Biographies of presenters are listed below in alphabetical order of last name.

Axel Abellard

President, Argos Scientific America, Inc. Argos Scientific, Inc.

Mr. Abellard holds degrees in Computer Engineering from the Georgia Institute of Technology as well as a master's degree in Business Administration from the University of California, Berkeley. Mr. Abellard has over 12 years of experience designing information systems for air monitoring equipment and was the principal architect for the Richmond Community Air Monitoring Program.

Session: Episodic Modeling

Presentation Title: Employing Machine Learning Techniques to Determine Emission Sources at Industrial Facilities Use of Open Path Air Monitoring Systems

Arpit Bhatt

Bioenergy Process Analysis Engineer, National Renewable Energy Laboratory

Arpit Bhatt is a Bioenergy Process Analysis Engineer in the Strategic Energy Analysis Center at the National Renewable Energy Laboratory. His research interests include techno-economic analysis for advanced biofuel production, and air quality analysis for evaluating the sustainability of biofuel conversion technologies. He holds a Master of Chemical Engineering degree from Lamar University, Texas and a Bachelors of Technology in Chemical Engineering from Nirma University, India.

Session: Emissions Estimation

Presentation Title: Estimating air pollutant emissions from co-processing raw bio-oil in petroleum refineries

Jerry Bovee

Source Test & Performance Evaluation Manager, BAAQMD

Mr. Jerry Bovee manages the Source Test and Performance Evaluation Sections at the Bay Area Air Quality Management District (Air District), overseeing multiple measurement and reporting programs and sharing knowledge in coordination with other Air District Divisions on issues involving rule development, compliance and enforcement, permitting practices, planning, emission inventory and litigation. He is a Licensed Professional Engineer (P.E.) in the State of Maryland and certified through the Source Evaluation Society (SES) as a Qualified Source Testing Individual (QSTI). Mr. Bovee possesses nearly three decades of experience in the environmental field, primarily in air quality, but he is also versed in water quality, wastewater treatment, remediation and sustainability. Prior to joining the Air District, Mr. Bovee worked as a Regional Manager for a large environmental consulting firm, providing air pollution measurement consulting services to private and public organizations, directing staff resources and projects related to emissions quantification, permitting, regulatory analysis, strategic planning, ambient monitoring, modeling and air pollution control system optimization. His expertise in industrial air pollution source emission quantification and control has been leveraged nationally and internationally by organizations to solve highly complex technical and regulatory problems.

Session: Long Term Measurements

Presentation Title: Lessons Learned During BAAQMD Required Refinery Fence Line Monitoring Program Development - Available Technology & Data Quality System Update

Joseph C. Chang

Senior Physical Scientist, RAND Corporation.

Dr. Joseph Chang has 30 years of experience in diverse subject areas in atmospheric sciences (e.g., atmospheric modeling, dispersion/plume modeling, environmental impacts, climate change, data analysis, and model verification and validation) and in homeland security (e.g., transportation security, border security, immigration, chemical security, infrastructure protection, risk assessment, operational and statistical analysis, and performance measurement). He provided technical management for the Department of Defense Office of the Special Assistant for Gulf War Illnesses to assess the potential exposures to U.S. troops due to inadvertent chemical agent releases during the 1991 Gulf War. He developed the Hybrid Plume Dispersion Model and the Offshore Coastal Dispersion Model. He also developed for the DOE, uranium enrichment plants a dispersion model that accounts for complex thermodynamics and chemistry of uranium hexafluoride. He evaluated more than a dozen commonly-used dense-gas dispersion models that are primarily used to model accidental releases of toxic industrial chemicals. He also extensively evaluated DoD dispersion models, such as the Joint Effects Model and the Hazard Prediction Assessment Capability. The evaluation methodology and acceptance criteria that he co-developed for dispersion models are widely used by scientists throughout the world. He has been hosting the annual George Mason University Conference on Atmospheric Transport and Dispersion Modeling for more than 15 years. Dr. Chang published over 24 articles in peerreviewed journals and co-authored one book, Guidelines for Use of Vapor Cloud Dispersion Models. He is a Certified Consulting Meteorologist by the American Meteorological Society. He has also served on various AMS boards and committees, including co-chairmanship of an AMS committee to explore a new climate-change consulting certification program.

Session: Episodic Modeling

Presentation Title: Jack Rabbit II Inter-model Comparison Exercise

Elena Craft

Senior Director, Climate and Health, Environmental Defense Fund

Dr. Craft's expertise is on air toxics issues, focusing specifically on reducing criteria and greenhouse gas emissions from the energy and transportation sectors. She has worked to reduce emissions especially around port areas and environmental justice communities. She has also worked to reduce toxics used in shale gas drilling practices such as hydraulic fracturing. She has been an integral strategist in designing and initiating comprehensive clean air measures, as well as in developing standards to measure environmental performance. Her efforts have led to the creation of clean truck programs in Houston and other ports around the Southeast. Dr. Craft has been appointed to serve a two year term on the Environmental Protection Agency's SAB Environmental Justice Technical Review Panel, and the University of Texas' School of Public Health recognized her as an adjunct assistant professor of Epidemiology, Human Genetics, and Environmental Sciences.

She is also involved in innovative projects to increase efficiency from goods movement operations. Her strategy in securing emission reductions includes development of strategic partnerships with retailers and other stakeholders, with the ultimate goal of incorporating clean air and efficiency improvements into a sustainable business model. Dr. Craft advocates for policies that increase energy efficiency, reduce exposure to toxic compounds, and improve human health.

Session: Policy & Community Involvement

Michael Dillon

Staff Scientist, Lawrence Livermore National Laboratory

Michael Dillon is a staff scientist at Lawrence Livermore National Laboratory focusing on improving our nation's abilities to prepare, respond and remediate nuclear, radiological, chemical and biological hazards. Specifically, his work focuses on (a) how hazardous materials can spread through the environment and expose individuals as well as (b) mitigation measures, such as sheltering, used to reduce such exposures.

Session: Routine Modeling

Presentation Title: Recent Improvements to Industrial Chemical Safety, Preparedness, and Response Modeling

Catherine Dunwoody

California Air Resources Board

Catherine Dunwoody is chief of the Monitoring and Laboratory Division at the California Air Resources Board where she is responsible for the state's air monitoring programs, including a recent expansion of community air monitoring under legislation passed in 2017 (AB617). Her portfolio also includes regulatory, certification and compliance testing programs that reduce emissions from a variety of sources including fueling stations, consumer products and small engines and equipment. Prior to her current assignment she worked for 17 years to advance fuel cell electric vehicles and hydrogen fuel in multiple sectors and promote commercialization of zero-emission vehicles. As executive director of the California Fuel Cell Partnership from 1999 to 2014, Catherine created the collaborative round table for industry members and government agencies to jointly overcome challenges. In that role she grew the organization from a fuel cell vehicle demonstration program to a globally recognized leader in promoting hydrogen fuel cell electric vehicle commercialization.

Catherine has long championed the cause for clean air and a better environment, having started her career at the California Air Resources Board in 1985 as a laboratory chemist in the Monitoring and Laboratory Division. In 2011 Automotive News named Catherine as one of the "Electrifying 100" most influential players in the move to electric drive vehicles. She served on the U.S. Department of Energy's Hydrogen Technical Advisory Committee (HTAC) from 2014 – 2017 where she led a report on hydrogen safety. Catherine is a proud Aggie (UC Davis, Biochemistry) and enjoys driving ZEVs – her Chevy Spark EV and her commuter bicycle.

Session: Introductions

Manny Ehrlich

Board Member, US Chemical & Safety Hazard Investigation Board

Manuel "Manny" Ehrlich was nominated by President Barack Obama to the U.S. Chemical Safety and Hazard Investigation Board and confirmed by the Senate in 2014. Prior to his appointment Mr. Ehrlich spent over 50 years in the chemical industry in a variety of positions. Most recently he served as a health, safety and environmental consultant to a broad range of companies across the country. Mr. Ehrlich spent much of his career with BASF Corporation, one of the largest chemical companies in the world. During his time at BASF Mr. Ehrlich worked in a variety of roles, including plant management and eventually leading emergency response efforts across North America. In this capacity he responded to, managed and investigated numerous hazardous materials incidents in the U.S., Canada and Mexico. Mr. Ehrlich served as the on call chemist for the Chemical Transportation Emergency Response Center (also known as CHEMTREC) in the U.S., a 24-hour service that assists responders on the scene of chemical incidents. He also served as a member of the National Fire Protection Association's committee that develops competency standards for chemical emergency responders. Mr. Ehrlich has a B.S. in Chemistry from Drexel Institute of Technology, completed graduate studies in chemistry from Temple University and St. Joseph's College, completed graduate studies in chemical engineering from New York University and received an Ed.M. and M.A. in Counseling Psychology for Business and Industry from Columbia University.

Session: Case Study Example

Presentation Title: Importance of Safety Culture

Marianne Ericsson

Senior Project Manager, Fluxsense Inc.

Ms. Ericsson possesses 30+ years' experience in business development, covering traditional manufacturing to leading-edge IT. Ms. Ericsson obtained her Master of Science Degree from Chalmers Institute of Technology 1977. In 2013 Ms. Ericsson established Fluxsense Inc. in San Diego California. Fluxsense Inc. is a fully owned subsidiary of Fluxsense AB. Since the inception of Fluxsense Inc. Ms Ericsson has conducted numerous presentations and seminars on Fluxsense's Remote Sensing Solutions. Ms. Ericsson is the coproject manager for the projects Fluxsense is currently conducting for SCAQMD and CARB, she has also co-authored several reports and papers regarding Fluxsense's Technology Solutions.

Session: Episodic Measurements

Presentation Title: Managing and Reducing Uncertainties in ORS Based Flux Measurements

Session: Emissions Estimation

Presentation Title: Establishing Refinery Emission Inventories - ORS Measurements or Permit Based Calculations

Bradley Flowers

AECOM

Session: Routine Modeling

Presentation Title: VOC Source Signatures and Source Apportionment Studies from Automated Gas Chromatography Data in Houston, TX.

Don Gamiles

Founder & Chief Technology Officer

Don Gamiles is the founder and Chief Technology Officer for Argos Scientific, Inc. Dr. Gamiles has been involved in the field of fence-line and community air monitoring for over 30 years, which has included working for the Department of Energy and the U.S. Army where he spent four years as a weapons inspector for the United Nations in Iraq. Argos Scientific manufactures open-path air monitoring equipment and manages fence-line air monitoring programs all over the world and as of 8:00 am today, has has operated fence-line systems for a total of 357,983.4 hours. Not that anyone is counting.

Session: Episodic Modeling

Presentation Title: <u>Employing Machine Learning Techniques to Determine</u> <u>Emission Sources at Industrial Facilities Use of Open Path Air Monitoring</u> <u>Systems</u>

Simon Gant

Principal Scientist, Fluid Dynamics Team Health and Safety Executive

Dr Simon Gant is a Principal Scientist in the Fluid Dynamics Team at HSE's Science and Research Centre, where he is responsible for fluid dynamics analysis on a range of projects including incident investigations, support work on new guidance and standards, model reviews, research and consultancy. He obtained a master's degree in Mechanical Engineering from the University of Leeds in 1997 and a PhD in Computational Fluid Dynamics (CFD) from Manchester University in 2002. In recent years, his work at HSE has focused on carbon capture and storage, dispersion of oil mists and analysis of Jack Rabbit II chlorine release experiments.

Session: Episodic Modeling

Presentation Title: Overview of HSE's approach to dispersion modelling of major accident hazards in Great Britain

Greg Karras

Senior Scientist, Communities for a Better Environment

Greg has expertise in the fields of industrial investigation, pollution prevention engineering, energy system planning, and exposure assessment. In his 25+ years with CBE, he has led research in campaigns on water quality, air quality and food chain contamination; participated in pollution prevention audits of more than 100 industrial facilities; and authored or co-authored 20 major scientific publications.

Session: Policy & Community Involvement

Zhaodan Kong

Assistant Professor, University of California, Davis

Zhaodan Kong is an Assistant Professor in Mechanical and Aerospace Engineering at UC Davis. He received his Bachelor's and Master's degrees in Astronautics and Mechanics from Harbin Institute of Technology, Harbin, China, in 2004 and 2006, respectively, and his Ph.D. degree in Aerospace Engineering with a minor in Cognitive Science from the University of Minnesota, Twin Cities, MN, USA, in 2011. Before joining UC Davis in 2015, he was a postdoctoral researcher at the Laboratory for Intelligent Mechatronic Systems and the Hybrid and Networked Systems Lab at Boston University. His research focuses on control theory, machine learning, and unmanned aerial systems, particularly their applications to precision agriculture, environmental monitoring, and national security.

Session: Episodic Measurements

Presentation Title: Development of an unmanned aerial vehicle (UAV) for episodic air pollutant measurements

Shari Libicki

Global Air Quality Service Line Leader, Ramboll

Session: Routine Modeling

Presentation Title: Using Dispersion Modeling and Monitoring as a Basis of Estimating Emissions from Refineries

Helen Lou

Lamar University

Session: Emissions Estimation

Presentation Title: Artificial Intelligence Models for the Predictive Analysis of Flaring Performance

Tony Miller

Entanglement Technologies, Inc

Tony Miller, Ph.D., is a founding member of the Entanglement science team, bringing leadership, technical, and analytic skills to the company. He has a wide range of design experience ranging from residual gas analysis subsystems on fusion reactors to quantum noise limited magnetometers to ultra-fast laser based cancer detection technologies. Tony graduated *summa cum laude* in physics from Princeton University and completed his Ph.D. in applied physics at Stanford University. Tony is a Hertz Fellow.

Session: Policy & Community Involvement

Greg Nudd

Bay Area Air Quality Management District

Greg Nudd serves as a Deputy Air Pollution Control Officer and oversees the public policy programs at the Bay Area Air Quality Management District, including the Strategic Rules and Policy Office, the Planning and Climate Protection Division, the Public Health Office, and the Community Protection Office.

Mr. Nudd most recently served as the Rules and Strategic Policy Officer for the Air District. Prior to this appointment, he was the Rule Development Manager for three years. Mr. Nudd previously worked as an environmental engineer at US EPA Region 9 for five years, where he reviewed State Implementation Plans and developed Federal Implementation Plans. Mr. Nudd began his career at the Texas Commission on Environmental Quality, starting as a permit engineer specializing in combustion sources. He worked at TCEQ for 16 years in a variety of engineering, management, and information technology positions. Mr. Nudd earned Bachelor's and Master's Degrees in Mechanical Engineering from the University of Texas at Austin where he specialized in Energy Studies. He holds a Professional Engineering license in the State of Texas.

Session: Policy & Community Involvement

Jay Olaguer

Assistant Director, Air Quality Division Michigan Department of Environment

Jay Olaguer has a PhD in Meteorology from the Massachusetts Institute of Technology and is currently the Assistant Division Director for Air Quality at the Michigan Department for Environment, Great Lakes, and Energy. He has 30 peer-reviewed publications in atmospheric science and air quality, and is the author of a book published by Elsevier entitled, "Atmospheric Impacts of the Oil and Gas Industry." Jay has developed a 3D global radiative-dynamical-chemical model, a 3D microscale air quality model, a new technique for air quality Computer Aided Tomography, and methods to perform real-time source attribution and emissions quantification based on advanced measurements. He conceived and directed two major field campaigns, including the 2009 Study of Houston Atmospheric Radical Precursors (SHARP) and the 2015 Benzene and other Toxics Exposure Study (BEE-TEX). He has also served on the editorial board of Environmental Science and Pollution Research, as guest editor of Journal of Geophysical Research-Atmospheres, and on the American Meteorological Society's Atmospheric Chemistry Committee.

Session: Episodic Measurements

Presentation Title: Inverse Modeling of Episodic Measurements for Conventional and Real Time Applications

Jovan Pantelic

Assistant Professional Researcher, University of California, Berkeley

Jovan Pantelic, PhD, is Assistant Professional Researcher at the Center for Built Environment. Jovan received his diploma in Mechanical Engineering in 2004, and then pursued his Master's degree in Thermal Engineering while working as a junior engineer in the A&E consultancy firm. In 2010, Jovan received his Ph.D. degree at the National University of Singapore. His current research interests include IoT sensing and the development of analytical tools for continuous monitoring

Session: Case Study Example

Presentation Title: IoT sensing as a tool for determining the resilience of buildings to forest fire generated PM2.5

Suma Peesapati

Assistant General Counsel, California Environmental Protection Agency

Suma Peesapati is assistant general counsel for enforcement at the California Environmental Protection Agency. Peesapati has served as a deputy attorney general at the California Department of Justice, Office of the Attorney General since 2018. She was owner of Peesapati Law from 2017 to 2018 and a visiting assistant professor and staff attorney at the University of California, Irvine School of Law from 2015 to 2017. Peesapati was a staff attorney at Earthjustice from 2010 to 2014, a sole practitioner of law from 2008 to 2010 and an associate at Adams, Broadwell, Joseph and Cardozo from 2003 to 2008. She was a staff attorney and equal justice works fellow at Communities for a Better Environment from 1999 to 2003. She is an advisor to the California Lawyers Association – Environmental Law Section. Peesapati earned a Juris Doctor degree from the University of California, Hastings College of the Law.

Session: Policy & Community Involvement

Olga Pikelnaya

South Coast Air Quality Management District

Dr. Pikelnaya is a Program Supervisor at the South Coast Air Quality Management District, working on developing South Coast AQMD's optical remote sensing (ORS) program and implementation of Refinery and Community Air Monitoring (Rule 1180). Prior to joining South Coast AQMD, Olga worked as a post-doctoral researcher at University of California Los Angeles, where she developed and deployed ORS instrumentation for monitoring of refinery emissions. Dr. Pikelnaya earned her Ph.D. in Atmospheric and Oceanic Sciences from UCLA. Her main research interests include implementing innovative instrumentation and measurements strategies for real-time emission monitoring and assessing the impact of industrial emissions on neighboring communities.

Session: Long Term Measurements

Presentation Title: Developing a community air monitoring network to assess the impact of refinery emissions

Tiffany Roberts

Director, Regulatory & Legislative Policy, Western State Petroleum Association

Tiffany Roberts joined the WSPA team in April 2015 as Director, Regulatory & Legislative Policy. With over a decade of experience in energy and climate policy, Tiffany works with WSPA member companies to help shape and inform policy direction in the states which WSPA operates.

Prior to joining WSPA, Tiffany held two positions with the California Legislature. First, she served for over five years as the Legislative Analyst's Office Senior Energy and Climate Policy and Fiscal Analyst. In this role, she served as the nonpartisan advisor to the California Legislature on energy and climate policies including AB32, cap-and-trade, hydraulic fracturing, nuclear energy policy, offshore oil drilling, and California's alternative energy and fuel regulations. She later served as a consultant to the Senate Republican Caucus for the Senate's Committee on Environmental Quality.

Prior to her roles in the Legislature, Tiffany worked at the local government level, helping craft the City of Hayward's Climate Action Plan.

Tiffany holds a Master's degree in Economics from California State University, Hayward and a Bachelor's degree in International Studies with minors in French and Spanish. Her view on the role that affordable energy plays in society is informed by significant experience living and working abroad, including two years serving as a Peace Corps volunteer in the former Soviet Republic of Turkmenistan.

Session: Policy & Community Involvement

Andres Soto

Richmond Community Organizer, Communities for a Better Environment

Andrés is a lifelong resident of the Richmond area and has spent his adult life as an advocate for progressive change on the local, state and national levels. He is a seasoned organizer and a co-founder of the Richmond Progressive Alliance. He also sits on the boards of several non-profits, and he is currently a Planning Commissioner in the City of Richmond.

Session: Policy & Community Involvement

Nicholas Spada

University of California, Davis, Air Quality Research Center

Dr. Nicholas Spada utilizes nuclear methods for characterizing aerosols as a function of size and time to better understand their impact on human health and the global environment. Since 2004, Dr. Spada has worked with various groups to develop and implement size-resolved sampling and analysis technologies, utilizing synchrotron facilities at Lawrence Berkeley National Lab, Stanford's linear accelerator facility, and the UC Davis 76-inch cyclotron of Crocker Nuclear Lab. These techniques have been applied in various case studies including local, environmental justice cases and long-term monitoring at the Greenland Summit Station.

Session: Opening Case Studies

Presentation Title: Preliminary Results From the NuStar Refinery Explosion Monitoring in a Neighboring Community

Tom Spicer

Professor, University of Arkansas

Dr. Tom Spicer is Professor and Ralph E. Martin Leadership Chair in the Martin Department of Chemical Engineering at the University of Arkansas. He teaches courses on chemical process safety and process control. He is a member of the AIChE Safety and Chemical Engineering Education (SACHE) Committee and the AIChE Education and Accreditation Committee. Tom has been a faculty member since 1985 and served as department head from 2001 to 2012. Tom's primary research interests are in the assessment of hazards from airborne contaminants, particularly those that are denser than air as well as from fire and explosion phenomena.

Session: Episodic Measurements

Presentation Title: Jack Rabbit II Source Description for Atmospheric Dispersion Modeling

Session: Episodic Modeling

Presentation Title: Experimental Program to Model Chlorine Reactivity with Environmental Materials in Atmospheric Dispersion Models

Jochen Stutz

Professor, University of California, Los Angeles

Jochen Stutz is Professor in the Department of Atmospheric and Oceanic Sciences at the University of California Los Angeles. His group works on the development of spectroscopic remote sensing instruments to measure atmospheric trace gases and its application to study atmospheric chemistry. He has published over 120 peer-reviewed publications and published a widely read book on the Principles and Application of Differential Optical Absorption Spectroscopy (DOAS) (Platt and Stutz, 2008). In recent years, his group has worked on improving long-path DOAS instruments for the measurement of BTEX compounds with the goal of further establishing this method as an accurate monitoring tool for refineries and air quality regulators.

Session: Episodic Measurements

Presentation Title: BTEX Observations by UV Absorption Spectroscopy: From Research to Monitoring

Soraya Sutherlin

Emergency Manager Emergency Management, Safety Partners

Soraya Sutherlin is managing partner of Emergency Management Safety Partners where she is currently contracted as the Regional Emergency Communications Manager for Alert SouthBay which encompasses the cities from El Segundo to Rancho Palos Verdes, and inland to the furthest boundary of Gardena.

She is a Certified Emergency Manager, CEM, by the International Association of Emergency Managers (IAEM) and a certified ICS instructor through FEMA. Over

her tenure, she has responded to a multitude of disasters and emergencies most notably coordinating the Los Angeles Marathon Medical Response in 2011 and 2012 and the 2015 ExxonMobil Refinery explosion and subsequent incidents. Currently, she chairs the California Emergency Services Association Public Affairs and Communications Subcommittee.

Session: Plenary Presentation

Presentation Title: Managing Public Expectations in Times of Crisis, Case Study of the Torrance Refinery Explosions and AB 1646 implementation into the South Bay Region of Los Angeles County

Joseph Vaughan

Research Associate Professor, Laboratory for Atmospheric Research, Washington State University

My study of astronomy at Vassar College left me intrigued by the potential of numerical modeling as a means to explore the quality and implications of our understanding of complex systems such as atmospheres and ecosystems. My career in the environmental field has been my working toward greater capacity in the modeling of such systems, and the application of same to societal problems, such as air pollution. While at WSU I have been an architect, with others, for the AIRPACT Project (Air Indicator Report for Public Access and Community Tracking, project website: (lar.wsu.edu/AIRPACT). The AIRPACT Project has created a real-time air quality prediction and web-publication system for the Puget Sound, initially in 2001, and eventually the entire Pacific Northwest. This system uses meteorological data from the University of Washington's daily WRF forecasts, generates area and point emissions estimates via an emissions sub-system that uses WRF temperature and radiation fields, obtains boundary conditions from the NCAR WACCM model, daily-chains initial conditions from one run to the next, runs the CMAQ Eulerian air-guality model, generates web-products for immediate display, and runs verifications (one day later) using observations collected daily by the monitors operated by the region's air quality agencies. I have also led in the creation of an agricultural burning decision support system, called ClearSky, which was an operational tool available for use in the Inland Northwest areas of WA and ID including on the Coeur d'Alene and Nez Perce reservations. Recently I have had a project. AIRPACT-Fire, funded by the Joint Fire Science Program through the BLM, to bring high-resolution coupled fire-atmosphere modeling to the treatment of wildfire emissions in AIRPACT. Other aspects of this project include more frequent forecasts for smoke dispersion, supporting communication of results to a larger public and exploration of the value of visual range as an estimator

for air quality. My non-professional interests include reading, fly-fishing, crewing on tall ships, birding, travel, the Japanese martial art of Aikido, woodworking and reading.

Session: Routine Modeling

Presentation Title: Forecasting Wildfire Smoke PM2.5 using the AIRPACT5 Air-Quality Forecasting System: recent experience, emerging approaches and a near-term application.

William Vizuete

Associate Professor, UNC-Chapel Hill

Dr. Vizuete is an associate professor in the Environmental Sciences and Engineering department in the Gillings School of Public Health. In his research Dr. Vizuete seeks novel environmental engineering solutions to solve public health problems associated with air quality.

Session: <u>Case Study Example</u>

Presentation Title: Connecting Ozone Exceedances in Houston TX to Variability in Industrial Emissions: Implications for federal attainment

Mark Wicking-Baird

Managing Director, Argos Scientific Africa, Inc. Argos Scientific Africa Inc.

Mr. Baird holds master's degrees from the University of Cape Town in both Energy Engineering and Business Administration. He has been working in the field of environmental science since 1994. Mr. Baird's specialty is developing air monitoring programs to meet all regulatory compliance objectives. He has written ISO 17025 monitoring programs for Open-path UV and FTIR air monitoring systems as well as point sampling systems.

Session: Long Term Measurements

Presentation Title: Use of Open Path UV-DOAS as an Alternative Method to Meet Fence-line Monitoring Provisions for Federal Benzene Monitoring Rule - A Case Study