

**Developments in Air Quality  
Current Issues and New Technologies**

**Conference with  
Posters and Exhibition**

**Organised by the  
Automation and Analytical Management Group -  
Royal Society of Chemistry**

**Tuesday 11th & Wednesday 12th December 2018**

at The Royal Society of Chemistry,  
Burlington House, Piccadilly  
London W1J 0BA

**Email: [conf.aamg@gmail.com](mailto:conf.aamg@gmail.com)  
Website: <http://www.rsc.org>**

# Developments in Air Quality Current Issues and New Technologies Conference with Posters and Exhibition

Tuesday 11th and Wednesday 12th December 2018  
The Royal Society of Chemistry, Burlington House, London

## Introduction

2018 has seen air quality remain high on the public and political agendas. Wild fires have led to air pollution problems over wide areas, tighter real-world emissions tests have been introduced for cars sold in Europe, cities are introducing new measures to meet EU Limit Values and many European countries have committed to phasing out petrol and diesel cars all together. Within the UK we have had a new assessment of the health effects of NO<sub>2</sub>, highly relevant to diesel engine emissions, and consultation on a new Clean Air Strategy tackling a broad range sources including traffic, wood burning and agriculture.

Building on the success of this long-running annual event, this conference will present an update on a range of relevant topics. As usual, the presenters will include internationally recognised experts, and there will also be a range of contributed talks and posters, providing a broad and up-to-date survey of the measurement, regulatory and scientific issues affecting air quality.

The conference will again be held in collaboration with Defra's Air Quality Expert Group (AQEG) with sessions based on the group's recently-published reports, including those on the impacts of vegetation on urban air pollution and on air quality impacts of shale gas extraction. Presentations will also be made on topics that AQEG are currently scoping, including vehicle exhaust emissions and non-road mobile machinery.

## Tuesday 11th December

09:30 Registration

10:25 Welcome and Introductory Remarks

### Session 1: Recently published AQEG reports

Chair: **Paul Monks** - University of Leicester, UK

10:30 Presentation of the AQEG Vegetation report  
*David Fowler, AQEG, UK*

11:00 Discussion of report conclusions

11:20 Presentation of the AQEG Shale Gas report  
*Paul Monks, AQEG, UK*

11:50 Discussion of report conclusions

12:10 Presentations by the exhibitors

12:40 **Lunch - exhibition & posters**

## **Session 2: Vehicle Exhaust Emissions and non-road mobile machinery (NRMM)**

Chair: **Paul Monks** - University of Leicester, UK

13:40 Recent vehicle exhaust emission results  
**David Carslaw**, *University of York, UK*

14:10 Mobile NO<sub>2</sub>/NO<sub>x</sub> measurements with the ICAD instrument to investigate air pollution distribution and personal exposure  
**Denis Pöhler**, *University of Heidelberg, Germany*

14:40 Exposure to traffic-related air pollutants particle number and NO<sub>2</sub> when commuting by modes: walk, cycle, car and bus  
**James Tate**, *University of Leeds, UK*

### **15:10 Tea / Coffee - Exhibition & Posters**

15:40 Developing a new approach to the non-road mobile machinery inventory for London  
**Carl Desouza**, *King's College London, UK*

16:10 London's low emission zone for non-road mobile-machinery  
**Stephen Inch**, *Greater London Authority, UK*

16:40 The importance of particles and carbon dioxide in air pollution and in-vehicle human exposure  
**Nick Molden**, *Emissions Analytics, UK*

## **Wednesday 12th December**

09:30 Coffee and Exhibition

### **Session 3: Measurement Technologies**

Chair: **Gary Fuller** - King's College London, UK

10:00 High Accuracy measurement of urban Nox pollution "hot spots"  
**Mark Peckham**, *Cambustion Ltd, UK*

10:30 Generation of gases on demand for the calibration of ambient air monitors  
**David Green**, *Air Monitors Ltd, UK*

11:00 Developments in greenhouse gas standards  
**Ruth Pearce**, *National Physical Laboratory, UK*

### **11:30 Tea / Coffee - Exhibition & Posters**

12:00 Measurement of formaldehyde pollution in ambient air  
**Arto Branders** *Gasera Ltd, Finland*

12:30 Airborne microplastics  
**Stephanie Wright**, *King's College London, UK*

**13:00 Lunch - Exhibition & Posters**

#### **Session 4: Current Topics**

Chair: **Paul Quincey** - National Physical Laboratory, UK

14:00 Wildfires  
**To be confirmed**

14:30 Combining global observations and models to monitor wildfire emissions and their impact on air quality  
**Mark Parrington**, *ECMWF, UK*

15:00 Inland vessel emissions in China - an introduction to regulation and PEMS results  
**Xin Wang**, *Beijing Institute of Technology, China*

15:30 Closing Remarks

**15:35 Tea / Coffee - Close of Conference**

## How To Register

Please visit our website at: [www.rsc.org](http://www.rsc.org) for easy on-line registration. Early registration is advised due to the limited number of delegate places and catering requirements.

<b>Registration Fees:</b>	Non Members	£295
	Member RSC	£230
	Students/Retired	£ 90

The registration fee includes attendance at the meeting together with coffee, lunch and afternoon tea/coffee.

### Payment of registration fees:

- By Debit/Credit Card when you make your on-line registration via Eventbrite
- Offline payment by invoice/BACS

### Venue

The Royal Society of Chemistry,  
Burlington House  
Piccadilly  
London  
W1J 0BA

Map and directions are available on the on-line registration page of our website.

### Registration Contact

Ms Gail Rafferty  
Email: [conf.aamg@gmail.com](mailto:conf.aamg@gmail.com)

### AAMG Treasurer

Dr R Narayanaswamy  
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### Notes

- 1) Fees are not normally refundable but are transferable. If for any reason the organisers should cancel the conference then fees will be refunded.
- 2) The registration fee includes attendance at the meeting together with coffee, lunch and afternoon tea/coffee, as appropriate.
- 3) The organisers reserve the right to alter the programme.

*Data Protection Act.* The information on this form will be retained (1) for the purpose of administering this meeting, in particular for producing a list of participants for distribution at the meeting, and (2) in order that information on future meetings can be sent to you. Please write to the meeting contact if you object.