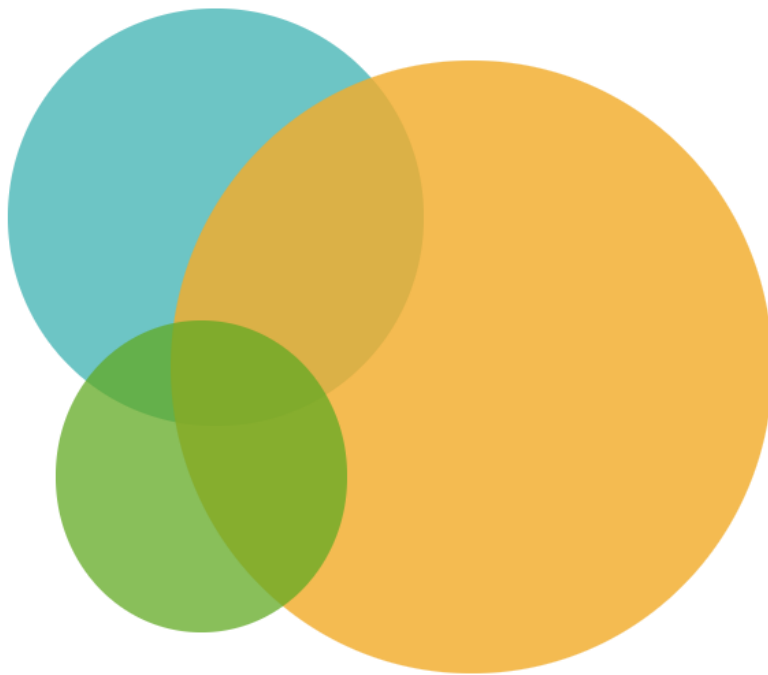


# Air Sensors International Conference 2018



*Advancing Science and Engaging Communities*

Oakland Convention Center, California | September 12-14, 2018

# Thank you to our Committee Members

UC Davis Air Quality Research Center in partnership with the U.S. Environmental Protection Agency, California Air Resources Board, South Coast Air Quality Management District and National Institute for Environmental Health designed this educational conference to advance the science of air quality sensors with a focus on engaging communities. As a team, we enlisted the support from over 50 other individuals with knowledge and experience in air quality sensors and community science to create the incredible program experience at ASIC 2018.

The UC Davis AQRC would like to express our greatest appreciation for our partners and committee members who have shared knowledge and given time to make this enriching educational conference possible.

Josh Apte, University of Texas	Iyad Kheirbek, C40 Cities
David Balshaw, NIEHS	Vasu Kilaru, US EPA
Liu Baoxian, Beijing Municipal Environmental Protection Bureau	Pramod Kulkarni, NIOSH
Kristen Benedict, US EPA	Janice Lam Snyder, SMAQMD
Ron Cohen, UC Berkeley	Jason Low, SCAQMD
Yuxia Cui, NIH/NIEHS	Humberto Luego, CCV Health
François Dedieu, French Agronomic Institute (Inra)	Elizabeth Mannshardt, US EPA
Suresh Dhaniyala, Clarkson University	Luis Olmedo, CCV, IVAN AIR
Catherine Dunwoody, CARB	Vasileios Papapostolou, SCAQMD
Veronica Eady, CARB	Robert Pinder, US EPA
Holger Eisl, Queens College, City University of New York	Andrea Polidori, SCAQMD
Cassie Ely, EDF	Joann Rice, US EPA
Paul English, California Department of Public Health	Nico Schulte, CARB
Ron Evans, US EPA	Willie Shubert, Public Lab
Jennifer Gabrys, Goldsmith, University of London & Citizen Sense	Linda Tombras Smith, CARB
Vanessa Galaviz, University of Washington	Mia South, US EPA
Gretchen Gehrke, Public Lab	David Southgate, DISUR Puerto Rico
Michel Gerboles, EC-JRC	Susan Stone, US EPA
Tarun Gupta, IIT Kanpur, Franc	Jenia Tufts, US EPA
Walter Ham, CARB	John Volckens, Colorado State University
Mike Hannigan, University of Colorado, Boulder	Chet Wayland, US EPA
Christa Hasenkopf, Open AQ	Tony Wexler, AQRC
Michael Heimbinder, HabitatMap	John White, US EPA
Ajith Kaduwela, CARB	Ron Williams, US EPA
Amanda Kaufman, US EPA	Holly Wilson, US EPA
	Alfred YU, Environmental Protection Department
	Yifang Zhu, UCLA

## We couldn't do this without you!

# Thank you to our Generous Sponsors!



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT



---

**National Institute for Environmental Health Sciences,  
Environmental Health Science Center at UC Davis**

---



## TUESDAY, SEPTEMBER 11, 2018

2:00pm – 8:00pm      Registration Open

4:00pm – 4:45pm      **Pre-Conference Trainings, sponsored by Airthinx**

201	Air Quality 101	John Balmes, UCSF
202	State of Air Sensors	Tim Dye, TD Environmental Services
203	Technical Foundations for Sensor Networks	Melissa Lunden, Aclima
204	Excel Macro 101	Andrea Clements, US EPA
205	Creating Healthy Indoor Spaces for Industry Members	Airthinx

5:00pm – 5:45pm      **Pre-Conference Trainings, sponsored by Airthinx**

201	Air Quality 102	Ajith Kaduwela, CARB
202	Community Sensor Training: Best practices and lessons learned for engaging communities in air quality monitoring	Vasileios Papapostolou, SCAQMD & Hilary Hafner, Sonoma Technology Inc
203	Sensing to Go: Mobile Platforms	Melissa Lunden, Aclima

## WEDNESDAY, SEPTEMBER 12, 2018

7:00am – 5:30pm      Registration Open

8:00am – 7:30pm      Exhibit Hall Open

*Exhibit Hall Sponsored by Aclima*

8:00am – 9:30am      **Plenary Panel**

East 1
<b>CALIFORNIA COMMUNITY AIR PROTECTION PANEL</b>
Moderator: <i>Catherine Dunwoody, CARB</i>
<p><b>Podium Presentations &amp; Discussion by:</b>                  Veronica Eady, California Air Resources Board                  Jason Low, South Coast Air Quality Management District                  Eric Stevenson, Bay Area Air Quality Management District                  Alan Abbs, California Air Pollution Control Officers Association</p>

10:00am – 11:00am      **Concurrent Sessions - Group 1**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>REGULATIONS AND PERFORMANCE STANDARDS</b>	<b>INDOOR AIR QUALITY</b>	<b>DATA ANALYTICS</b>
CHAIRS: <i>Walter Ham, CARB &amp; Kristen Benedict, US EPA</i>	CHAIRS: <i>Holly Wilson, US EPA &amp; Yifang Zhu, UCLA</i>	CHAIRS: <i>Andrea Polidori, SCAQMD &amp; Elizabeth Mannshardt, US EPA</i>
<p><b>Podium Presentations by:</b></p> <ul style="list-style-type: none"> <li>- Kyle Vagadori, CARB</li> <li>- Kristen Benedict, US EPA</li> <li>- Craig Kreman, Quapaw Tribe of Oklahoma</li> <li>- Michel Gerboles, EC-JRC</li> </ul>	<p><b>Panel Discussion with:</b></p> <ul style="list-style-type: none"> <li>- Bob Thompson, US EPA</li> <li>- Yifang Zhu, UCLA</li> <li>- Justin Patts, NIOSH</li> <li>- Martin Lukac, Nexleaf Analytics</li> </ul>	<p><b>Podium Presentations by:</b></p> <ul style="list-style-type: none"> <li>- Christoph Hueglin, Empa, Swiss Federal Laboratories</li> <li>- Brandon Feenstra, South Coast Air Quality Management District</li> <li>- Jennifer Eberwein, Mojave APCD &amp; Steve Drevik, Agilaire</li> <li>- L. Drew Hill, Exponent, Inc. Center</li> </ul>

11:00am – 11:30am **Session Break**

11:30am – 12:30am **Concurrent Sessions – Group 1 continued...**

East 1
<b>REGULATIONS AND PERFORMANCE STANDARDS</b>
CHAIRS: <i>Walter Ham, CARB &amp; Kristen Benedict, US EPA</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Andrea Polidori, SCAQMD</li><li>- Eric Stevenson, BAAQMD</li><li>- Caroline D'Angelo – US DOS</li><li>- Liu Baoxian, BJMEMC</li></ul>

East 3 (ABCD)
<b>INDOOR AIR QUALITY</b>
CHAIRS: <i>Holly Wilson, US EPA &amp; Yifang Zhu, UCLA</i>
<b>Panel Discussion Continued with:</b> <ul style="list-style-type: none"><li>- Ajay Pillarisetti, UC Berkeley</li><li>- Oliver Lefebvre, Climate Solutions Consulting</li><li>- Ang Zhao, Rock Environment and Energy Institute</li></ul>

East 4 (EFGH)
<b>DATA ANALYTICS</b>
CHAIRS: <i>Andrea Polidori, SCAQMD &amp; Elizabeth Mannshardt, US EPA</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- David Lary, University of Texas at Dallas</li><li>- Tongshu Zheng, Duke University</li><li>- Ramachandran Subramanian, Carnegie Mellon University</li></ul>

12:30am – 2:00pm **Lunch Break & Exhibit Viewing – On your own**

2:00pm – 3:00pm **Concurrent Sessions – Group 2**

East 1
<b>CITIZEN &amp; COMMUNITY SCIENCE GROUP 1</b>
CHAIR: <i>Vanessa Galaviz, University of Washington</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Trina Mackie, Touro University</li><li>- Amanda Kaufman, US EPA</li><li>- Luis Olmedo, CCV, IVAN AIR</li><li>- Gustavo Aguirre Jr., CCEJN</li></ul>

East 3 (ABCD)
<b>GAS &amp; VAPOR SENSING</b>
CHAIRS: <i>Ron Williams, US EPA &amp; Joann Rice, US EPA</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Ron Williams, US EPA</li><li>- Michael Hannigan, University of Colorado</li><li>- Geoff Henshaw, Aeroqual Ltd</li><li>- Igor Paprotny, University of Illinois at Chicago</li></ul>

East 4 (EFGH)
<b>DATA ASSIMILATION</b>
CHAIRS: <i>John White, US EPA &amp; Michel Gerboles, EC-JRC</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Alena Bartoňová, NILU Norwegian Institute for Air Research</li><li>- Karin Tuxen-Bettman, Google</li><li>- Michael Heimbinder, HabitatMap</li></ul>

3:00pm – 3:30pm **Session Break**

3:30pm – 4:30pm **Concurrent Sessions – Group 2 Continued...**

East 1
<b>CITIZEN &amp; COMMUNITY SCIENCE GROUP 1</b>
CHAIR: <i>Vanessa Galaviz, University of Washington</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Ms. Margaret Gordon, WOIEP</li><li>- Margaret Rice, New York City Department of Health &amp; Mental Hygiene</li><li>- Kris Ray, Colville Tribes</li><li>- Calvin Cupini, Clean Air Carolina</li></ul>

East 3 (ABCD)
<b>GAS &amp; VAPOR SENSING</b>
CHAIRS: <i>Ron Williams, US EPA &amp; Joann Rice, US EPA</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Markus Knoll, Graz University of Technology, Institute of Electronic Sensor Systems</li><li>- Georgia Miskell, University of Auckland</li><li>- Ardevan Bakhtari, Scentroid</li><li>- Amanda Billingsley, AQMesh</li></ul>

East 4 (EFGH)
<b>DATA ASSIMILATION</b>
CHAIRS: <i>John White, US EPA &amp; Michel Gerboles, EC-JRC</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Theo Damoulas, University of Warwick &amp; The Alan Turing Institute</li><li>- Tim Dye, TD Environmental Services</li><li>- Jun Wang, University of Iowa</li></ul>

4:40pm – 5:35pm **Poster Presentations**

Poster Displays will cover air sensor applications, research projects, the resulting data and community engagement case studies. There will be 50 Rapid Fire Poster Presentations in the main hall East 1 before the Welcome Reception and Poster Viewing begins.

5:45pm – 7:30pm **Welcome Reception & Poster Review**

*Sponsored by Bay Area Air Quality Management District & South Coast Air Quality Management District*  
The Welcome Reception Sponsors, the Bay Area Air Quality Management District and South Coast Air Quality Management District invite you to join them to mix & mingle with colleagues while enjoying some great appetizers and beverages! This Welcome Reception is held in the Exhibit Hall, which is sponsored by Aclima.

**THURSDAY, SEPTEMBER 13, 2018**

8:00am – 7:30pm Exhibit Hall Open  
*Exhibit Hall Sponsored by Aclima*

8:00am – 9:30am **Plenary Panel**

East 1
<b>COMMUNITY PERSPECTIVES AND CONNECTIONS PLENARY PANEL</b>
<i>Moderator: Amanda Kaufman, US EPA &amp; Paul English, CA Department of Public Health</i>
<p><b>Podium Presentations &amp; Discussion by:</b>                  Penelope “Jenny” Quintana, San Diego University                  Kris Ray, Colville Confederated Tribes                  Calvin Cupini, Clean Air Carolina                  Adrienne Hollis, West Harlem Environmental Action, Inc.</p>

10:00am – 11:00am **Concurrent Sessions - Group 1**

East 1	East 2	East 3 (ABCD)	East 4 (EFGH)
<b>LOW &amp; MIDDLE INCOME COUNTRIES</b>	<b>YOUTH EDUCATION</b>	<b>FIELD EXPERIENCE</b>	<b>PARTICLE SENSING</b>
CHAIR: <i>Robert Pinder, US EPA</i>	CHAIRS: <i>Paul English, CA Department of Public Health &amp; Mia South, US EPA</i>	CHAIRS: <i>Jennifer Gabrys, Goldsmith, University of London &amp; Citizen Sense, Michael Heimbinder, HabitatMap &amp; Luis Olmedo, CCV, IVAN AIR</i>	CHAIRS: <i>Vasileios Papapostolou, SCAQMD &amp; Suresh Dhaniyala, Clarkson University</i>
<p><b>Panel Session with:</b></p> <ul style="list-style-type: none"> <li>- Emmanuel Appoh, Ghana Environmental Protection Agency</li> <li>- Saliou Souare, Centre de Gestion de la Qualité de l’Air à Dakar (CGQA)</li> <li>- R. Subramanian, Carnegie Mellon University</li> <li>- Sean Khan, United Nations Environment</li> </ul>	<p><b>Podium Presentations by:</b></p> <ul style="list-style-type: none"> <li>- Luz Guel, The Mount Sinai Transdisciplinary Center on Early Environmental Exposures</li> <li>- Eric Cantenwalla, US EPA &amp; Ryder Freed, US EPA</li> <li>- Daniel Madrigal, Public Health Institute</li> </ul>	<p><b>Podium Presentations by:</b></p> <ul style="list-style-type: none"> <li>- Jesse Kroll, Massachusetts Institute of Technology</li> <li>- Sunil Gulia, National Environmental Engineering Research Institute</li> <li>- Shih-Chun Candice Lung, Research Center for Environmental Changes, Academia Sinica</li> <li>- Benjamin Barratt, King’s College London</li> </ul>	<p><b>Podium Presentations by:</b></p> <ul style="list-style-type: none"> <li>- Eben Cross, Aeroqual Research Inc.</li> <li>- Kyle Alberti, Aeroqual Research Inc.</li> <li>- Lara Gundel, Lawrence Berkeley National Laboratory</li> <li>- Pratim Biswas, Washington University in St. Louis</li> </ul>

11:00am – 11:30am **Session Break**

11:30am – 12:30am **Concurrent Sessions – Group 1 continued...**

East 1	East 2	East 3 (ABCD)	East 4 (EFGH)
<b>LOW &amp; MIDDLE INCOME COUNTRIES</b>	<b>YOUTH EDUCATION</b>	<b>FIELD EXPERIENCE</b>	<b>PARTICLE SENSING</b>
CHAIR: <i>Robert Pinder, U.S. EPA</i>	CHAIRS: <i>Paul English, CA Department of Public Health &amp; Mia South, US EPA</i>	CHAIRS: <i>Jennifer Gabrys, Goldsmith, University of London &amp; European Research Counsel, Michael Heimbinder, HabitatMap &amp; Luis Olmedo, CCV, IVAN AIR</i>	CHAIRS: <i>Vasileios Papapostolou, SCAQMD &amp; Suresh Dhanyala, Clarkson University</i>
<b>Panel Sessions with:</b> <ul style="list-style-type: none"> <li>- Emmanuel Appoh, Ghana Environmental Protection Agency</li> <li>- Saliou Souare, Centre de Gestion de la Qualité de l'Air à Dakar (CGQA)</li> <li>- R. Subramanian, Carnegie Mellon University</li> <li>- Sean Khan, United Nations Environment</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Amal Kaduwela, Albany High School</li> <li>- Rachelle Duvall, US EPA</li> <li>- Group Discussion to follow</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Pierre Pernot &amp; Adrian Arfire, Airparif</li> <li>- Ashley Collier-Oxandale, University of Colorado Boulder</li> <li>- Guy Coulson, National Institute of Water and Atmospheric Research</li> <li>- Karen Canales, Little Village Environmental Justice Organization</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Vasileios Papapostolou, South Coast AQMD</li> <li>- Sreenath Avula, TSI Inc.</li> <li>- Meilu He, Clarkson University</li> <li>- Graeme Carvlin, Puget Sound Clean Air Agency</li> </ul>

12:30am – 2:00pm **Lunch Break & Exhibit Viewing – On your own**

2:00pm – 3:00pm **Concurrent Sessions – Group 2**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>CITIZEN &amp; COMMUNITY SCIENCE GROUP 2</b>	<b>DATA COMMUNICATION</b>	<b>MOBILE TECHNOLOGIES</b>
CHAIR: <i>Catherine Dunwoody, CARB</i>	CHAIRS: <i>Susan Stone, US EPA &amp; Jason Low, SCAQMD</i>	CHAIRS: <i>Nico Schulte, CARB &amp; Josh Apte, University of Texas</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Jill Johnston, USC and CBE</li> <li>- Ernie Weijers, National Institute for Public Health and the Environment RIVM</li> <li>- Nancy Carmona, University of Washington, Department of Environmental and Occupational Health Sciences</li> <li>- Jennifer Gabrys, Goldsmith, University of London &amp; Citizen Sense</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Jason Low, South Coast AQMD</li> <li>- Mena Shah, CARB</li> <li>- Elena Austin, University of Washington</li> <li>- Kayla Schulte, University of Oxford</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Albert Presto, Carnegie Mellon University</li> <li>- Anthony Miller, Entanglement Technologies, Inc.</li> <li>- Kirsten Koehler, Johns Hopkins University</li> <li>- Bassam Dgheim, Aclima, Inc.</li> </ul>

3:00pm – 3:30pm **Session Break**

3:30pm – 4:30pm

**Concurrent Sessions – Group 2 Continued...**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>CITIZEN &amp; COMMUNITY SCIENCE GROUP 2</b>	<b>DATA COMMUNICATION</b>	<b>MOBILE TECHNOLOGIES</b>
CHAIR: <i>Catherine Dunwoody, CARB</i>	CHAIRS: <i>Susan Stone, US EPA &amp; Jason Low, SCAQMD</i>	CHAIRS: <i>Nico Schulte, CARB &amp; Josh Apte, University of Texas</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Adrienne Hollis, West Harlem Environmental Action, Inc.</li> <li>- Michael Ogletree, Denver Department of Public Health &amp; Environment</li> <li>- Sacoby Wilson, School of Public Health and University of Maryland-College Park</li> <li>- Anna Scott, Johns Hopkins University</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Susan Lyon Stone, US EPA</li> <li>- Jim Menard, IBM and The Weather Company</li> <li>- Alexa Wilkie, Public Health Institute and CDPH</li> <li>- Maria Harris, Environmental Defense Fund</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Marianne Hatzopoulou, Department of Civil Engineering, University of Toronto</li> <li>- Priyanka deSouza, Massachusetts Institute of Technology</li> <li>- Nico Schulte, CARB</li> </ul>

4:45pm – 5:45pm

**Plenary Panel**

East 1
<b>FEDERAL CONNECTIONS PLENARY PANEL</b>
Moderator: <i>Kristen Benedict, US EPA</i>
<b>Podium Presentations &amp; Discussion by:</b> Meredith Kurpius, US Environmental Protection Agency Erika Sasser, US Environmental Protection Agency Katherine Weber, US Department of State

6:00pm – 7:00pm

**Industry Member Gathering** (Oakland Room, 3<sup>rd</sup> Floor)  
**Community Scientist Gathering** (California Room, 3<sup>rd</sup> Floor)

**FRIDAY, SEPTEMBER 14, 2018**

8:00am – 5:00pm      Exhibit Hall Open  
*Exhibit Hall Sponsored by Aclima*

8:00am – 9:30am

**Plenary Panel**

East 1
<b>INTERNATIONAL PERSPECTIVES PLENARY PANEL</b>
Moderator: <i>Andrea Polidori, South Coast Air Quality Management District</i>
<b>Podium Presentations &amp; Discussion by:</b> Lyng-Jyn Chen, Academia Sinica Tonny Xie, Bluetech Clean Air Alliance Sean Khan, United Nations Environment Alena Bartoňová, NILU Norwegian Institute for Air Research Emmanuel Appoh, Ghana Environmental Protection Agency



10:00am – 11:00am **Concurrent Sessions – Group 1**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>EXPOSURE AND HEALTH</b>	<b>MONITOR SITING</b>	<b>EMERGING TECHNOLOGIES</b>
CHAIRS: <i>David Balshaw, NIEHS &amp; Linda Tombras Smith, CARB</i>	CHAIRS: <i>Janice Lam Snyder, Sacramento Air Quality Management District &amp; Holger Eisl, Queens College, City University of New York</i>	CHAIRS: <i>Ron Evans, US EPA &amp; Yuxia Cui, NIH and NIEHS</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Edmund Seto, University of Washington</li> <li>- Darby Jack, Columbia University</li> <li>- David Peden, University of North Carolina</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Alena Bartoňová, NILU Norwegian Institute for Air Research</li> <li>- Kate Hoag, BAAQMD</li> <li>- Holger Eisl, Queens College, City University of New York</li> <li>- Kun-Hsing Liu, Green Energy and Environmental Research Laboratories and Industrial Technology Research Institute</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Suresh Dhaniyala, Clarkson University</li> <li>- Zhi Ning, The Hong Kong University of Science and Technology</li> <li>- Matthew Landis, US EPA Office of Research and Development</li> </ul>

11:00am – 11:30am **Session Break**

11:30am – 12:30am **Concurrent Sessions – Group 1 continued...**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>EXPOSURE AND HEALTH</b>	<b>MONITOR SITING</b>	<b>EMERGING TECHNOLOGIES</b>
CHAIRS: <i>David Balshaw, NIEHS &amp; Linda Tombras Smith, CARB</i>	CHAIRS: <i>Janice Lam Snyder, Sacramento Air Quality Management District &amp; Holger Eisl, Queens College, City University of New York</i>	CHAIRS: <i>Ron Evans, US EPA &amp; Yuxia Cui, NIH and NIEHS</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Rima Habre, University of Southern California</li> <li>- Jeffery Williams, CARB</li> <li>- John Balmes, UC San Francisco, and Berkeley</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Ajith Kaduwela, AQRC, UC Davis</li> <li>- Christine Kendrick, City of Portland Bureau of Planning and Sustainability</li> <li>- Janice Lam Snyder, Sacramento Metropolitan AQMD</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Kevin Cromar, NYU</li> <li>- David Broday, Technion</li> <li>- Philip Father, Scepter, Inc.</li> </ul>

12:30am – 2:00pm **Lunch Break & Exhibit Viewing – On your own**

2:00pm – 3:00pm **Concurrent Sessions – Group 2**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>CITIZEN &amp; COMMUNITY SCIENCE #3</b>	<b>SOURCE CHARACTERIZATION</b>	<b>DATA SHARING AND HARMONIZATION</b>
CHAIR: <i>Amanda Kaufman, Office of Air Quality Planning and Standards, EPA</i>	CHAIRS: <i>Iyad Kheirbek, C40 Cities, John Volckens, Colorado State University &amp; Tarun Gupta, IIT Kanpur</i>	CHAIRS: <i>Christa Hasenkopf, Open AQ &amp; Vasu Kilaru, EPA-NERL</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Orly Stampfer, University of Washington</li> <li>- Wendy Grisworld, University of Memphis</li> <li>- Gregory Newmark, Kansas State University</li> <li>- Hilary Hafner, Sonoma Technology</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Ramachandran Subramanian, Carnegie Mellon University</li> <li>- Jinsol Kim, UC Berkeley</li> <li>- Andrew Grieshop, North Carolina State University</li> <li>- Shaohua Hu, CARB</li> </ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"> <li>- Vasu Kilaru, EPA-NERL</li> <li>- Michel Gerboles, EC-JRC</li> <li>- Luis Olmedo, CCV, IVAN AIR</li> <li>- Janet Fredericks, Woods Hole Oceanographic Institution</li> </ul>

3:00pm – 3:30pm **Session Break**

3:30pm – 4:30pm **Concurrent Sessions – Group 2 Continued...**

East 1	East 3 (ABCD)	East 4 (EFGH)
<b>CITIZEN &amp; COMMUNITY SCIENCE #3</b>	<b>SOURCE CHARACTERIZATION</b>	<b>DATA SHARING AND HARMONIZATION</b>
CHAIRS: <i>Amanda Kaufman, Office of Air Quality Planning and Standards, EPA</i>	CHAIRS: <i>Iyad Kheirbek, C40 Cities, John Volckens, Colorado State University &amp; Tarun Gupta, IIT Kanpur</i>	CHAIRS: <i>Christa Hasenkopf, Open AQ &amp; Vasu Kilaru, EPA-NERL</i>
<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Seung-Hyun Cho, RTI International</li><li>- Stephen Krabbe, US EPA Region 7</li><li>- Brian Miles, CGI</li></ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- Jingkun Jiang, Tsinghua University</li><li>- Naomi Zimmerman, The University of British Columbia</li><li>- Chelsea Preble, UC Berkeley</li><li>- Stephen Feinberg, ORAU and US EPA</li></ul>	<b>Podium Presentations by:</b> <ul style="list-style-type: none"><li>- John Graybeal, Stanford University</li><li>- David L. Elam, Jr., TRC</li><li>- Dan Webster, Sage Bionetworks</li><li>- Abhijit RS, EDF</li></ul>

4:30pm – 5:00pm **Final Raffle**

THANK YOU RAFFLE CONTRIBUTORS
SPEC Sensors, LLC Bay Area Air Quality Management District uRADMonitor Wynd Technologies, Inc Aeroqual Apis, Inc

## Thank You for Attending from the UC Davis AQRC!

Our mission at the AQRC is to facilitate research on the scientific, engineering, health, social, and economic aspects of gaseous and particulate atmospheric pollutants. The best way for us to facilitate the research and education of the world is through educational conferences like this. We thank you, as our attendees, for joining us to learn about new science and technology and for sharing your experiences and knowledge with the world.

We look forward to hosting you again for ASIC 2020!

To keep up to date with UC Davis AQRC events including ASIC 2020, join our mailing list:

<https://www.surveymonkey.com/r/AQRC-email-sign-up>

Visit our website to learn more about the UC Davis AQRC research activities and events:

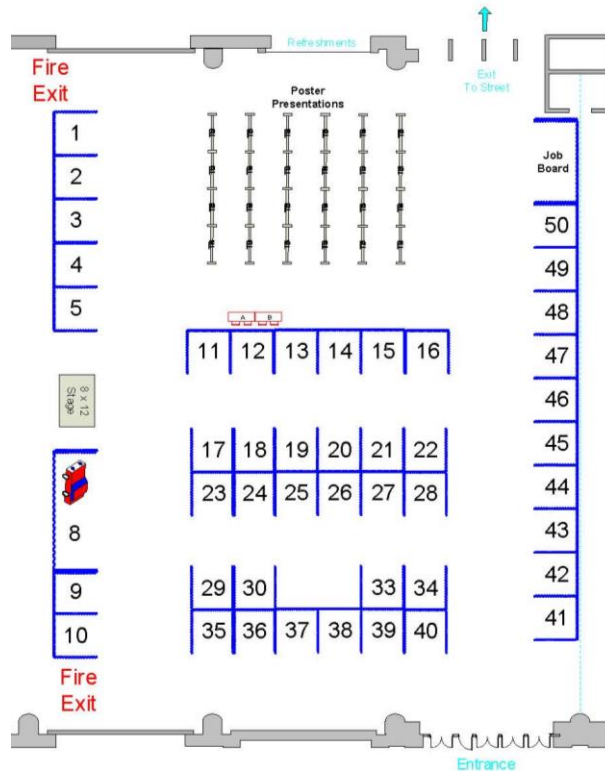
<https://aqrc.ucdavis.edu/>

# UC DAVIS

## AIR QUALITY RESEARCH CENTER

# ASIC Exhibit Hall

Officially Sponsored by Aclima



Organization	Booth
2B Technologies, Inc./ AQTreks	39/40
Aclima	8
Aeroqual	46
AethLabs	47
Agilaire LLC	27
Airthinx	10
Ambilabs	35
APIS AQ	13
AQMesh	42
Atmosfir Optics	15
Axetris AG	36
Sunset CES Inc	48
TD Environmental	25
TRC Companies	45

Organization	Booth
TSI Inc.	41
BAAQMD	3
CA Air Resources Board	5
Clarity	21
Earthworks	12
Ecomesure	20
EME Systems LLC / Berkeley Air Monitoring Group	17
Environmental Defense Fund	22
Envirosuite	11
FTS	16
IQAir	19
Kaiterra	9
U.S. EPA's Air and Energy Research Program	34
University of Illinois at Chicago	24

Organization	Booth
uRADMonitor	18
Klear Environment Group	14
Kunak	33
Met One Instruments	30
Mountain Air Engineering	Table A
Omniscient	26
Particles Plus	37/38
SCAQMD	4
Scentroid	29
Sonoma Technology	43
SPEC Sensors, LLC	28
Vaisala	49
Vaporsens, Inc.	23
Wynd Technologies, Inc	44

*CLEARING CALIFORNIA SKIES FOR OVER 50 YEARS*



Advancing air monitoring technology  
& fostering community science.

[arb.ca.gov/air-quality](http://arb.ca.gov/air-quality)

*Protecting the health of residents of the  
South Coast Air District*



**South Coast  
AQMD**

*Fostering practical and innovative strategies to clean the  
air, South Coast Air Quality Management District is a  
proud sponsor of the Air Sensors International Conference.*

[www.aqmd.gov](http://www.aqmd.gov)



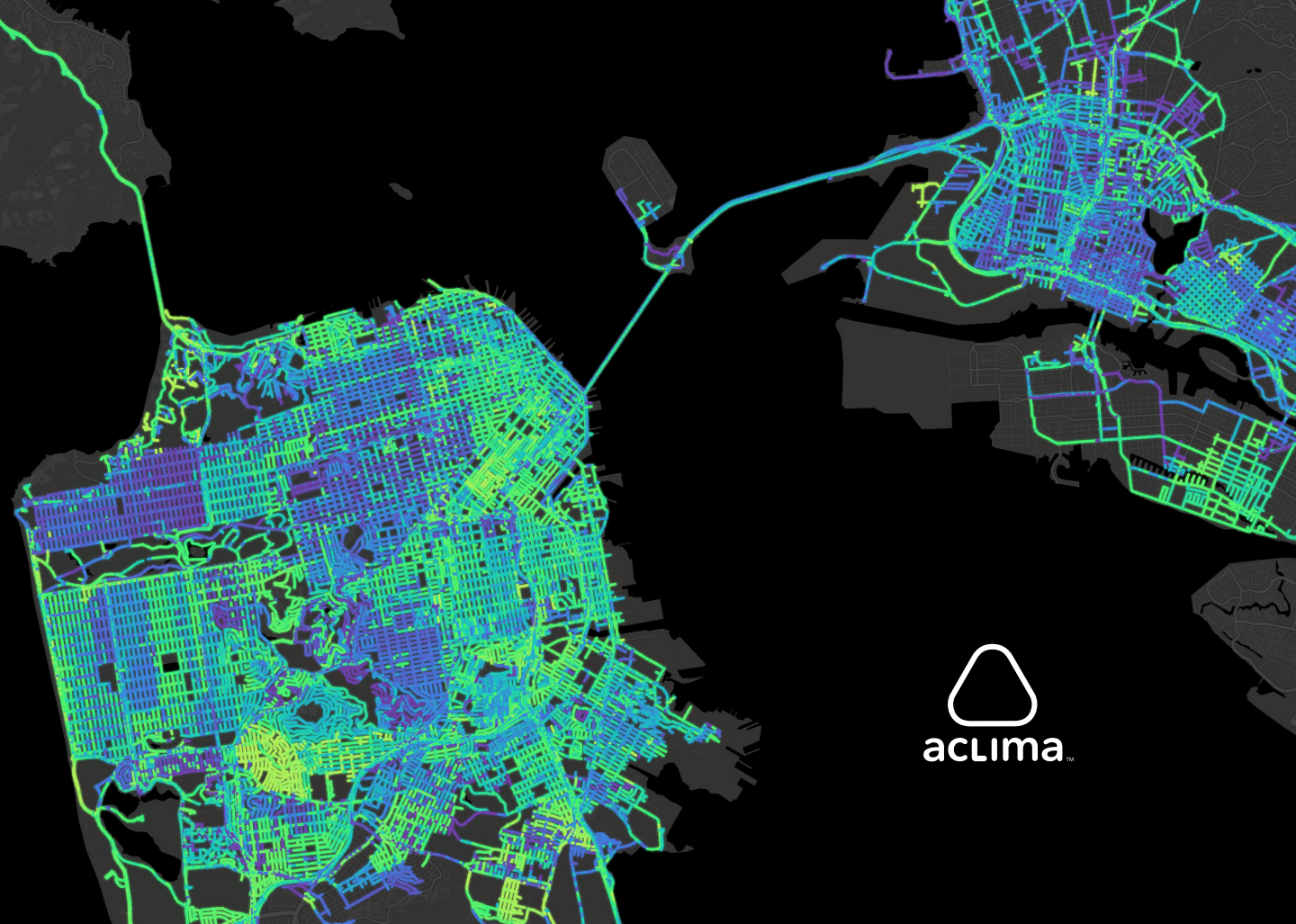
BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

*is a proud sponsor  
of the Air Sensors  
International Conference*

*Protecting  
and improving  
public health,  
air quality and  
the global climate  
since 1955.*

baaqmd.gov

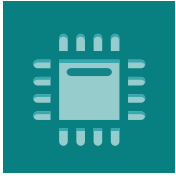




# Environmental intelligence for people and the planet

Aclima delivers hyperlocal air quality data and insights, at block-by-block resolution. Aclima combines leading-edge sensor technology, climate-science, enterprise software and machine learning to take the pulse of the invisible world around us. Translating real-time data into actionable insights, Aclima transforms how we understand and manage our communities, cities, and industries. Visit our Exhibitor booth to learn more.

---



an Open Access Journal by MDPI








## Message from the Editorial Board

*Sensors* (ISSN 1424-8220) is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes special issues devoted to specific sensing areas and application each year.

## The scope of *Sensors* includes:

Physical sensors	Sensor arrays and Chemometrics
Chemical sensors	Micro and nanosensors
Biosensors	Internet of Things
lab-on-a-chip	Signal processing, data fusion and deep learning in sensor systems
Remote sensors	Sensor interface
Sensor networks	Human-Computer Interaction
Smart/Intelligent sensors	Advanced materials for sensing
Sensor devices	Sensing systems
Sensor technology and application	MEMS/NEMS
Sensing principles	Localization and object tracking
Optoelectronic and photonic sensors	
Optomechanical sensors	

## Author Benefits

-  **Open Access** Unlimited and free access for readers
-  **No Copyright Constraints** Retain copyright of your work and free use of your article
-  **Thorough Peer-Review**
-  **Coverage by Leading Indexing Services** SCIE-Science Citation Index Expanded (Clarivate Analytics), MEDLINE (NLM), Pubmed (NLM), Scopus (Elsevier)
-  **No Space Constraints, No Extra Space or Color Charges** No restriction on the length of the papers, number of figures or colors
-  **Discounts on Article Processing Charges (APC)** If you belong to an institute that participates with the MDPI Institutional Open Access Program
-  **Impact Factor 2.475** (2017 Journal Citation Reports)







**EXTREME ENVIRONMENTS  
EXTREMELY RELIABLE**

**91%**

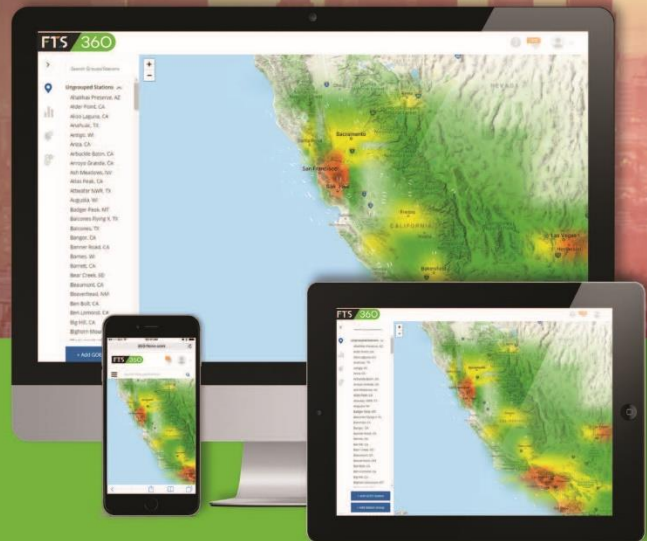
of the world's population lives in places where air quality exceeds WHO guideline limits

**4.2 million**

deaths occur every year as a result of exposure to ambient (outdoor) air pollution

### AIR QUALITY DASHBOARD

- FTS360 cloud platform
- Alerts by email, text, and social media
- iOS and Android App
- API for data pass through to your platform



Product Intent

### AIR QUALITY DATA CAPTURE SOLUTIONS




Portable



Smart City



Fire Weather

[ftsinc.com](http://ftsinc.com) | 1.800.548.4264    

CANADA 1065 Henry Eng Place | Victoria, BC | V9B 6B2

USA 1124 Fir Avenue, Suite C | Blaine, WA | 98230

To learn more come see us at booth 16  
or contact us at [product@ftsinc.com](mailto:product@ftsinc.com)

# Be part of the ASIC Special Issue Publications!

---

Atmospheric Environment  
&  
Aerosol Science & Technology

---

Accepting submissions starting September 17<sup>th</sup>

More information available online:

<https://asic.aqrc.ucdavis.edu/special-issue-publications>