussery, KEYAO SONG, Jessica Restivo, John Cirrito, Rajan K. Chakrabarty, *Washington University in St. Louis*
- 9HR.6 Pulmonary Disease Risks Linked to PM2.5 and Black Carbon Using Emergency Room Visits and Hospital Admissions in Karachi.** HAIDER KHWAJA, Fatim Sannoh, Zafar Fatmi, Nadeem Rizvi, Aftab Turabi, Kamran Khan, Mirza M. Hussain, Azhar Siddique, David Carpenter, *University at Albany*

- 9HR.7 Exposure Assessment of Solid Carbon Materials Through Atmospheric Carbon Dioxide Solidification Process.** EMI FUKUDA, Satsuki Takai, Taiki Nagaya, Yasuto Matsui, *Graduate School of Engineering, Kyoto University*
- 9HR.8 Online City Air Toxicity Monitoring Using Rats.** CHENYU ZHU, Maosheng Yao, *Peking University*
- 9HR.9 Exposure Studies of Living Organisms Using the PolluRisk Platform II : How is the Oxidative Potential a Relevant Metric to Assess the Health Impact of Air Pollution.** PATRICE COLL, Lucy Gerard, Ambre Delater, Clément Buissot, Sophie Lanone, Thomas Audoux, Laurent Alleman, Davy Rousset, Albane Barbero, Anouk Marsal, Gaëlle Uzu, The PolluRisk Team, *Université Paris Cité and Univ Paris Est Creteil, CNRS, LISA*
- 9HR.10 Exposure Studies of Living Organisms Using the PolluRisk Platform I: How the PolluRisk Platform is Simulating at the Laboratory Urban Air Quality and Its Health Impacts.** AMBRE DELATER, Patrice Coll, Spyros N. Pandis, Sophie Lanone, The PolluRisk Team, *Université Paris Cité and Univ Paris Est Creteil, CNRS, LISA*

9IA INDOOR AEROSOLS 2: POSTERS
EXHIBIT HALL NORTH

- 9IA.1 Isocyanates Emission Tests from Polyurethane Products.** YUJI FUJITANI, Yoshikatsu Takazawa, Go Suzuki, Satoshi Inomata, Rie Yanagisawa, Eiko Koike, *National Institute for Environmental Studies*
- 9IA.2 Resuspension Behavior of Settled Dust Particles in the Infant-Occupied Indoor Environment.** BRIAN MAGNUSON, Chunxu Huang, Satya Patra, Brandon E. Boor, *Purdue University*
- 9IA.3 Characterization of Eraser Wipe Solid Extraction Method Targeting Indoor and Outdoor Surface Films Influenced by Biomass Burning Aerosol.** JOSEPH BERBERICH, Janie (Yeaseul) Kim, Holden Schoenherr, Christopher Cappa, Elise Palombella, Shareen Ashby, Victoria Barber, Rachel O'Brien, *University of Michigan*
- 9IA.4 Modeling Of Indoor Contaminants Using CFD.** ROY KING, Suresh Dhaniyala, *Clarkson University*
- 9IA.5 Fluorescent Aerosol Particles in Outdoor and Mechanically Ventilated Indoor Air in a Subtropical Urban Environment.** YANHAO MIAO, Yu Chung Pang, Patrick K. H. Lee, *City University of Hong Kong*
- 9IA.6 Low-Cost Sensors in Household Kitchens: Monitoring Cooking Emissions from Induction Stoves and Air Fryers.** JOSHUA HARPER, Tianyuan Li, Robert T. Nishida, *University of Waterloo*
- 9IA.7 Quantifying Changes in Indoor PM2.5, VOCs, NO2, CO, and CO2 Pollution Associated with Gas-to-Induction Stove Replacement Programs.** Katie Kearns, JESSICA TRYNER, Ashley DeMichele, Garrison Davis, Jason Posner, Annie Carfaro, Daniel Bertoldi, Misbath Daouda, Maria Fe Aragon, Sydney Jones, Michael Johnson, *Access Sensor Technologies*

9IM INSTRUMENTATION AND METHODS 8: POSTERS
EXHIBIT HALL NORTH

- 9IM.1 Formation and Growth Analysis of Combustion-Generated Particles Using Size Distribution Measurements from 0.8 to 100 nm.** CHANAKYA BAGYA RAMESH, Daoru Han, Yang Wang, *University of Miami*
- 9IM.2 Functional Improvements to a Water Condensation-Based Viable Airborne Virus Sampling Technology: The BioSpot-VITA Bioaerosol Sampler.** BRADEN STUMP, Dominick Heskett, Gregory S. Lewis, Arantzazu Eiguren-Fernandez, Brian Annis, Patricia Keady, *Handix Scientific Inc.*
- 9IM.3 Determination of Effective Density of Sub-Micron Size Using Pre-Determined SMPS Data.** Jaeho Oh, Jungho Hwang, JEONG HOON BYEON, *School of Mechanical Engineering at Yeungnam University*

- 9IM.4 Leveraging Passive and Active Field Campaigns to Characterize Dust Abundance and Properties in the Southern Colorado Plateau.** FRANKLYN TELLES, Helena Tsigos, Samuel Jurado, Nour Kastoun, *Northern Arizona University*
- 9IM.5 Measuring Molecular Transport in Levitated, Viscous Microdroplets Using Confocal Fluorescence Microscopy.** FARHAD IZADI, Michael Jacobs, *Texas State University*
- 9IM.7 Enhancements in Portable Gas Chromatography–Mass Spectrometry Instrumentation for VOC Analysis.** DEVON HIGGINS, Lindsay Harrington, Sara Button, *INFICON, Inc.*
- 9IM.8 Development of the Molecular Isomer Resolving Aerosol Collector and Analyzer (MIRACA) for Organic Aerosol Chemical Characterization.** YAN WEN, Sarah Ellies, Yeongkwon Son, Andrey Khlystov, *Desert Research Institute*
- 9IM.9 Microfluidics–Based Capture and Transfer of Single Aerosol Particle–Droplets for Surface Enhanced Raman Spectroscopy Analysis.** WENDY FLORES–BRITO, Thomas Brubaker, Ryan Sullivan, *Carnegie Mellon University*
- 9IM.10 Next–Generation Optical Instrumentation for Comprehensive Aerosol and Cloud Characterization.** MATTHEW FREER, *CloudSci*
- 9IM.11 CADS: the Coarse Aerosol Detection System for Characterizing Coarse Mode and Biological Particles in Real Time.** PATRICIO PIEDRA, Prakash Gautam, Nicholas Beres, Hans Moosmüller, *The Probitas Project, Inc.*
- 9IM.12 Impact of Topography Monitor on Total Particulate Matter Emissions from Electronic Cigarettes.** CAMILO GARZON, Gloria Mbaka, Logan Kelly, Nathan Eddingsaas, Edward Hensel, Risa Robinson, *Rochester Institute of Technology*
- 9IM.13 Integrating New Facilities for Aerosol Measurements with Eddy Covariance Flux Measurements for Improved Understanding of Atmosphere–Biosphere Interactions.** ANDREW METCALF, James Henry, Thomas O'Halloran, *Clemson University*
- 9IM.15 CADET: Chamber for Aerosol Deposition Evaluation and Testing.** JAMES LIU, Tom Pilholski, Benjamin Alvarez, Terrence Garcia, Michael Schuit, *JHU/APL*
- 9IM.16 Quantitative Uncertainty and Post–Processing for Micro–Aethalometers Measuring Black Carbon.** Timothy Sipkens, JOEL CORBIN, Kerry Chen, Laura–Helena Rivellini, Jonathan Abbatt, Jason S. Olfert, *National Research Council Canada*
- 9IM.17 A Tandem–Dma Setup for Accurate Reaction Kinetics Determination of Particles in the Sub–4NM Size Range.** CHRISTIAN LUEBBERT, Luis–Javier Perez–Lorenzo, Juan Fernandez de la Mora, *Yale University*
- 9IM.18 Dynamic Aerosol Mass and Number Concentration Calibration Using a Propellant Driven Atomizer Coupled to a Well–Mixed Chamber.** NATHAN KREISBERG, Nagaraja Rao, Susanne Hering, Philip Croteau, Benjamin A. Nault, John Jayne, Gino Pena, Bradley Ries, Erin Bowey, Yumeng Cui, Nga Lee Ng, Armistead G. Russell, Ann M. Dillner, Roya Bahreini, *Aerosol Dynamics Inc.*
- 9IM.19 Uncertainty Analysis of Atmospheric Aerosol Particle Size Spectra from Portable Optical Particle Spectrometers.** Christopher Solares, Maria A. Zawadowicz, SARAH PETTERS, *University of California, Riverside*
- 9IM.20 Preliminary Ambient Comparisons of BlueSky O3 and NO2 with Reference Sensors and Between Purple Air SD and Flex PM Sensors.** Zoe Lynch, TATIANA PECCEDI, Ty Kaji, Erick Mattson, Alina Pantano, J. Alex Huffman, *University of Denver*

9IM.21 Low Cost Instrumentation and Kitesonde Kit. SIMRAN LABORE, Helena Tsigos, Jack Halberstadt, Franklyn Telles, *Cornell University*

9RA REDUCING AEROSOL EXPOSURE WITH CONTROL TECHNOLOGIES AND INTERVENTIONS 4: POSTERS
EXHIBIT HALL NORTH

- 9RA.1 Growth State of Aerosolized Bacillus Altitudinis Impacts its UV Susceptibility.** EMILY KRAUS, Samuel Bryan, Margot Thomas Gatel, Adam Gillison, Amaya GarciaCostas, Sonia Kreidenweis, Mark Hernandez, *University of Colorado Boulder*
- 9RA.3 Frequency Variation of Non–Thermal Plasma Effects on Inactivation of Single–Stranded DNA Virus.** EMILY HONG, Zhenyu Ma, Herek L. Clack, *University of Michigan*
- 9RA.4 Energy Recovery Ventilation (ERV) and Indoor Air Pollution.** Onyinye A. Ezeifeke, YEVGEN NAZARENKO, *University of Cincinnati*
- 9RA.5 Bazooka™: A First-of-Its-Kind Non–Thermal Plasma–Electrocyclone–Catalytic System for Real–Time Removal of Airborne Pathogens, Dust, and Ammonia in Poultry Farms.** RAJ SINGH, Hema Ravindran, Antonio Baratta, Gediminas Mainelis, *KiposTech LLC*
- 9RA.6 Integrated Studies on Improving Respirators Performance and Minimizing Aerosol Exposure.** XINYI NIU, Michael Yermakov, Sergey A. Grinshpun, Jun Wang, *University of Cincinnati*
- 9RA.7 Cleaner Air on a Budget: Assessing the Real–world Efficacy of DIY Air Cleaners in Urban Apartments.** VIVIAN ACHAO SURGELAS, Jenna Myers, Yiyi Wu, Phaneendra Sivangula, Evangelos K. Stefanidis, Jackie Park–Albaum, Deborah Plotnik, Jie Gong, Clinton J. Andrews, Jennifer Senick, Sunyoung Kim, Gediminas Mainelis, *Rutgers, The State University of New Jersey*
-

9RM REMOTE AND REGIONAL ATMOSPHERIC AEROSOL 2: POSTERS – MEASUREMENT NETWORK OF AEROSOLS
EXHIBIT HALL NORTH

- 9RM.1 Design, Build, Deploy: CU GeoData's Lower–Cost Sensor Network as a Blueprint for Undergraduate Engagement with Local Communities and Science.** NOUR KASTOUN, Samuel Jurado, Kylie Miller, Evelyn Keefe, Franklyn Telles, *Cornell University*
- 9RM.2 Comprehensive Cost–Benefit and Implementation Feasibility Analysis of Lower–Cost Particulate Matter Sensor Deployment Models based on Extended Field Observations.** Riley Ortt, Gabriella Gonzalez, Abigail Hadden, PINGFAN MO, Junhyuk Jeon, Chong Qiu, *University of New Haven*
- 9RM.3 Integrating ASCENT, Satellite and CMAQ Data over Atlanta, GA: More Questions than Answers.** MERVE EKE, Ruizhe Liu, Weixin Zhang, Katherine Paredero, Yifeng Wang, Yongtao Hu, Sohyeon Jeon, Ann M. Dillner, Roya Bahreini, Nga Lee Ng, Armistead G. Russell, *Georgia Institute of Technology*
- 9RM.4 Back Trajectory Analysis on the Sources and Transport of Nucleation Precursors at the DOE ARM Bankhead National Forest Site.** CONNOR SETO, Tamanna Subba, Chongai Kuang, James Smith, *University of California, Irvine*
- 9RM.5 Quantifying Lake Spray Aerosol Acidity: A Colorimetric Approach.** MIA B. KAUFFMAN, Samantha L. Bell, Cara Waters, Nicolas A. Buchenau, Haley E. Plaas, Jason Surratt, Andrew P. Ault, *University of Michigan*
- 9RM.7 Physico–chemical Properties of Free Tropospheric Mineral Dust at the Remote Pico Mountain Observatory, in the Azores.** IAN NORWOOD, Renato Pinto Reveggino, Shreya Joshi, Lynn Mazzoleni, Paulo Fiahlo, Swarup China, Bo Zhang, Andrea Baccarini, Kaelan Anderson, Megan Morgenstern, Simeon Schum, Claudio Mazzoleni, *Michigan Technological University*

- 9RM.8 Analyzing NO2 Emissions in Croplands using TEMPO Data.** XUEYING YU, *University at Albany, State University of New York*
- 9RM.9 Year-long Measurements of PM2.5 Composition and Size Distributions at the ASCENT Joshua Tree Site.** GINO PENA, Bradley Ries, Erin Bowey, Eleanor Bentley, Armistead G. Russell, Ann M. Dillner, Nga Lee Ng, Lelia Hawkins, Roya Bahreini, *University of California, Riverside*

9SA SOURCE APPORTIONMENT 3: POSTERS
EXHIBIT HALL NORTH

- 9SA.1 Understanding Sources Contributing to Photochemical Ozone Formation in NYC Metro Using Low-Cost Sensor Data and PAMS VOC Data.** JAMES NIMO, Md. Aynul Bari, Lucille Borlaza-Lacoste, Scott Miller, Cheng-Hsuan Lu, Philip K. Hopke, *University at Albany, State University of New York*
- 9SA.2 Attributing PM Sources within a Swine Production Facility via PMF Modeling of Particle Size Distribution Data.** PRADEEP KUMAR, Seyit Uguz, Shalini Tiwari, Youwen Yang, Zonggang Li, Yuanhui Zhang, Xufei Yang, *South Dakota State University*
- 9SA.3 Source Apportionment of PM2.5 Air Pollution in Lahore, Pakistan.** WAJIH UR REHMAN, *COMSATS University Islamabad*
- 9SA.4 Sources of PM2.5 and PM10 Trace Elements at Two Sites in the Inland Empire of Southern California.** BRADLEY RIES, Yifan Ding, Mohammad Sowlat, Payam Pakbin, Armistead G. Russell, Ann M. Dillner, Nga Lee Ng, Akula Venkatram, Roya Bahreini, *University of California, Riverside*
- 9SA.5 Development of Nitrogen Dioxide Source-Receptor Matrix for Rapid Health Impact Assessment of Emission Control Scenarios in the United States – Case Study in New York City.** Huy N.Q. Tran, Manish Soni, Catherine Seppanen, SARAVANAN ARUNACHALAM, *University of North Carolina at Chapel Hill*
- 9SA.6 Quantification, Source Characterization, and Health Risk of BTEX Compounds in Northern India.** BHUPENDRA SINGH, *Central University of Haryana, India*

9UA URBAN AEROSOLS 5: POSTERS
EXHIBIT HALL NORTH

- 9UA.1 Impacts of Emission Profiles on Urban SOA Formation.** Azad Madhu, MYOSEON JANG, *University of Florida*
- 9UA.2 High Aerosol Optical Depths Observed From the Ground and Air During the 2024 NASA ASIA-AQ Field Campaign.** RICHARD MOORE, Sayantee Roy, Francesca Gallo, Carolyn Jordan, Michael Shook, Elizabeth Wiggins, Edward Winstead, Luke Ziemba, ASIA-AQ Science Team, NASA
- 9UA.3 Spatial Variations of PM2.5 in Baltimore: Leveraging In-Situ and Satellite-Based Measurements.** GRACE KOWALSKI, Darryn Waugh, Peter F. DeCarlo, Benjamin A. Nault, Kirsten Koehler, Drew Gentner, Colby Buehler, Shobha Kondragunta, Hai Zhang, Gaige Kerr, *Johns Hopkins University*
- 9UA.4 Understanding Ambient Air Quality at Underserved Neighborhoods in New York State Through Low-cost Monitoring Techniques and Community Engagement.** MD. AYNUL BARI, James Nimo, Scott Miller, Cheng-Hsuan Lu, Elias Dueker, Brian Pavilonis, *University at Albany, State University of New York*
- 9UA.5 Cooking Organic Aerosol Drives High PM Events in Wintertime Mineola, NY.** ADAM DE GROODT, Emily Barnes Franklin, Joseph Ko, Michael Vermeuel, Trey Maddaleno, Roisin Commene, Dylan Millet, Delphine K. Farmer, *Colorado State University*

9UA.6 Spatial Variations of Non-Tailpipe Particulate Matter and Associated Oxidative Potential in Toronto, Canada.

NICOLE TRIEU, Cheol H. Jeong, Yee Ka Wong, Christi Jose, Xing Wang, Greg J. Evans, *University of Toronto*

9UA.7 Ambient Measurements of Fuel Oil Combustion Emissions in New York City.

MITCHELL ROGERS, Lijin Zhang, Tori Hass-Mitchell, Taekyu Joo, Drew Gentner, *Yale University*

9UA.8 Comparison of Personal Exposures to PM_{2.5} and Ozone using Mobile and Stationary Air Monitors in Elizabeth, New Jersey.

JENNA MYERS, Carmen Rosario, Victoria Wei, Phaneendra Sivangula, John Evangelista, Jackie Park-Albaum, Clinton J. Andrews, Jennifer Senick, Deborah Plotnik, Gediminas Mainelis, *Rutgers, The State University of New Jersey*

Thursday 3:00 PM – 3:30 PM Coffee Break (Exhibit Hall North)

Thursday 3:30 PM – 5:00 PM Session 10: Platform

10AA AEROSOL PROCESSES AND PROPERTIES IN CHANGING ENVIRONMENTS IN THE ANTHROPOCENE 3: BIOMASS BURNING AEROSOLS

101 CF – Rajan Chakrabarty and Manabu Shiraiwa, chairs

10AA.1 Tales from the Smoky Side of the Anthropocene. ARTHUR J. SEDLACEK, Timothy Onasch, Ernie R. Lewis, 3:30 *Brookhaven National Laboratory*. INVITED.

10AA.2 Evolution of Fresh Biomass Burning Aerosol Physical, Chemical, and Optical Properties upon Increase of Combustion Temperature. ZEZHEN CHENG, Valentina Sola, Gregory W. Vandergrift, Sijia Liu, Ryan Poland, Michael Caraway, Xena Mansoura, Schuyler Lockwood, Tania Gautam, Amna Ijaz, Yuzhi Chen, John Shilling, Nurun Nahar Lata, Payton Beeler, Laura Fierce, Gourihar Kulkarni, Alexander Laskin, Sergey Nizkorodov, Marwa El-Sayed, Geoffrey Smith, Rawad Saleh, Swarup China, ManishKumar Shrivastava, Alla Zelenyuk, *Pacific Northwest National Laboratory*

10AA.3 Particle-scale Diversity in Organic Composition of Fresh and Aged Wildfire Emissions. JOHANNES PASSIG, 4:00 Ellen Iva Rosewig, Aleksandrs Kalamasnikovs, Haseeb Hakkim, Marco Schmidt, Thomas Gröger, Mika Ihalainen, Anni Hartikainen, Markus Somero, Pasi Yli-Pirilä, Olli Sippula, Kerneels Jaars, Pieter Gideon van Zyl, Kajar Köster, Stefan Siebert, Saara Peltokorpi, Liqing Hao, Angela Buchholz, Annele Virtanen, Ville Vakkari, Andreas Walte, Ralf Zimmermann, *Mass Spectrometry Centre;Rostock University/Helmholtz Munich*

10AA.4 Evidence for Brown Carbon Whitening with Increasing Plume Age During Wildfire Seasons in Western Canada. MOHAMAD H. AL-JABIRI, Jason S. Olfert, Laura-Helena Rivellini, Stephanie R. Schneider, Jonathan Abbatt, *University of Toronto*

10AA.5 Dark Brown Carbon Dominates Shortwave Absorption in Urban Emissions. YUEZHI (AUGUST) LI, Joshin Kumar, 4:30 Gwan-Yeong Jung, Taveen S. Kapoor, Joseph V. Puthussery, Guodong Ren, Jordan A. Hachtel, Zezhen Cheng, Nurun Nahar Lata, Benjamin Sumlin, Chenchong Zhang, Dishit Ghumra, Ganesh Chelluboyina, Swarup China, Rohan Mishra, Rajan K. Chakrabarty, *Washington University in St. Louis*

10AA.6 Vertical Gradients in New Particle Formation and Growth: Influence of Agricultural Emissions. Bri Dobson, 4:45 Daniel Katz, Mitchell Alton, Harald Stark, Tamanna Subba, Douglas Worsnop, Chongai Kuang, Manjula Canagaratna, ELEANOR BROWNE, *University of Colorado Boulder & CIRES*

10AC AEROSOL CHEMISTRY 9: ANTHROPOGENIC-BIOGENIC AEROSOLS AND INTERACTIONS

101 DE – Yue Zhang and Matthew Goss, chairs

- 10AC.1

3:30

Precursor Concentration and Molecular Structure Influence the Viscosity and Volatility of Secondary Organic Aerosol Derived from Sesquiterpene Ozonolysis. SIJIA LIU, Amna Ijaz, ManishKumar Shrivastava, Sergey Nizkorodov, Celia Faiola, Alla Zelenyuk, *Pacific Northwest National Laboratory*
- 10AC.2

3:45

The Influence of Road Salt on Nitryl Chloride Formation from Aerosol and Urban Grime Surfaces in Urban, Continental, Wintertime Environments. EMMA MCLAY, Trevor VandenBoer, Nasrin Dashti, Cora Young, *York University*
- 10AC.3

4:00

Vertically Resolved Chemical Speciation of Organic Aerosols at ARM Southern Great Plains. SHAN GU, Lindsay Yee, Gregory W. Vandergrift, Swarup China, Danielle Dexheimer, Allen Goldstein, *University of California, Berkeley*
- 10AC.4

4:15

Advancing Aerosol Chemistry Studies with an LED-powered Environmental Chamber: From Modeling-Assisted Control of Secondary Organic Aerosol (SOA) Coating to Multiphase Reactions. YUE ZHANG, Miska Olin, Sining Niu, Hannah LeClear, Christopher Rapp, Jiayun Zhao, Jason Surratt, Daniel Cziczo, *Texas A&M University*
- 10AC.5

4:30

Unexpected Stereochemical Specificity for Organosulfates Formed from Isoprene-Epoxy Ring Opening Reactions as a Function of Aerosol Acidity. ANDREW P. AULT, Madeline Cooke, N. Cazimir Armstrong, Cara Waters, Qiyuan Zhao, Scarlet Aguilar-Martinez, Yuzhi Chen, Ziyang Lei, Zhenfa Zhang, Avram Gold, Paul Zimmerman, Jason Surratt, *University of Michigan*
- 10AC.6

4:45

Chemical Composition and Volatility Distribution of Secondary Organic Aerosol Formed through Multiphase Chemical Reactions as a Function of Sulfate Seed Acidity. SINING NIU, Miska Olin, Christopher Rapp, Siddharth Gopalakrishnan, Hannah LeClear, Jason Surratt, Daniel Cziczo, Yue Zhang, *Texas A&M University*

10BA BIOAEROSOLS 4: FIELD STUDIES
106 BC – Marina Nieto-Caballero and Maria Zawadowicz, chairs

- 10BA.1

3:30

Report on Workshop on "Bioaerosols in the Earth System". SONIA KREIDENWEIS, Allison Aiken, Kathleen Weathers, et al., *Colorado State University*. INVITED.
- 10BA.2

3:45

Quantification of Bioaerosol Emission Flux Over a Semi-Arid Grassland. LILLIAN JONES, Rutambhara Joshi, Kevin Barry, Thomas Hill, Jay Ham, Sonia Kreidenweis, Delphine K. Farmer, *Colorado State University*
- 10BA.3

4:00

Air Microbiome Dynamics During the 2024 Boston Marathon. KATHERINE ARAYA, Vivian Tat, Sarah Alnemrat, Riley Watson, Madison Farnsworth, Justin Nguyen, Kostiantyn Botnar, Sean Kinahan, Shanna A. Ratnesar-Shumate, David Kimmel, Hema Narra, Christine Tomlinson, George Golovko, Kamil Khanipov, *The University of Texas Medical Branch*
- 10BA.4

4:15

Investigating the Role of Bioaerosols in Antimicrobial Resistance Transmission in Environmental Settings. NISHTHA CHAUHAN, Jillian Goodrich, Joe Brown, Freddy Soria, Olivia Ginn, *University of Georgia*
- 10BA.5

4:30

Determining Bioaerosol Composition in Swine Production Facilities Through Next Generation Sequencing. PRADEEP KUMAR, Shalini Tiwari, Seyit Uguz, Zonggang Li, Jose Gonzalez, Yuanhui Zhang, Xufei Yang, *South Dakota State University*
- 10BA.6

4:45

Evaluation and Characterization of Bioaerosols from Different Poultry House Environment of Naini, Prayagraj, India. HARISON MASI, *SHUATS, (Allahabad) Prayagraj, Uttar Pradesh, India*

10CO COMBUSTION 3: SOOT AND PYROLYSIS
101 AH – Joel Corbin and Christian Bjork, chairs

- 10CO.2

3:45

Tracing the Physico-chemical Evolution of Soot Primary Particles via Molecular Dynamics Simulations of Acetylene Pyrolysis. EVAN GVENTER, Khaled Mosharraf Mukut, Eirini Goudeli, Georgios A. Kelesidis, Somesh Roy, *Marquette University*
- 10CO.3

4:00

The Effect on Soot and its Gaseous Precursors of Trans-decalin Doping in a Laminar Non-Premixed, Ethylene-Fueled, Planar Mixing Layer Flame (PMLF). CHRISTIAN P. BJORK, Mahmoud K. Ashour, Evangelos K. Stefanidis, Scott W. Wagnon, Chiara Saggese, Francesco Carbone, *University of Connecticut*
- 10CO.4

4:15

Toxic Gas and Particle Emissions from the Pyrolysis of Spacecraft Materials. XIAOLIANG WANG, Bjoern Bingham, Salix Bair, Matthew Claassen, Marit Meyer, Claire Fortenberry, W. Patrick Arnott, John Watson, Judith Chow, *Desert Research Institute*
- 10CO.5

4:30

The Role of Black Carbon Emitted from Aircraft Engines as a Condensational Sink of Oil and Sulfur Particles. BENJAMIN A. NAULT, Andrew Freedman, Edward Fortner, Bruce Anderson, Steven Baughcum, Matthew Brown, Josh DiGangi, Francesca Gallo, Francisco Guzman, Jennifer Klettlinger, Kevin Sanchez, Michael Shook, Gregory Smallwood, Elizabeth Wiggins, Edward Winstead, Luke Ziemba, Richard Miake-Lye, Richard Moore, *Aerodyne Research, Inc.*
- 10CO.6

4:45

Dependence of Secondary Organic Aerosol Formation on Combustion Conditions in Simulated Prescribed Fires. MUHAMMAD ABDURRAHMAN, Michael Caraway, Thomas Carroll, Kruthika Kumar, Anita Anosike, Nicholas Kusumo, Ariana Deegan, Ryan Poland, John Allen, Mac A. Callaham, Joseph O'Brien, Edward Fortner, Amanda Frossard, Geoffrey Smith, Rawad Saleh, *University of Georgia*

10IA INDOOR AEROSOLS 3

106 AD – Xinxiu Tian and Victoria McCrary, chairs

- 10IA.1

3:30

Understanding the Effect of Wildfire Smoke and Hvac Settings on Indoor Air Quality Using Networked Sensors. FIONA HOPEWELL, Tristalee Mangin, Colin Schermerhorn, Kerry Kelly, *University of Utah*
- 10IA.2

3:45

Investigating the Impacts of Building HVAC Systems on Aerosol Composition and Concentration in Different Seasons. XINXIU TIAN, Benjamin A. Nault, Bryan Berman, Bryan Cummings, Shannon Capps, Michael Waring, Peter F. DeCarlo, *Johns Hopkins University*
- 10IA.3

4:00

Impact of Wildfire Smoke on HVAC Filter Performance and Indoor Air Quality. SHIBO WANG, Qisheng Ou, Dongryul Park, Keonwang Lee, Hyungho Park, David Y. H. Pui, *University of Minnesota*
- 10IA.4

4:15

Investigating the Particulate Matter and CO2 Relationship During Wildfire and Prescribed Burn Smoke Events. C. VICTORIA MCCRARY, Sara Jones, Perry Hystad, Molly Kile, Parichehr Salimifard, *Oregon State University*
- 10IA.5

4:30

Mass Balance Model for Estimating Indoor and Outdoor Contributions to Residential PM2.5 and Indoor-Generated PM2.5 Composition Profile. YIXIANG WANG, James Schauer, Marilyn Black, Michael Bergin, Junfeng Zhang, Linchen He, *College of Health, Lehigh University*
- 10IA.6

4:45

Advancing Approaches to Estimate Deposition Loss Rate Constants and Penetration Factors for Fine and Ultrafine Particles into Residences. SAEED FARHOODI, Haoran Zhao, Mohammad Heidarinejad, Brent Stephens, *Illinois Institute of Technology*

10SA SOURCE APPORTIONMENT 4

101 BG – Nahin Ferdousi-Rokib, chair

- 10SA.1

3:30

Characterization of Aerosol Types Using a 2D Angstrom Exponent Approach Across Multiple Sites. ASTA GREGORIČ, Matic Ivančič, Irena Ježek Brecelj, Gašper Lavrič, Bálint Alföldy, Albert Presto, Amalia Muñoz, Mila Ródenas, Luca Ferrero, Luca D'Angelo, Martin Gysel, Benjamin Brem, Marco Pandolfi, Jordi Rovira, Nikolaos Mihalopoulos, Panagiotis Kalkavouras, Tuukka Petäjä, Lauri Ahonen, Tobias Hammer, Konstantina Vasilatou, Martin Rigler, *Aerosol d.o.o.*
- 10SA.2

3:45

A Comprehensive Study of Particulate Matter (PM) in the Eastern Coachella Valley (ECV) Community: Mass Closure and Comparisons between Time Integrated Sampling and Real-Time Continuous Monitoring Data. JOSEPH SALAZAR, Yumeng Cui, Julia Montoya-Aguilera, Christopher Lim, Mohammad Sowlat, Steven Boddeker, Freyja Berg Lopez, Laura Saucedo, Cynthia Berg, Angela Haar, Stephen Dutz, James Rothchild, Eric Holden, Sina Hasheminassab, Matic Ivančič, Martin Rigler, Payam Pakbin, Andrea Polidori, Jason Low, *South Coast Air Quality Management District*
- 10SA.3

4:00

Improving Characterization of Cooking Organic Aerosols (COA) via Novel Source Apportionment Analysis of HR-ToF-AMS. ASHUTOSH KUMAR SHUKLA, Wenqing Jiang, Qi Zhang, *University of California, Davis*
- 10SA.4

4:15

Source Apportionment of Organic Aerosol Informed by ASCENT Instrumentation at Look Rock, Great Smoky Mountains National Park. NICOLAS A. BUCHENAU, Cade Christensen, James Renfro, Bill Hicks, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Nga Lee Ng, Jason Surratt, *University of North Carolina at Chapel Hill*
- 10SA.5

4:30

Long-Term Source Apportionment at 12 Sites in the Western United States from 2000–2020. KAMALJEET KAUR, Jenna Krall, Cesunica Ivey, Heather Holmes, Kerry Kelly, *University of Utah*
- 10SA.6

4:45

Source Apportionment of Sulfate Aerosol at the ASCENT Cheeka Peak Observatory Site. OLIVIA HAKAN, Odelle Hadley, Courtney Winck, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Nga Lee Ng, Joel A. Thornton, *University of Washington*

Thursday 5:00 PM – 6:30 PM

Technical Program Committee Meeting (Board Meeting Room)

Friday

Friday 8:00 AM – 9:15 AM

Session 1I: Platform

- 11AA AEROSOL PROCESSES AND PROPERTIES IN CHANGING ENVIRONMENTS IN THE ANTHROPOCENE 4: AMBIENT URBAN AEROSOLS AND NON-TAILPIPE PM

101 CF – Johannes Passig and August Li, chairs
- 11AA.1

8:00

Recent Progress on Atmospheric Science and Chemistry mEasurement NeTwork (ASCENT): Advanced, Ground-based Aerosol Measurement Network Across the U.S. NGA LEE NG, Roya Bahreini, Ann M. Dillner, Armistead G. Russell, Richard Flagan, James Flynn, Drew Gentner, Robert Griffin, Lelia Hawkins, Jose-Luis Jimenez, Jingqiu Mao, Shane Murphy, Albert Presto, Sean Raffuse, Allen Robinson, John Seinfeld, Jason Surratt, Joel A. Thornton, *Georgia Institute of Technology*
- 11AA.2

8:15

Validation of In Situ Size-Resolved Composition Model from the 2023 AEROMMA Airborne Field Mission Against Ground-Based and Remote Sensing Aerosol Optical Measurements. HAN N. HUYNH, Adam Ahern, Charles Brock, Ming Lyu, Samuel Taylor, Xiaoli Shen, Justin Jacquot, Daniel Cziczo, Alison Piasecki, Ann M. Middlebrook, Sarah Albertin, Daniel Murphy, Glenn Diskin, Charles K. Gatebe, Johnathan Hair, *CU-CIRES/NOAA CSL*
- 11AA.3

8:30

Temperature Dependence of Gas-Phase Precursors of Secondary Organic Aerosol During Summertime in New York City. MIA TRAN, Mitchell Alton, Anita Avery, Minguk Seo, Jo Machesky, Taekyu Joo, Manjula Canagaratna, Jordan Krechmer, Andrew Lambe, Drew Gentner, *Yale University*

- 11AA.4 Non-Tailpipe Emissions from Ambient and Laboratory Measurements: Commonalities in Environmentally Persistent Free Radicals, Reactive Oxygen Species and Oxidative Potential of Brake Wear, Tire Wear and Road Dust.** SUKRITI KAPUR, Kasey Edwards, David Herman, Madeline Cooke, Adam Thomas, Tsuyoshi Ito, Hiroyuki Hagino, Junichi Hosoya, Tazuko Morikawa, Lisa Wingen, Véronique Perraud, Andrea De Vizcaya Ruiz, Michael Kleinman, James Smith, Barbara Finlayson-Pitts, Manabu Shiraiwa, *University of California, Irvine*
- 11AA.5 Reactivity of Brake Wear Particles: Reactive Oxygen Species Generation by Fresh Emissions and Iron Solubilization during Atmospheric Processing.** JENNY P.S. WONG, Amelia K. Williams, Gloria G. Simmons, *Mount Allison University*

11BA BIOAEROSOLS 5: TECHNOLOGICAL ADVANCES IN BIOAEROSOL SAMPLING AND MONITORING
106 BC – Gediminas Mainelis and Emily Kraus, chairs

- 11BA.1 Towards Accurate Real-Time Bioaerosol Monitoring.** KONSTANTINA VASILATOU, Christina Giannakoudaki, Reto Abt, Kevin Auderset, Benoit Crouzy, Sophie Erb, Ahmed Oguzhan Erdogan, Elias Graf, Kenjiro Iida, Gian Lieberherr, Hiromu Sakurai, Julia Schmale, Christian Wälchli, Stefan Horender, *METAS Federal Institute of Metrology*
- 11BA.2 Development of a High-Plex Biosensor Platform for Airborne Pathogen Detection and Building-Integrated Exposure Control.** NICHOLAS HEREDIA, *SafeTraces Inc.*
- 11BA.3 Water-Injection Based BioCascade Impactor for Size-Fractionated Bioaerosol Collection.** MOHAMMAD WASHEEM, Amin Shirkhani, Sudheer Salana, Yu-Ju Chen, Luis Angel Nino Barreat, Bright Amponsem, Amir R. Sharafudin, Sripriya Nannu Shankar, Arantzazu Eiguren-Fernandez, John Lednicky, Chang-Yu Wu, *University of Miami*
- 11BA.4 Concentrated and Viable: Improved Bioaerosol Sampling via Virtual Impactor Enhanced Water Condensation Collection.** DREW JONES, Emily Kraus, Kristin Rugh, Mark Hernandez, Marina Nieto-Caballero, Sonia Kreidenweis, Shantanu Jathar, *Colorado State University*
- 11BA.5 Performance of a Novel Personal Passive Sampler in a Calm-Air Environment.** TAEWON HAN, Gediminas Mainelis, *Rutgers, The State University of New Jersey*

11CA CARBONACEOUS AEROSOLS 3: CHARACTERIZING ATMOSPHERIC BROWN CARBON
101 DE – Georgios Kelesidis and Alexandre Albinet, chairs

- 11CA.1 Primary and Secondary Particle Emissions from Residential Wood Combustion: Appliance Type, Fuel, and Aging Effects.** ALEXANDRE ALBINET, Céline Degrendele, Yamina Allouche, Abd El Rahman El Mais, Ali Hnaino, Serge Collet, Sergio Harb, Nicolas Karoski, Vincent Fuvel, Jason Bardou, Mehdi Dionigi, Ahmed Abida, Yannick Dupuis, Chrsitophe Richet, Rachel Gemayel, Jérôme Beaumont, Théo Claude, Laurent Meunier, Robin Aujay-Plouzeau, Céline Ferret, Nathalie Bocquet, Andrea Baccarini, Nikunj Dudani, Pabrito Ray, et al., *INERIS*
- 11CA.2 Volatility Resolved Optical Properties of Biomass Burning Aerosols from Simulated Wildland Fires in the G-WISE-2 Campaign.** RYAN POLAND, John Allen, Muhammad Abdurrahman, Mike Lesiak, Michael Caraway, Thomas Carroll, Ariana Deegan, Mac A. Callahan, Joseph O'Brien, Rawad Saleh, Geoffrey Smith, *University of Georgia*
- 11CA.3 Humidity-Driven Changes in the Light Absorption Properties of Biomass Burning Secondary Brown Carbon.** MUHAMMAD ABDURRAHMAN, Rawad Saleh, *University of Georgia*
- 11CA.4 Exploring the Impact of Wildfire Smoke on Cloud-Aerosol Chemistry at Whiteface Mountain, NY: Organic Acids and Growing Importance of Ammonium.** ARCHANA TRIPATHY, Christopher Lawrence, Sara Lombardo, Paul Casson, Rudra Patel, Lily Hammond, Kathleen DeMarle, Richard Brandt, Scott D. McKim, James Schlemmer, James Schwab, Haider Khwaja, Mirza M. Hussain, Elizabeth Yerger, Phil Snyder, Dan Kelting, William May, Sara Lance, *Atmospheric Sciences Research Center, University at Albany*

11CA.5 Reducing the Exposure to Soot and Carcinogenic Polycyclic Aromatic Hydrocarbon Emissions from Jet Fuel Combustion by Pentanol Blending. Constantinos Moularas, Una Trivanovic, Irini Tsiodra, Nikolaos Mihalopoulos, GEORGIOS A. KELESIDIS, *Rutgers, The State University of New Jersey*

11CO COMBUSTION 4: BIOMASS BURNING
101 AH – Haley Plaas and John Allen, chairs

- 11CO.1 From Fuel to Smoke: Composition of a Flame from a Prescribed Fire and its Near-Field Plume.** ALLA ZELENYUK, 8:00 Schuyler Lockwood, Zezhen Cheng, Tracy Baker, Ashley Bradley, Kendall Hughey, Joey Chong, Stephen Baker, Emily Lincoln, Shawn Urbanski, David Lignell, Zisimos Toumasatos, Georgios Karavalakis, David Weise, Timothy Johnson, *Pacific Northwest National Laboratory*
- 11CO.2 Generating and Characterizing Smoke Aerosol for HEPA Filter Media Loading.** DRAKE LARSON, Spencer Phillips, 8:15 Jaime Gibson, *Mississippi State University*
- 11CO.3 Coating Thickness and Coating Volatility of Black Carbon Particles from Simulated Wildland Fires Depends on Combustion Conditions.** JOHN ALLEN, Ryan Poland, Muhammad Abdurrahman, Mike Lesiak, Mac A. Callaham, Michael Caraway, Thomas Carroll, Dongli Wang, Joseph O'Brien, Rawad Saleh, Andrew Metcalf, Pengfei Liu, Geoffrey Smith, *University of Georgia*
- 11CO.4 Simulating Biomass Burning Emissions: Organic Acid Production from Lignin Under Variable Combustion and Aging Conditions.** ESTHER OLONIMOYO, Elise Aggrey, Akua A. Asa-Awuku, *University of Maryland*
- 11CO.5 Parameterizing Residential Coal Emissions as a Source of Soluble Iron in an Earth System Model.** HALEY E. 9:00 PLAAS, Rui Li, Douglas Hamilton, Mingjin Tang, *North Carolina State University*

11IA INDOOR AEROSOLS 4
106 AD – Marina Vance and Douglas Collins, chairs

- 11IA.1 A Study of PM2.5 Behavior in Indoor Environments Using Canonical and Grand Canonical Ensembles.** Buddhi 8:00 Pushpawela, ISHIKA SINGH, *The University of Alabama in Huntsville*
- 11IA.2 Atmospheric Nanoparticle Growth Dynamics with the Application of Whole-Room Far-UVC Radiation.** BRIAN 8:15 MAGNUSON, Shohoria Afrin Shorno, Chunxu Huang, Ernest Blatchley III, Brandon E. Boor, Nusrat Jung, *Purdue University*
- 11IA.3 Consumer products, Lights, and Environmental Air cleaning in Normal conditions (CLEAN) Home Indoor Field Study Overview.** Sofie Schwink, Rileigh Robertson, Ethan Richter, Rebecca Mesburis, Douglas A. Day, Seonsik Yun, Matt Shulman, Andre Schaum, Annamarie Guth, Sean Benjamin, Jose-Luis Jimenez, Joost A. de Gouw, Kelvin Bates, Qing Ye, Michael Hannigan, MARINA VANCE, *University of Colorado Boulder*
- 11IA.4 A Blueprint for Far-UVC Use in Airborne Pathogen Control.** STEVE MARTIN, Richard Williamson, James Montavon, 8:45 Jacob Swett, *Blueprint Biosecurity*
- 11IA.5 Understanding VOC Levels in an Office: The Impact of Acid-Base and Oxidation Surface Chemistry.** JILLIAN 9:00 DOWNEY, Jonathan Abbatt, *University of Toronto*

11RM REMOTE AND REGIONAL ATMOSPHERIC AEROSOL 3: AIR QUALITY AND CHEMICAL PROCESSES OF AEROSOLS IN THE REMOTE ENVIRONMENT
101 BG – Rachel O'Brien and Cassandra Gaston, chairs

- 11RM.1

8:00

Estimating the Air Quality Co-Benefits of Preventing Deforestation-related Fires. RICARDO MORALES
BETANCOURT, Fernando Garcia-Menendez, Amy P. Sullivan, Diego Roberto Rojas-Neisa, *Universidad de los Andes*
- 11RM.2

8:15

Influence of Wildfire Smoke on the Regional Air Quality in the U.S. Midwest. Parth Thakre, Kerstin Cox, Samantha Galicki, GOURI PRABHAKAR, *Purdue University*
- 11RM.3

8:30

African Dust Transported to Barbados in the Wintertime Lacks Indicators of Chemical Aging. CASSANDRA GASTON, Haley Royer, Michael Sheridan, Hope Elliott, Edmund Blades, Nurun Nahar Lata, Zezhen Cheng, Swarup China, Zihua Zhu, Andrew P. Ault, *University of Miami*
- 11RM.4

8:45

Recalcitrant Brown Carbon: Chemical Characteristics of Biomass Burning Organic Aerosol vs Soil Dust. RACHEL O'BRIEN, Janie (Yeaseul) Kim, Willow Hwang, Cassandra Gaston, Ann M. Dillner, Andrew P. Ault, Benjamin A. Nault, Manjula Canagaratna, Elise Palombella, Christopher Cappa, *University of Michigan*
- 11RM.5

9:00

Distinguishing Regional And Local PM2.5 Influences Using Sensor Networks: Evidence From West Bengal, India. SATHISH SWAMINATHAN, Panagiotis Reskos, V. Faye McNeill, *Columbia University*

Friday 9:15 AM – 9:45 AM

Coffee Break (Exhibit Hall North)

Friday 9:45 AM – 10:45 AM

Session 12: Platform

- 12AA AEROSOL PROCESSES AND PROPERTIES IN CHANGING ENVIRONMENTS IN THE ANTHROPOCENE 5: AEROSOL PROCESSES AND SOURCES
101 CF – Jenny Wong and Lena Gerritz, chairs
- 12AA.1

9:45

Aerosol Acidity Modulated by Temperature Through Semi-Volatile Species. James Campbell, Rodney J. Weber, JINGQIU MAO, *University of Alaska Fairbanks*
- 12AA.2

10:00

Exploring Spontaneous Oxidation Chemistry at the Air-Water Interface of Microdroplets Using a Suite of Mass Analyzers and Ionization Sources. PAUL TUMMINELLO, Nathan Bays, David Schafer, Leonid Sheps, Jared Echternach, Ryan Davis, *Sandia National Laboratories*
- 12AA.3

10:15

Aerosol Inhibition on Photochemical Surface Ozone Formation in Present Day and Under Future Climate and Air Quality Scenarios. G.S. Gopikrishnan, DANIEL WESTERVELT, Jayanarayanan Kuttippurath, *Columbia University*
- 12AA.4

10:30

Spacecraft Reentry: A Novel Source of Aerosol to the Stratosphere. DANIEL MURPHY, NOAA CSL

- 12BA BIOAEROSOLS 6: BIOAEROSOLS AND THE ATMOSPHERE
106 BC – Teresa Feldman and Lillian Jones, chairs
- 12BA.1

9:45

Characterizing Springtime Pollen Rupture and Vertical Transport in the Southeastern US. TAMANNA SUBBA, Allison Steiner, Maria A. Zawadowicz, Ashish Singh, Chongai Kuang, *Brookhaven National Laboratory*
- 12BA.2

10:00

Convective Storms Alter Local Bioaerosols and Ice Nucleating Particles Through Cold Pools and Rain. TERESA FELDMAN, Janeshta Fernando, Chamari Mampage, Claudia Mignani, Marina Nieto-Caballero, Thomas Hill, Brian Heffernan, Drew Juergensen, Christine Neumaier, Tyler Barbero, Charles Davis, Lexi Sherman, Ben Ascher, Jacob Escobedo, Nick Falk, Sean Freeman, Gabrielle Leung, Allie Mazurek, Daniel Veloso-Aguila, Leah Grant, Susan van den Heever, Russell Perkins, Paul DeMott, Sonia Kreidenweis, Elizabeth Stone, *University of Iowa*

- 12BA.3 Wet Deposition of Bioaerosol Tracers.** JANESHTA FERNANDO, Teresa Feldman, Chamari Mampage, Claudia Mignani, Marina Nieto–Caballero, Thomas Hill, Brian Heffernan, Christine Neumaier, Tyler Barbero, Charles Davis, Lexi Sherman, Ben Ascher, Jacob Escobedo, Nick Falk, Sean Freeman, Gabrielle Leung, Allie Mazurek, Daniel Veloso–Aguila, Leah Grant, Susan van den Heever, Russell Perkins, Paul DeMott, Sonia Kreidenweis, Elizabeth Stone, *University of Iowa*
- 12BA.4 Vertical Profiles of Fluorescent and Coarse Mode Particle Properties in the Colorado River Basin and Southeastern United States.** MARIA A. ZAWADOWICZ, Chongai Kuang, Tamanna Subba, Shawn Serbin, Olga Mayol–Bracero, Darielle Dexheimer, Mirtha Salatti, Russell Perkins, Paul DeMott, Jessie Creamean, Zezhen Cheng, Gregory W. Vandergrift, Ashfiquir Rahman, Nurun Nahar Lata, Swarup China, *Brookhaven National Laboratory*

12CA CARBONACEOUS AEROSOLS 4: CHARACTERIZING CARBONACEOUS ORGANIC AEROSOLS
101 DE – Na Mao and Martin Rigler, chairs

- 12CA.1 Enhancing Organic Characterization from TOF–ACSM Mass Spectra Using Collocated Functional Groups Measurements for ASCENT Sites.** NA MAO, Manjula Canagaratna, Nga Lee Ng, Satoshi Takahama, Ruizhe Liu, Sohyeon Jeon, Theobard Habineza, Albert Presto, Seonsik Yun, Douglas A. Day, Jose–Luis Jimenez, Elena Goodspeed, Yingjie Shen, Shane Murphy, Haroula D. Baliaka, Ryan Ward, John Seinfeld, Richard Flagan, Nicolas A. Buchenau, Jason Surratt, Ann M. Dillner, *University of California, Davis*
- 12CA.2 Optimized Source Apportionment Using Total Carbon and Black Carbon Measurements: Integrating Multidimensional BC–Tracer and AAE Models.** MARTIN RIGLER, Matic Ivančič, Iasonas Stavroulas, Eleni Liakakou, Georgios Grivas, Panagiotis Kalkavouras, Lara Bubola, Irena Ježek Breceľj, Bálint Alföldy, Gašper Lavrič, Nikolaos Mihalopoulos, Asta Gregorič, *Aerosol d.o.o.*
- 12CA.3 Characterization and Laboratory Testing of an Oxidation Flow Reactor (DOFR) to Study Secondary Organic Aerosol Formation.** ANSSI ARFFMAN, Stephen Robertson, Miikka Dal Maso, Markus Nikka, Pauli Simonen, Anette Karppinen, Gordon McFiggans, *Dekati Ltd.*
- 12CA.4 Regurgitation of Black Carbon Aerosols from the Ocean During a Cyclone.** ASHISH SONI, Pawan S. Soyam, Shivdas Bankar, Thara Prabhakaran, Harindra J. Fernando, Devmi Gamage, Griffin Modjeski, Selina Bolella, Joaquim Goes, Charles Kovach, Sudarsan Bera, A. Aravindhavel, Maria Laura Zaffoli, Amit Tandon, Mahen Konwar, P. Murugavel, Pramod Safai, Stefano Decesari, Maria Cristina Facchini, Craig M. Lee, Nandakumar Kalarikkal, *Indian Institute of Tropical Meteorology*

12CM CONTROL AND MITIGATION 3 & AEROSOL HISTORY
101 AH – Christine McCool and Srikrishna Devabhaktuni, chairs

- 12CM.1 Detection of and Protection from VOC "Spikes" Generated during Everyday Cooking, Cleaning, and Artistic Activities.** Sonam Devabhaktuni, Sathyaraj Devabhaktuni, DEVABHAKTUNI SRIKRISHNA, *PatientKnowhow.com*
- 12CM.2 The Need for Efficient COVID–19 Engineering Controls.** Yun–Hui Kao, Sheng–Hsiu Huang, Yu–Mei Kuo, Chih–Wei Lin, CHIH–CHIEH CHEN, *National Taiwan University*
- 12CM.3 Modeling Particle Charging and Deposition Behavior in Single–stage Wire–plate Electrostatic Precipitators.** AUSTIN ANDREWS, Christopher J. Hogan, *University of Minnesota*
- 12CM.4 A Brief History of Bioaerosol Sampling: From Early Innovations to Future Prospects.** GEDIMINAS MAINELIS, *Rutgers, The State University of New Jersey*

12NP NANOPARTICLES AND MATERIALS SYNTHESIS 2
106 AD – Mark Swihart and Zhengyuan Pan, chairs

- 12NP.1

Nanoscale High-Entropy Alloy Catalysts from a Flame Aerosol Process. Shuo Liu, Chaochao Dun, Jeffrey Urban, MARK SWIHART, *University at Buffalo – SUNY*
- 12NP.2

Aerosol-Enabled One-Step Synthesis of ZIF-Derived Porous Carbon Spheres. MOHAIMINUL CHOWDHURY, Wei-Ning Wang, *Virginia Commonwealth University*
- 12NP.3

Evaluation of Sub-50 nm Colloidal Silica Detection and Non-Volatile Residue Control for Liquid Filtration through Aerosolization-Based Techniques. ZHENGYUAN PAN, Qisheng Ou, Daniel R. Troolin, David Y. H. Pui, *University of Minnesota*
- 12NP.4

One-Step Synthesis of Nanostructured Spinel-Type High Entropy Oxide (HEO) Materials by the Flat Premixed Droplet-Seeded Flame (FPDSF) Method. OWEN S. FUHR, Serdar Yildirim, Tyler Park, Xiao-Dong Zhou, Francesco Carbone, *University of Connecticut*

12RM REMOTE AND REGIONAL ATMOSPHERIC AEROSOL 4
101 BG – Jay Cheng and Madeline Cooke, chairs

- 12RM.1

Deep Convection Leads to Ultrafine Particle Formation and Growth in the Upper Troposphere at Continental Mid-Latitudes. MADELINE COOKE, John Ortega, James Smith, *University of California, Irvine*
- 12RM.2

Estimating Planetary Boundary Layer Influence at the Helmos Hellenic Atmospheric Aerosol & Climate Change (HAC)2 Station Using Remote Sensing Techniques and In-Situ Measurements. OLGA ZOGRAFOU, Maria Gini, Prodromos Fetfatzis, Konstantinos Granakis, Romanos Foskinis, Christos Mitsios, Carolina Molina, Aiden Jönsson, Paul Zieger, Mika Komppula, Alexandros Papayannis, Athanasios Nenes, Konstantinos Eleftheriadis, *NCSR Demokritos, Athens, Greece*
- 12RM.3

Evaluation of Arctic Aerosol Mass Scattering Efficiency using Airborne Observations. LUKE ZIEMBA, Matthew Brown, Josh DiGangi, Glenn Diskin, Eva-Lou Edwards, Francesca Gallo, Susan Mathai, Richard Moore, Amin Nehrir, Michael Shook, Armin Sorooshian, Jian Wang, Edward Winstead, *NASA*
- 12RM.4

Biogenic Effects on New Particle Formation at a Subalpine Site in Colorado. ANNA KAPP, Darielle Dexheimer, Gregory W. Vandergrift, Zhenli Lai, Nurun Nahar Lata, Swarup China, Zezhen Cheng, James Smith, *University of California, Irvine*

Friday 11:00 AM – 12:30 PM
Plenary 4 (Ballroom)

- 11:00

Plenary Lecture: At a Crossroads in the Sky: Tackling Aerosols, Contrails, and a Sustainable Future for Aviation
Richard Moore, *NASA*
Moderator Marwa El-Sayed, *Embry-Riddle Aeronautical University*
- 12:00

Student Poster and Oral Platform Competition Award Presentation Shannon Capps and Jessica Tryner, *Drexler University and Access Sensor Technologies*
- 12:05

Fine Particle Arts Competition Award Presentation Joseph Woo, *Lafayette College*
- 12:10

Announcement of the Juan Fernadez de la Mora Prize Maria Zawadowicz and Fan Mei, *Brookhaven National Laboratory and the Pacific Northwest National Laboratory*
- 12:15

Concluding Remarks and Preview for 2026 Jason Surratt, 2025 Conference Chair, and Roya Bahreini, 2026 Conference Chair, *University of North Carolina at Chapel Hill and University of California Riverside*

Friday 12:30 PM – 4:00 PM
AAAR Board of Directors Meeting (Board Meeting Room)

Friday 1:30 PM – 7:30 PM
AAAR at Niagara Falls (Must Register for Event)