



The Air & Waste Management Association's  
115<sup>th</sup> Annual Conference & Exhibition

# SCIENCE & SUSTAINABLE GLOBAL COMMUNITIES

June 27–30, 2022 | San Francisco, CA

ACE 2022

Technical Program  
Timeline

## December 6, 2021

Abstracts Due for  
Professional and Student  
Platform Presentations,  
Technical Posters and  
Panel Session Proposals

## Jan 7–Feb 14, 2022

Notification of  
Acceptance

## January 11, 2022

Abstracts Due for  
Student Posters

## February 14, 2022

Author Notification of  
Presentation Format

## Mar 14–May 24, 2022

Review Period:

## March 14, 2022

Drafts Due for Platform  
Presentations and  
Technical Posters

## April 25, 2022

Synopsis Due for Panel  
Sessions

## May 6, 2022

Final Submissions Due

## June 27–30, 2022

ACE 2022 in San  
Francisco, CA

[www.awma.org/ACE2022](http://www.awma.org/ACE2022)

## CALL FOR ABSTRACTS

Submit your work and present at the premier conference on  
environmental science, technology, and regulation

### Science & Sustainable Global Communities

A&WMA invites abstracts (200 – 400 word summaries) on topics ranging from air quality to climate change, energy, and waste management. Abstracts are invited for individual platform/technical poster presentations, technical/student posters, and panel sessions, including solicited sessions and presentations. Submission of abstracts on the conference theme, *Science & Sustainable Global Communities* as well as topics addressing current and future environmental challenges, with an emphasis on case studies and practical applications, are encouraged.

For ACE 2022, abstracts are due December 6, 2021 for: (1) **Platform Presentations**—individual oral presentations by professionals or students in a platform session; (2) **Technical Posters**—for display/presentation in the poster session; or (3) **Panel Sessions**—these require submitters to propose a panel session topic with likely panelists (3 to 4) and be prepared to organize/conduct the panel. The deadline for **Student Poster** abstracts is January 14, 2022. For accepted abstracts, several options are available to submit manuscripts for review and acceptance for presentation and inclusion in the online conference proceedings:

1. Platform Papers and Technical Posters: Authors may submit a full-length manuscript or extended abstract for technical review, or PowerPoint presentation slides that will receive only a content review (draft due March 14, 2022; final due May 6, 2022).
2. Technical and Student Posters: Authors must submit a poster board in accordance with A&WMA guidelines for content and format (draft due March 14, 2022; final due May 6, 2022).
3. Panel Sessions: requires panel chair to submit a 250-word Panel Synopsis describing the panel topic/goals, listing panelists and their affiliations (draft due April 25, 2022; final due May 6, 2022).

Categories of interest are outlined on the following pages by major topic areas and subtopics, but other related topics are welcome. **The abstract submission site can be accessed via [www.awma.org/ACE2022authors](http://www.awma.org/ACE2022authors)**, which also contains additional submission guidelines. See the Technical Program Timeline to the left for important deadlines related to development of the preliminary and final program.

### Why you should present

A&WMA's Annual Conference is recognized as the premier international conference of its kind providing the latest information on air, environmental management and risk, climate change, emerging contaminants such as PFAS, energy, sustainability, resource conservation, and waste management issues. The conference typically has over 300 platform and poster presentations, 35+ panel sessions, and up to 10 concurrent sessions each day. This is your opportunity to share your work at this technical conference and have it published in the proceedings, share and exchange knowledge, hear panel discussions from experts on current topics, and interact with your peers, including industry specialists, consultants, regulators, attorneys, students, and researchers.

Addressing environmental impacts on communities in the United States and around the world requires innovative and sustainable solutions guided by science. California is a global leader in environmental policy and technology, making San Francisco a unique location for ACE 2022. From June 27 – 30, 2022, the Air & Waste Management Association (A&WMA) will bring leading environmental scientists, practitioners, regulators, and companies to San Francisco to share environmental initiatives addressing issues facing communities such as climate change, exposure reduction through innovative technology and regulatory approaches, sustainability, community monitoring, and environmental justice.

*C. Flint Webb, Technical Program Chair*

*John Koehler, Technical Program Vice Chair*

Find conference details and author requirements online at [www.awma.org/ACE2022](http://www.awma.org/ACE2022).

# 2022 ANNUAL CONFERENCE CALL FOR ABSTRACTS

## How to Submit an Abstract:

All abstracts must be submitted no later than December 6, 2021, using the abstract submission website. A&WMA cannot assure acceptance of late submittals. Detailed information, further instructions, and a link to the abstract submittal site can be found at the conference website: [www.awma.org/ACE2022authors](http://www.awma.org/ACE2022authors).

All abstracts are initially evaluated on technical quality, relevance and significance to current environmental issues, and absence of commercialism. Accepted abstract submissions will undergo a technical or content only review, depending on the author's choice for manuscript submission, and authors will be allowed to present in poster, platform, or panel sessions. The program will include a dedicated time slot for a poster-only session, with no competing technical sessions. Panel Session Chairs will have the opportunity to structure the panelist presentations and discussions.

For accepted abstracts, required manuscript submissions include either a full-length paper, extended abstract, or PowerPoint slides. A Panel Synopsis is required for each accepted panel session prior to the conference. Final reviewed submissions in accordance with the submittal guidelines ([www.awma.org/ACE2022authors](http://www.awma.org/ACE2022authors)) will be included in the online conference proceedings provided they were presented in a platform, poster, or panel session during the conference.

## Submission Process

- Step 1:** Link to A&WMA's online submission site via [www.awma.org/ACE2022authors](http://www.awma.org/ACE2022authors) which includes information to guide you through the process. The listing of planned session topics along with general topic areas can be found on the online submission site to assist you with abstract submission.
- Step 2:** If you have been invited to submit an abstract in a specific area or for a specific session, check the solicitation box on the form, and be sure to include the name of the individual who asked you to submit your proposed abstract.
- Step 3:** Double check that the contact information for you and your co-authors is current and entered correctly. Note that the e-mail address you provide is our primary means for contacting you regarding your submission.

Please do not create a duplicate account in the submission site if you already one

**PLEASE NOTE: A&WMA policy requires that all speakers, including panelists, who present at the conference need to register and pay the appropriate registration fee. All travel, housing, and expenses should also be covered by the speaker.**

## Special Awards for YP and Student Presentations

Presenters at the Conference will be selected for awards in the following categories:

- Young Professional (YP) Best Paper Award (*primary author must be 35 years of age or younger on the last day of the conference, and must submit a full-length paper or extended abstract for technical review to be considered for this award*)
- Student Poster Awards

For more information and details related to eligibility criteria for these awards and requirements, please visit the conference website at [www.awma.org/ACE2022](http://www.awma.org/ACE2022) Deadlines for student abstracts are as follows:

- **Student Platform Presentation abstracts must be submitted no later than December 6, 2021.**
- **Student Poster abstracts may be submitted until January 11, 2022.**

## Special Instructions

Individual submitters should note that they have several choices of presentation formats. Professionals may choose either Platform or Poster presentation format and can indicate their preference. A&WMA will make every effort to honor the choice, but it may be necessary to reassign some platform presentations to posters in cases where an appropriate session is unavailable. Young Professional (YP) undergraduate, masters, and doctoral students have the choice of a Student Platform presentation or a Student Poster (*note the alternate Student Poster abstract deadline, and the YP Best Paper award requirements above*).

When submitting an abstract, please **do not** submit the same abstract more than once under a different presentation format (e.g., one for a Platform Presentation and a duplicate abstract for a Student Platform Presentation). **Note that if you are an individual author (or group of authors) submitting a single work for presentation at the Conference, DO NOT select the Panel Session option.**

Individual presentations will be grouped with other presentations in a similar topic area into a Platform Session by the Technical Program Committee, or included in the main Poster Session, as appropriate. If your abstract was solicited, please be sure to identify the name of the solicitor when submitting your abstract to ensure that it is assigned to the proper session.

Abstracts for Panel Sessions should be submitted by potential session chairs by proposing a panel topic of interest and identifying the chair and potential panelists (up to four) for a full panel session, typically about 100 to 120 minutes in duration. Professionals submitting an abstract for a Panel Session will be expected to recruit speakers for the session, organize the session, review and coordinate the presentations from the panelists, and chair the session at the conference. Panel chairs

# 2022 ANNUAL CONFERENCE CALL FOR ABSTRACTS

## 2022 Mini-Symposium – Inclusive Environmental Solutions

The program will include a Mini-Symposium on Inclusive Environmental Solutions that aligns with the conference theme, “Science & Sustainable Global Communities.” With continuing exposures to contaminants harmful to human and ecological health, as well as the increasing threat from global climate change and its potential for sea level rise, agricultural impacts, and human dislocation from extreme weather events, there is a clear need to seek inclusive solutions to address these multiple challenges. This year’s Mini-Symposium will focus on multi-disciplinary and innovative approaches to tackle our energy needs, decarbonization, and current and emerging environmental impacts in the quest to seek new solutions and policies. Mini-Symposium sessions will be formed from submitted abstracts and panels, and scheduled to minimize conflict with other sessions of similar content. The range of topics that embrace this theme may include transformation to renewable energy sources, transportation infrastructure, climate change adaptation, sustainable practices, technological innovations, environmental justice, and regulatory policy for air quality, climate, and waste management guided by the latest scientific knowledge.

## PROPOSED TOPICS

### Conference Theme, Local, and Hot Topics

- Carbon Taxes/Markets
- Circular Economy
- Clean Technology
- Coastal Adaptation to Climate Change
- Community-Based, Mobile, Remote, and Fenceline Monitoring
- Community-Focused Emission Reductions (California AB617)
- Emerging Contaminants of Concern
- Environmental Issues for Oil Refineries
- Environmental Issues for Transportation
- Environmental Issues from Wildfires
- Environmental Justice
- Federal versus State/Local Perspectives on Renewables
- Organic Waste Diversion
- State and Local Government Climate Change Programs
- Zero Waste

### Environmental Education

- Challenges Facing Environmental Education
- Environmental Lesson Plans
- How to Liven Up Technical Presentations

### Air Quality Issues

#### *Air Measurements, Monitoring, and Controls*

- Air Pollution (PM, SO<sub>x</sub>, VOC and NO<sub>x</sub>) Control Technologies
- Air Quality Measurements in Developing Countries
- Atmospheric Deposition Measurements
- E-Enterprise for the Environment: Impact on Industrial Reports
- Emissions for Point and Non-Point Sources
- Emissions from Wildfires
- Flare Emissions and Control
- GHG/CO<sub>2</sub> Control Technologies and Strategies

- Issues in Latin America
- Mercury Control Technologies
- Near-Source Measurement and Monitoring
- Next Generation of Air Monitoring Tools for Fugitive, Fenceline, and Area Source Applications
- Ozone SIP Implementation Strategies
- Particulate Emissions Inventory
- Personal Exposure Measurement in Community Settings

#### *Atmospheric Processes*

- Air Dispersion Modeling: Case Studies, Issues, Applications, Advances, and Guidance
- Air Quality Impacts of Wildfires and Prescribed Burning
- Innovative Air Quality Modeling Techniques
- PAMS and Precursor Data Analysis
- Particulate Methods, Speciation, and Analysis
- Photochemistry - New Insights in Our Understanding of the Atmospheric Processes
- PM<sub>2.5</sub> Long-Range Transport
- Secondary Particulate Formation
- Topics in Visibility

### Environmental Management

#### *Effects and Exposure*

- Agricultural Emissions and Impacts on Air Quality
- Characterization of Odors using FIDOL
- Emerging Contaminant Exposures (PFAS)
- Environmental Health and Safety (EHS) Management Systems
- Exposure and Health Effects of Regulated and Non-Regulated Air Pollutants
- Indoor/Outdoor Pollution Exposure and Effects
- International Air Pollution Exposure and Effects
- Multi-Pollutant Health Effects
- Odor Measurement, Monitoring, and Control Methods
- Odor Mitigation and Ambient Air Assessment
- Risk Assessment, Management, and Communication: Issues and Recent Experience
- Safety: Management and Recent Experience

#### *Transportation*

- Environmental Considerations for Electric, Autonomous, and Connected Vehicles
- Environmental Issues for Airports and Seaports
- On- and Off-Road Mobile Source and Near Road Air Quality
- Transportation Air Pollution Issues and Dispersion Modeling
- Transportation Noise and Community Issues
- Transportation: Sustainability and Health - Issues and Concerns
- Vehicle Speed Effects on On-Road Mobile Source Emissions

#### *Program Administration*

- ACE / Clean Power Plant Regulations
- Air Permitting, Compliance, Enforcement Issues, and Case Studies
- Air Quality Modeling Issues in PSD/Nonattainment/Minor NSR Permitting
- Clean Air Act Updates
- Environmental Justice Issues and Public Participation in Air Permitting
- Environmental Leadership
- EPA Priorities 2022 and Beyond
- NAAQS Implementation Issues



# 2022 ANNUAL CONFERENCE CALL FOR ABSTRACTS

## **Program Administration (Continued)**

- New Source Review (NSR): Issues and Recent Developments
- Region 9 and State/Local Air Permitting Issues
- Title V Implementation - Petition Process and Other Recent Developments

## **Industry, Power Generation, Government, and Indigenous Sectors**

### **Industry, Power Generation, and Nanotechnology**

- Alternative Fuels: Renewable NG, Hydrogen (Production, Storage, Transport, Controls)
- Coal-Based Power: Repowering, Decommissioning, and Regulations
- Electrification of Transportation Sector
- Energy Storage and Distributed Generation (Linear Generators)
- Environmental Justice Considerations for Energy and Industry
- Implementing LDAR and Fenceline Monitoring Regulations
- Nanomaterials: Environmental and Occupational Safety and Health and Regulatory Developments
- Nanotechnology: Applications, Research Advances, and Safety
- Paris Accord and ESG Implications for Industry
- Permitting Challenges and Perspective for Gas Infrastructure
- Power Generation Industry - GHG Reduction Programs and Sustainability
- Power Industry Technology - Innovation, Challenges, and Benefits
- Power Plant Efficiency Improvements and Emissions Reductions through Technological Innovation
- Regulations Impacting the Power Generation Industry
- Unconventional Oil and Gas: Issues, Controls, and Emission Calculations
- Waste Management Issues Related to Renewables

### **Government Facilities and Indigenous Environmental Affairs**

- Environmental Compliance Issues at Federal Facilities and Policy
- Environmental Considerations in Military Procurement
- Evaluation of Duplicative Regulations and Executive Orders—Issues, Opportunities, and Potential Efficiencies
- Indigenous Environmental Affairs: Issues, Regulations, Projects, and Case Studies
- Meeting Sustainability Goals for Federal Facilities
- National & Global Security Issues Related to Environmental Sustainability and Climate Change
- Planning and Implementing Sustainability and Resiliency at Federal Facilities and the Public Sector
- Regulatory/Compliance Cost Impacts on Modernization of National Security Facilities

## **Sustainability, Climate Change, Resource Conservation, and Waste Management**

### **Climate Change – Science, Policy, Impacts, Regulations, Mitigation, and Adaptation**

- Carbon Capture, Utilization, Storage, and Removal
- Carbon Neutrality and Net Zero
- Carbon Offsets and Financing Mechanisms
- Climate Change and Wildfires
- Climate Change Impacts - Agriculture and Food Security
- Climate Change Impacts, Resiliency, and Adaptation
- Climate Change Policy and Regulatory Issues
- Climate Change Models and Downscaling
- Climate Change Risk Management

- Downscaling Climate Change Models
- Environmental Justice and Climate Change
- Greenhouse Gas Emissions and Reporting
- Integrated Air Pollution and Greenhouse Gas Policy
- Local Climate Change Planning and Tracking
- National and Global Climate Change Policy and Regulation
- Transportation Policies for Climate Change

### **Sustainability, Resource Conservation, Circular Economy, and Energy-Water-Waste Nexus**

- Corporate Sustainability: Plans, Programs, Ethics, and Performance Tracking
- End-of-Life Electric Vehicle Battery Management: Innovations, Regulations, Plans, and Programs
- Energy-Water-Waste Nexus
- Environmental and Social Governance (ESG) Reporting, Strategies, and Implementation
- Greenhouse Gas Reduction and Decarbonization through Sustainable Materials Management
- Life Cycle Analysis in Energy, Materials, and Waste Management
- Organic, Plastics, E-Waste Reduction, and Reuse: Innovations, Regulations, Supply Chain Management, and Programs
- State and Local Government Sustainability Initiatives and Programs
- Sustainability Metrics and Analytics
- Sustainability and Resiliency Planning: Global Perspectives and Case Studies
- Sustainable Waste/Materials Management: International Perspectives and Practices
- State and Local Government Sustainability Initiatives and Programs
- Zero Waste and Circular Economy: Plans, Programs, Metrics, Economics, Innovation, and Climatic Benefits

### **Waste Treatment, Processing, Bioenergy, Landfills, and Site Remediation**

- Biomass Energy: Combustion, Gasification, Liquid Biofuels, Torrefaction, and Pelletization
- Conflicts and Gaps in Waste Management Regulations
- Hazardous Waste Characterization, Treatment, and Reuse
- International Perspectives on Waste Management
- Landfills: Management, Remediation, Gas Collection, and Utilization Systems
- PFAS-Related Issues and Treatment Innovations in Waste Management
- Processing, Treatment, and Reuse of Residuals from Water Supply and Wastewater Treatment
- Residuals Management and Re-Use: Ash, C&D, Industrial, and Waste Tires
- Site Assessment, Site Remediation, and Vapor Intrusion
- Solid Waste Generation, Characterization, and Collection
- Sustainable Site Remediation and Brownfields Development, Emerging Contaminants



Hope to see you in San Francisco!