

Air Quality - the wider picture Current Issues and New Technologies

**Conference with
Posters and Exhibition**

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

Wednesday 13th & Thursday 14th December 2017

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

**Email: conference@aamg-rsc.org
Website: <http://www.aamg-rsc.org>**

Air Quality - the wider picture

Current Issues and New Technologies

Conference with Posters and Exhibition

Wednesday 13th and Thursday 14th December 2017
The Royal Society of Chemistry, Burlington House, London

Introduction

2017 has seen issues relating to poor air quality which continues to remain high on the public and political agendas. While there is general consensus on the benefits of reducing ambient concentrations of nitrogen dioxide, ozone and particulate matter, there are many open questions about the priorities for maximum health benefits, the changing sources of these pollutants, and the best ways to reduce exposure to the public. All these questions need to be addressed using reliable evidence.

Building on the success of this long-running annual event, and continuing the direct link with the work of Defra's Air Quality Expert Group (AQEG), this conference will present an update on a range of relevant topics. As in previous conferences, the presenters include internationally recognised experts, providing a broad and up-to-date survey of the measurement, regulatory and scientific issues affecting air quality.

Wednesday 13th 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 Biomass report
Alison Tomlin, University of Leeds, UK

11:00 Discussion of report conclusions

11:20 Presentation of the AQEG Shipping report
Mathew Heal, University of Edinburgh, UK

11:50 Discussion of report conclusions

12:10 Presentations by the exhibitors

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

Session 2: Assessment of the Effects of Interventions

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

13:40 Introduction to and scope of the AQEG report
David Carslaw, *University of York, UK*

14:10 A tale of two cities: is air pollution improving in London and Paris?
Anna Font, *King's College London, UK*

14:40 Towards the optimum solution to poor urban air quality caused by motor vehicles
Nick Molden, *Emissions Analytics Ltd, UK*

15:10 Tea / Coffee - Exhibition & Posters

15:40 Measurements and source apportionment of airborne particulate matter in the vicinity of Heathrow airport
Roy Harrison, *University of Birmingham, UK*

16:10 Recent findings from vehicle emission remote sensing from UK measurements
Rebecca Rose, *Ricardo Energy and Environment, UK*

16:40 T B C
Karl Ropkins, *University of Leeds, UK*

17:10 Close of Day One

Thursday 14th December

09:30 Coffee and Exhibition

Session 3: Measurement Technologies

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

10:00 A new online instrument to quantify reactive oxygen species (ROS) in atmospheric aerosol
Markus Kalberer, *University of Cambridge, UK*

10:20 Activities to improve calibration for PM and black carbon measurements in the EMPIR programme
Paul Quincey, *National Physical Laboratory, UK*

10:40 New method and instrumentation to measure and characterize aerosolized carbon
Griša Močnik, *Aerosol d.o.o., Slovenia*

11:00 Tea / Coffee - Exhibition & Posters

- 11:30 Developments in occupational air monitoring techniques for assessing exposure to diesel engines emissions and the potential for harmonization with techniques used in monitoring ambient air
Owen Butler, *Health and Safety Laboratory, UK*
- 11:50 Light absorption versus evolved carbon - a new way to look at elemental and organic carbon analysis
Eleonora Nicolosi, *King's College London, UK*
- 12:10 A synthetic zero air reference material
Ruth Pearce, *National Physical Laboratory, UK*
- 12:30 The use of low cost sensors to monitor air quality
Kate Smith, *University of York, UK*
- 12:50 Lunch - Exhibition & Posters**

Session 4: Current Topics

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

- 13:50 Investigation of organic aerosol during high pollution events in Beijing
William Dixon, *University of York, UK*
- 14:10 Impact of European motor vehicle emissions control directives on ground level ozone
Richard Derwent, *RD Scientific, UK*
- 14:30 Health benefit and economic cost of building interventions to reduce indoor exposure to outdoor pollution in Beijing China
Zhiwen (Vincent) Luo, *University of Reading, UK*
- 14:50 The October 2017 red sun phenomenon over the UK: a satellite perspective
David Moore, *University of Leicester, UK*
- 15:10 Closing Remarks
- 15:15 Tea / Coffee - Close of Conference**

How To Register

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

Registration Fees:	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

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.