

**Air Quality Monitoring**  
**New Technologies, New Possibilities**

**Conference with  
Posters and Exhibition**

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

**Tuesday 10th & Wednesday 11th December 2013**

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

**Email: [conference@aamg-rsc.org](mailto:conference@aamg-rsc.org)  
Website: <http://www.aamg-rsc.org>**

# **Air Quality Monitoring - New Technologies, New Possibilities**

## **Conference with Posters and Exhibition**

Tuesday 10th and Wednesday 11th December 2013  
The Royal Society of Chemistry, Burlington House, Piccadilly, London

### **Introduction**

Air quality issues do not stand still. As regulations across Europe lower vehicle emissions and improve fuel specifications, the pollutant mix has changed. These changes are being supplemented by new sources such as biomass burning. The effect of these emissions changes on concentrations of nitrogen dioxide and particulate matter, for example, has proved hard to predict because of the complexity of the atmospheric processes involved, and substantial health effects remain. At the same time, new instrumentation provides the possibility of greatly enhanced information, especially about spatial and temporal variations in concentration, and about the composition and size of particulate matter. Also, methods for integrating monitoring data with other sources of information such as inventories and models are continually improving, together with methods for visualisation and interpretation.

Most measurements are made by regulatory monitoring networks, focusing on determining Limit Value compliance, rather than making measurements that clarify the relative impact of different sources and allow the refinement of models. Helping regulations and strategies evolve to make the best use of resources, as knowledge and technologies change, is a challenging task.

The AAMG December 2013 meeting will focus on these challenges.

Exhibition:- A limited number of exhibition places are available. Interested persons are requested to contact the conference secretary at [conference@aamg-rsc.org](mailto:conference@aamg-rsc.org) as soon as possible.

### **Tuesday 10th December**

10:00 Registration

#### **Session 1: Overview**

Chair: **Peter Woods**, National Physical Laboratory, Middlesex, UK

10:30 35 Years Ambient Air Monitoring - from (supposed) Old Chestnuts to New Challenges.

***Ulrich Pfeiffer**, LANUV, Germany, former chair of AQUILA*

11:15 Assessing Health Effects of Air Pollutions: Implications for Air Quality Monitoring.

***Michal Krzyzanowski**, Visiting Professor, King's College London (formerly WHO)*

12:00 Everybody Is Measuring Air Quality. What Now?  
**Peter van Breugel**, DCMR EPA Rijnmond , The Netherlands

12:30 Short Presentations by Exhibitors

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

## **Session 2: Community Issues**

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

14:00 Is PM10 the Most Suitable Metric for Monitoring and Control of Airborne Particulate Matter in Nigeria?  
**Diran Oderinde**, University of Sunderland, UK

14:30 Air Quality Monitoring in Schools and Community-Wide Environmental Education  
**Zoë L. Fleming**, National Centre for Atmospheric Science, University of Leicester, UK

15:00 **Tea / Coffee - Exhibition & Posters**

## **Session 3: Monitoring Technologies (1)**

Chair: **Ulrich Pfeffer**, LANUV, Germany

15:30 High Density Air Quality Network at Cambridge and London Heathrow Airport: First Results and Interpretations  
**Rod Jones**, University of Cambridge, UK

16:00 Airborne Remote Sensing of Atmospheric NO<sub>2</sub> to Monitor Air Quality Over and Around an Urban Environment.  
**James Lawrence**, University of Leicester, Leicester, UK

16:30 Mobile Monitoring of Air Quality in the City of Rotterdam  
**Marita Voogt**, TNO, Utrecht, The Netherlands.

17:00 End of Day One

## Wednesday 11th December

09:30 Tea /Coffee - Exhibition and Posters

### Session 4: The Work of the UK Air Quality Expert Group

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

10:00 Raising the Evidential Value of Air Quality Compliance Monitoring

**Alastair Lewis**, University of York, UK

10:30 Mitigation of PM<sub>2.5</sub> in the UK

**Matthew Heal**, University of Edinburgh, UK

11:00 Strengthening the Links Between Air Quality Emissions Inventories and Ambient Measurements

**Tim Murrells**, Ricardo-AEA, UK

11:30 Discussion

### Session 5: Monitoring Technologies (2)

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

13:00 HCl Monitoring Using Continuous Wave Cavity Ring-Down Spectroscopy

**Graham Leggett**, Tiger Optics, Warrington, U.S.A.

13:30 Comparison of EC/OC, BC and PNC at an Urban Site.

**Martine Van Poppel**, VITO, Mol, Belgium

13:00 Detection of the Freshly Nucleated Aerosol Particles

**Minna Väkevä**, Airmodus Ltd, Finland

14:30 Comparing Black Carbon Monitors as Employed by Different Measuring Networks.

**Philippe Maetz**, Belgian Interregional Environment Agency, Bruxelles, Belgium.

15:00 Measuring ppb Gas Concentrations in Air Quality Networks.

**John Saffell**, Alphasense Ltd, Great Notley, Essex, UK

15:30 Tea / Close of Conference

## How To Register

Early registration is requested due to limited number of delegate places and catering requirements. Please complete and return the registration form as soon as possible.

<b>Registration Fees:</b>	Non Members	£290
	Member RSC	£210
	Students/Retired	£ 95

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

### Payment of registration fees:

- By Cheque made payable to: **AAMG-RSC**
- By Credit Card (note that AMEX and DINERS cards are not accepted)

### Venue

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

Maps and details will be provided upon registration

### Registration Contact

Conference Secretary, AAMG-RSC, PO Box 174, Manchester M24 4XZ, UK  
Email: [conference@aamg-rsc.org](mailto:conference@aamg-rsc.org) Fax: +44 (0) 161 610 3939

### AAMG Treasurer

Dr R Narayanaswamy, address as above  
Tel +44 (0) 7974 515265 Fax: +44 (0) 161 610 3939

### 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.

## Registration Form

Please complete this form after referring to the registration information and return by post, fax or email to:

**AAMG-RSC, PO Box 174, Manchester. M24 4XZ, UK**  
**Fax No: +44 (0) 161 610 3939 Email: [conference@aamg-rsc.org](mailto:conference@aamg-rsc.org)**

### **Air Quality Monitoring New Technologies, New Possibilities**

Tuesday 10th and Wednesday 11th December 2013  
Royal Society of Chemistry, Burlington House, Piccadilly, London W1J 0BA

Delegate Name & Title

Position

Organization

Address

Post Code

Telephone No:

Fax No:

Email

Special Requirements

Signature

<b>Registration Fees:</b>	Non-Member	£290
	Member RSC	£210
	Student/Retired	£ 95

#### **Payment:**

(Please tick payment method)

By Cheque

Please make cheque payable to: **AAMG-RSC**

Credit/Debit Card

Please complete details below

#### **Credit Card Details** (Please note that AMEX or DINERS cards cannot be accepted)

Card Type: Visa      Mastercard      Maestro

Card Number:

Valid from

Expiry Date

Card Issue No: (Maestro only)

Card Security Code (last 3 digits on reverse of credit card):

Cardholder Name

Statement Address

Post Code

Contact Tel No (not mobile)

Signature of Cardholder

Date