



# **Air Quality Monitoring Evolving Issues and New Technologies**

**Conference with  
Posters and Exhibition**

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

**Wednesday 9th & Thursday 10th December 2015**

**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

## Evolving Issues and New Technologies

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Wednesday 9th and Thursday 10th December 2015  
The Royal Society of Chemistry, Burlington House, Piccadilly, London

### Introduction

At the heart of the VW revelations are exhaust emission tests of nitrogen oxides. This year's conference will focus on vehicle emissions along with other high profile topics and new measurement techniques. The conference will be held in conjunction with DEFRA's Air Quality Expert Group and will include sessions based on topics that AQEG are current scoping to help gather evidence.

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.

### Wednesday 9th December

09:30 Registration

10:25 Welcome and Introductory Remarks

### Session 1: Vehicle Emissions in the Real World

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

10:30 Real World Emission Results by Remote Monitoring  
**David Carslaw**, AQEQ, University of York / Ricardo Energy and Environment, UK

11:00 Real-World Performance of Euro 6 Vehicles - The London Perspective  
**Adam Moody**, Transport for London, UK

11:30 Real World NO<sub>x</sub> Emissions from Passenger Cars in Europe  
**Nick Molden**, Emission Analytics, UK

12:00 Real-World Black Carbon, Particle Number Concentration and Nitrogen Oxide Vehicle Emission Factors: On-Road Chasing Campaign Results  
**Grisa Mocnik**, Aerosol d.o.o., Ljubljana, Slovenia

12:30 Short Presentations by Exhibitors

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

## Session 2: Vehicle and Shipping Emissions

Chair: **David Carslaw** - AQEQ, University of York / Ricardo Energy and Environment, UK

14:00 Trends of Air Pollutants in Roads in London: using a large population of monitoring sites to investigate the effects of policies abating atmospheric emissions from traffic  
**Anna Font**, *King's College London, London UK*

14:30 Real-time Measurement of the Optical Absorption Spectra of Vehicle Emissions  
**Ivan Iskra**, *Aerosol d.o.o., Ljubljana, Slovenia*

15:00 Cleaner Sea Ships – Cleaner Air?  
**Peter van Breugel**, *DCMR, Netherlands*

15:30 Diesel-Related Hydrocarbons can Dominate Gas Phase Reactive Carbon in Megacities  
**Jacqui Hamilton**, *University of York, UK*

## Thursday 10th December

### Session 3: Urban Vegetation as a Means of Reducing Exposure

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

10:00 Air Quality and Urban Form  
**Rob Mackenzie**, *University of Birmingham UK*

10:30 Land Use Regression Modelling to Assess Urban Vegetation as a Means of Reducing Exposure to Air Pollution  
**John Gulliver**, *Imperial College London, UK*

11:00 i-Tree Eco: Quantifying and Valuing Ecosystem Services Provided by Urban trees. A UK Perspective  
**Kieron Doick**, *Forest Research, UK*

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

## **Session 4: Ultrafine Particles**

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

12:00 Sources and Atmospheric Processes Affecting Ultrafine Particles

**Roy Harrison**, *University of Birmingham, UK*

12:30 The UK Ultrafine Monitoring Network and Developments in Harmonisation

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

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

## **Session 5: Monitoring Technologies - Recent Developments**

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

14:00 Regulatory PAH Monitoring: 'a tour of the bay'

**Richard Brown**, *National Physical Laboratory, UK*

14:30 Field Evaluation of a High Time Resolution Elemental Monitor (XACT 625) at Marylebone Road, London, UK

**Anja Tremper**, *King's College London, UK*

14:50 The Development of a Portable PM<sub>2.5</sub> Personal Aerosol Measurement System (PAMS) and Automated Process Laboratory Measurements

**David Dikken**, *M T L, USA*

15:10 Next Generation (Smaller, Lower Cost, Lower Energy Consumption) Portable Emissions Measurement Systems (PEMS)

**Karl Ropkins**, *University of Leeds, UK*

15:30 Challenges in Using Metal Oxide Sensors for Air Quality Monitoring

**Philip Peterson**, *University of Leicester, UK*

15:50 Nitrogen Dioxide Concentrations Variation and Road Infrastructure Interventions

**Teresa Raventos**, *University of Leicester, UK*

16:10 Closing Remarks

**16:20 Tea / Coffee - Close of Conference**

## How To Register

Please visit our website at: [www.aamg-rsc.org](http://www.aamg-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: [conference@aamg-rsc.org](mailto:conference@aamg-rsc.org)

### AAMG Treasurer

Dr R Narayanaswamy  
Tel +44 (0) 7974 515265

### 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.