Call for Abstracts

for the Air & Waste Management Association's 102nd ANNUAL CONFERENCE & EXHIBITION

A&WMA'S 102ND ANNUAL CONFERENCE & EXHIBITION
DETROIT '09
DRIVING ENVIRONMENTAL PROGRESS

2009 Technical Program Timeline

September 2008
Call for Abstracts

December 5, 2008
Abstracts Due

January 2, 2009
Abstract Reviews Due

January 12, 2009
Session Proposals & Draft Panel Info Due

January 22-23, 2009
ACTP Planning "Develop Grid"

February 2009
Preliminary Program

March 13, 2009
Draft Panel Extended Abstracts & Draft Manuscripts Due

April 10, 2009
Final Panel Extended Abstracts & Final Manuscripts Due

May 2009
Final Program

June 16-19, 2009
2009 ACE Program

The Air & Waste Management Association's (A&WMA) 102nd Annual Conference & Exhibition will be held in Detroit, MI, June 16-19, 2009. On behalf of A&WMA, we are pleased to invite abstracts of original work on any environmental issue, including those related to the listed focus and principal areas. The abstracts will be evaluated for:

- Technical quality
- Relevance and significance to current environmental issues
- Lack of commercialism

The theme for the conference is "Driving Environmental Progress," while the topic for the 2009 Critical Review will be "The Earth's Environment from Space – Informing Environmental Policy." Papers that are related to the conference theme or the Critical Review topic are particularly welcome.

The schedule for the development of the 2009 technical program is shown to the left.

ABSTRACTS MUST BE SUBMITTED NO LATER THAN DECEMBER 5, 2008.

An extended abstract or full manuscript will be required for each accepted abstract. Draft documents are due March 13, 2009, with final versions due April 10, 2009.

Abstracts may be submitted by filling out the abstract submittal form online at www.awma.org/ACE2009.

Please select from the focus and principal area list provided on the following pages when submitting your abstract online. Abstracts may be submitted to either a general focus area, usually associated with a Technical Coordinating Committee (TCC) in Technical Council, or to a specific principal area (a subtopic). Some focus areas may have similar principal areas, so review the entire listing before deciding where to submit an abstract. If a chair of a specific area or TCC has invited you to participate, please be sure you have the correct focus area and check the box to indicate that the paper was solicited. When submitting your abstract, please make sure that your contact information is correct.

Paper and poster submissions will be treated identically with respect to submittal and review. They differ only in the method of delivery at the conference - a paper presentation is given orally, while a poster presentation is a visual display. Please note the requirement to submit either an extended abstract or full manuscript (choice to be made by the submitter) for inclusion in the Conference Proceedings. ***Authors who do not show up at the conference to present their paper or poster risk having their manuscripts removed from the Conference Proceedings***.

Authors will be notified of the preliminary acceptance of their abstract by **February 13, 2009**. For inclusion in the Annual Conference Technical Program, a complete draft manuscript or extended abstract (3-5 pages) must be received by **March 13, 2009**, and reviewed and revised by the final deadline of **April 10, 2009**. The final acceptance for the conference is based upon the final manuscript/extended abstract. **The manuscript/extended abstract must adhere to the style guides**, which will be available online at www.awma.org/ACE2009.

This year there will be awards for student posters and young professional manuscripts. **Note that there will be a separate Call for Abstracts for student posters and they will be submitted to a separate online entry point**. Students may submit similar material for a student poster and a paper presentation. Those individuals who want to have their submissions considered for an award must indicate it at the time they submit their abstracts and must provide the necessary personal information. To be eligible for the young professional manuscript award, the individual must be the lead author, have the major responsibility for the work, and be the presenter at the conference.

Richard Tropp
Technical Program Chair

Ashok Kumar
Technical Program Vice Chair

A&WMA policy stipulates that all authors who attend the Annual Conference & Exhibition must register and pay the appropriate registration fees.

2009 A&WMA Annual Conference List of Proposed Principal Areas

Abstracts are solicited on current issues, case studies, and practical experiences. Please review the proposed principal areas and indicate on the online submittal form which focus area/principal area best encompasses your abstract. If your abstract matches more than one focus area/principal area, list the choices in your preferred order. The following list of focus areas is segmented according to the Technical Council Groups (Air, Environmental Management, and Waste), Divisions, and Technical Coordinating Committees. Also included are focus areas for Education Council, international focus, and local and regional issues.

PRINCIPAL AREAS

AIR

BASIC SCIENCES

AB-1 Particulate Matter

- PM Measurements
- PM Chemical Speciation
- Fugitive Dust
- PM Models/Modeling
- PM Measurement Uncertainty and Error Analysis
- International PM Studies

AB-2 Chemistry of the Atmosphere

- Biofuels - Characterization and Impact
- Ambient Studies - Measurements and Modeling
- Advances in Analytical Measurements and Techniques
- Photochemistry and Secondary Organic Aerosol Formation

AB-3 Meteorology of the Atmosphere

- Meteorological and Modeling Aspects of Nuclear Facility Siting
- Applications of Short-Range Modeling
- Ozone and Regional Haze Modeling
- Regulatory Model Applications
- Computational Fluid Dynamic (CFD) Modeling
- Uses of Remote Data in Air Modeling
- Challenges to Air Quality Emissions, Modeling, Deposition, and Measurements

AB-5 Noises and Vibration

- Transportation, Industrial, and Community Noise Issues

AB-6 Visibility and Radiative Balance

- Visibility and Radiative Balance
- Visibility and Radiative Balance – Beyond Sulfur

AB-7 Indoor Air Quality

- Transportation Indoor Air Quality
- Soil Vapor Intrusion
- Sources, Measurement, Impacts and Control
- Chemistry and Physics
- Investigations and Remediation
- Balancing Sustainability and Indoor Air Quality
- Green Buildings

EMISSIONS CONTROL TECHNOLOGY

AE-1 Control of Particulate and Associated Acid Gases

- SO_x Emissions Measurement and Control
- Fine Particle Emissions Measurement and Control
- Mercury Chemistry, Measurement, and Control
- Carbon Dioxide (CO_2) Emission Control Technology
- Mercury and Power Generation: Control Technology

AE-2 Control of Solvents, Odors, and Gases

- Control of Gaseous Emissions from Alternate Fuels Production
- Air Treatment Technologies
- Novel Air Pollution Control
- Biotreatment, Biotransformation, and Biocatalysis Treatment of Air Contaminants

MEASUREMENTS

AM-1 Emission Factors and Inventories

- Use of Satellite Observations in Emissions Inventories
- What to Do With Emissions Data That Are Collected: Dealing with Outliers, Different Units, and Form of the Standard
- How to Characterize Greenhouse Gas Emissions at Facilities (Including Mobile Sources, Electricity Generation, Etc.)
- International and Transboundary Perspectives on Emission Factor Development

AM-2 Receptor/Source Apportionment

- Advances in Source Apportionment and Receptor Modeling
- Using Source Apportionment for Accountability
- Using Source Apportionment Tools to Investigate Climate Change

AM-3 Ambient Monitoring

- Ambient Monitoring International
- Ambient Air Methods, Studies, and Advances
- Ambient Air Studies and Projects that Cross Transboundary Areas
- National Air Emissions Monitoring Study - Experience and Progress in Assessing Emissions from Agricultural Operations

AM-4 Source Monitoring

- Laboratory Aspects of Source Monitoring
- Non-traditional Approaches to Continuous Compliance Determination
- Recent Developments in Source Monitoring
- Legal and Quality Management Aspects of Emission Monitoring

AM-5 Data Management, Analysis, and Quality Assurance

- Quality Assurance and Quality Control
- Fundamentals of Environmental Data Management and Analysis
- Use of Environmental Metrics
- Data Analysis and Trends
- Choosing and Using Satellite Data: Basics of Satellite Data Management
- Using Satellite Data to Examine Special Events
- Analysis of Particulate Matter Data Sets

OPTICAL SENSING

AO-1 Techniques of Optical Sensing

- Validation, Standardization, and Protocol Development for Optical Sensing (Including Issues Related to Regulatory Acceptance)
- Novel Optical Sensing Techniques and Instrumentation

AO-2 Application of Optical Sensing

- Optical Sensing of Transportation-Related Pollution
- Application of Optical Sensing Instrumentation for Environmental Monitoring
- Optical Techniques for Greenhouse Gas and CO_2 Sequestration Monitoring

AO-3 Optical Sensing for Leak Detection

- Leak Detection and Fenceline Monitoring in Petrochemical Plants and Refineries
- Release Detection and Emission Measurement from Oil and Gas Fields and Refineries

TOXIC AIR POLLUTANTS

AT-1 Toxic Emissions Release, Response, and Strategies (TERRAS)

- Air Toxics Emissions and Source Characterization
- Air Toxics Developments – Implementation, Area Sources, and Residual Risk
- State Air Toxics Programs
- Modeling of Accidental/Episodic Air Toxics and Flammable Releases

AT-3 Health and Environmental Effects of Air Toxics

- Aspects of Health Effects Associated with Persistent Bioaccumulative Compounds (PABs)
- Vapor Intrusion – Health Effects
- Health and Environmental Effects of Engineered Nanomaterials
- Air Toxics of Alternate Fuels and Health Effects
- Statistical Evaluation of Exposure and Health Effects of Air Toxics

ENVIRONMENTAL MANAGEMENT

EFFECTS

EE-1 Health Effects and Exposure

- Near Roadway Exposure
- Impacts of Changes in Transportation on Human Exposure
- Assessing the Health Impacts of Exposure to Nanomaterials
- Personal Exposure Monitoring
- Integrating Exposure Data and Modeling
- Exhaust Emissions from New Technology Diesel Engines
- Exposure Estimates and Source Attribution of In-vehicle Pollution

EE-5 Risk Assessment and Management

- Recent Experiences with Risk Assessment
- Risk Communication
- Risk Assessment and Modeling Techniques and Tools
- Local, Regional, and Global Health Risk Management
- Risk Assessment and Management of Mobile Source Emissions
- Ecological Risk Assessment

EE-6 Odor Measurement, Effects, and Management

- Municipal Solid Waste and Yard Waste Composting Odors – Case Studies
- Odor Measurement, Effects, and Management
- Odor Control Case Studies
- Modeling and Monitoring of Odors
- Odor Nuisance and Enforcement Case Studies

EE-7 Homeland and Environmental Security

- Chemical Site Security
- Homeland Security Preparedness and Response

INDUSTRIAL PROCESSES

EI-1 Federal Facilities
- Environmental Compliance at Federal Facilities
- Implementation of Executive Order 13423, Energy Initiatives, and Sustainability at Federal Facilities

EI-2 Power Generation
- Bridge Technologies and Strategies for a Carbon Constrained World
- Challenges in Public Utilities in a Carbon Constrained World
- Nuclear Power – Moving Forward
- The Role of Energy Efficiency in Combating Climate Change
- International Power Generation Strategies for Dealing with Global Climate Change

EI-3 Non-Utility Boilers, Furnaces, and Process Heaters
- Environmental Issues Facing Commercial and Industrial Energy Sources
- Fundamentals of Efficient Boiler Operation
- Carbon Footprinting for Industrial Boilers
- Latest Developments on the Commercial, Industrial, and Institutional Boiler MACT

EI-4 Chemical/Petroleum Sources
- Global Issues in the Chemical and Petroleum Industries
- Permitting and Enforcement Issues in the Chemical Manufacturing Industry
- Compliance Systems Solutions for the Petroleum and Chemical Sector
- Emerging Issues in the Petrochemical Industry

EI-5 Cement, Lime, and Non-Metallic Mineral Processing
- Regulatory Updates and Impacts on the Portland Cement and Lime Industry
- Sustainability

EI-6 Metal Industries
- Energy Efficiency Projects in the Metals Industries
- New Coke Oven Environmental Issues
- Strategies for Metals Industry to Meet Requirements of New SIPs for $PM_{2.5}$ and Ozone

PROGRAM ADMINISTRATION

EP-1 Policy and Regulations
- Air Permitting Conditions, Problems, and Issues
- Great Lakes Protection and Diversions
- The Federal/State Relationship
- Review of EPA's Current Substantive Rulemaking
- Company Outreach to the Public
- Modifying the Clean Air Act
- Experience in Incorporating Flexibility into Title V Permits

EP-3 Legal/Liability
- International/Transboundary Issues

EP-4 Facility Permitting and Siting
- Facility Permitting Issues

EP-5 Public Participation and Facility Siting
- Public Participation in Programs to Reduce Greenhouse Gas Emissions
- Public Participation in Environmental Policy and Projects

EP-8 Environmental Health and Safety Management Systems
- EHS and Sustainability in the Public Sector – Lessons Learned from Executive Order 13423
- Identifying and Managing Key EHS Metrics and Systems
- Raising the Bar on Compliance – Striving for Zero Defects
- Six Sigma – Using Data to Improve Performance
- Environmental Health and Safety
- Driving Improved Performance by Behavior Management

POLLUTION PREVENTION AND SUSTAINABILITY

ES-1 Pollution Prevention
- Integrated Contingency Planning
- Approval and Implementation of Pollution Prevention Techniques
- Identification of Pollution Prevention Opportunities
- Design for Product Stewardship/Life Cycle Ownership
- Innovative Technologies for Reducing Pollution Including Greenhouse Gases

ES-4 Sustainability
- Urban Built Environment Impacts on Climate Change
- Green Building and Land Use
- Sustainable Development through Partnership and Collaboration
- Climate Change and Sustainability
- Sustainable Agriculture
- The Sustainability Movement

ES-5 Climate Change Strategies
- The Role of Renewable Energy in Greenhouse Gas Mitigation
- Greenhouse Gas Mitigation and Clean Energy
- Climate Policy and Regulation
- Climate Impacts and Adaptation
- Climate Change Including Its Impact on the Auto Industry
- Energy Efficiency and Conservation

TRANSPORTATION ISSUES

ET-1 Transportation On and Off Road

- Diesel Vehicles – Tier 4 and Beyond: Energy Efficient and Low Emitting?
- Technologies that Could Achieve Reductions of Greenhouse Gas Emissions from the Transportation Sector Focusing on Engines and Fuels
- General Emissions/Modeling/Clean Diesel Issues
- Transportation and Advanced Technologies Strategies from the Auto Capital
- Plug-In Hybrid Vehicles: Energy, Environmental, and Policy Implications
- Off Road Sources, Airports, Rail, Marine and Construction

ET-2 Land Use and Transportation Policy

- Land Use and Transportation Measures to Address Global Warming
- Transportation – Air Quality Issues in Developing Countries

RESOURCE CONSERVATION AND WASTE MANAGEMENT

MUNICIPAL AND MEDICAL WASTE

WM-1 Integrated Waste Management, Waste Prevention, and Recycling

- Zero Waste Systems, Zero Waste to Landfills, Eco-Industrial Parks and Communities
- MSW Recycling Technology, Economics, Policy, and Outreach
- Electronics Reuse, Recycling and Management
- International Perspectives and Case Studies in Municipal Solid Waste Management
- Special Wastes, C&D and Disaster Waste Reuse and Recycling
- Zero Waste in the Automotive Industry
- Green Procurement, Green Accounting, Design for Environment

WM-3 Municipal Waste Treatment

- Landfills, Bioreactors, Gas and Leachate Collection, Treatment, and Energy Recovery, and Landfill Mining
- Composting Technologies, Emissions, Quality, and Applications
- Bioenergy and Alternative Fuels – Technologies, Policies, and Applications
- Anaerobic Digestion, Co-Digestion of Food Waste, Agricultural and Industrial
- Ash and Residuals Management and Beneficial Use – Technologies, Policies, and Applications
- Industrial Non-Hazardous Waste Management and Treatment
- Thermal Treatment of Solid Wastes/Residuals, Gasification, and Waste-To-Energy Applications
- Water/Wastewater Treatment Residuals, Management, and Processing

WM-4 Medical Waste Treatment

- Healthcare Waste Management (Including Infectious Wastes, Pharmaceuticals, Radioactive Healthcare Waste, and Pathological Wastes)
- Medical Waste Prevention and Resource Efficiency
- Medical Equipment Reuse and Recycling
- Medical Waste Treatment and Processing Technologies (Including Alternative Treatments)
- Biomedical and Pharmaceutical Management
- Community Generated Healthcare Wastes

HAZARDOUS, RADIOACTIVE, AND MIXED WASTE

WR-1 Site Characterization, Investigation, and Remediation/Redevelopment

- Site Investigation
- Brownfields
- Climate Change and Waste Management
- Remediation of Emerging Contaminants

WR-2 Management and Treatment of Hazardous, Radioactive, and Mixed Wastes

- Area Based/Centralized Waste Management
- Hazardous Waste Management
- Management of Radioactive Materials Associated with Emergency Response
- Radioactive Decontamination and the Associated Wastes and Byproducts
- Greenhouse Gas Issues in Waste Management
- Hazardous Waste Management at Federal Facilities

EDUCATION

- Environmental Education and Outreach: Opportunities and Challenges
- State of Environmental Research and Development in the Energy Arena
- Information Technology for Environmental Action

INTERNATIONAL FOCUS

- Environmental Issues in Emerging Economies
- International Global Climate Change Mitigation Efforts

LOCAL AND REGIONAL ISSUES

- Great Lakes Protection
- Midwest Regional Initiatives Related to Climate Change
- The Future of Power Generation in the Midwest
- Auto Industry Challenges