

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**

Monday 12th & Tuesday 13th December 2016

**at The Society of Chemical Industry,
14/15 Belgrave Square,
London SW1X 8PS**

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

Air Quality Monitoring

Evolving Issues and New Technologies

Conference with Posters and Exhibition

Monday 12th and Tuesday 13th December 2016
The Society of Chemical Industry, 14/15 Belgrave Square, London

Introduction

2016 has seen air quality issues remain high on the public and political agendas. In parallel, there have been many developments in technologies that can help clarify which are the main contributors to air pollution, reduce emissions from specific sources, and reduce exposure to the public.

Building on the success of this long-running annual event, the 2016 conference will address these developments and the prospects that they offer for the future. The conference will be held in collaboration with Defra's Air Quality Expert Group, and will include sessions based on the topics AQEG are currently scoping, to help gather relevant evidence. These topics include mitigation methods such as photocatalytic paint or urban vegetation as means of reducing exposure, ultrafine particles and engineered nanoparticles, and agricultural emissions. The conference will also include the presentation of results from the recent Defra funded project on innovative technologies for air quality monitoring.

Monday 12th December

09:30 Registration

10:25 Welcome and Introductory Remarks

Session 1: Innovative Measurement Technologies

Chair: **T B C** -

10:30 Presentation of the findings of the innovative technologies for air quality monitoring report

Stephen Stratton, *Ricardo Energy & Environment, UK*

Margaret Bell, *University of Newcastle, UK*

11:30 Laser based remote sensing of vehicle exhaust

John Stewart Hager, *H E A T, USA*

12:00 Developments in technologies and accuracy for NOx measurements

David Worton, *National Physical Laboratory, UK*

12:30 Short presentations by exhibitors

13:00 **Lunch - exhibition & posters**

Session 2: Particulate Measurements: Ultrafine and Composition

Chair: **T B C** -

14:00 Long-term measurements of ultrafine particles in the Ruhr area (Germany)

Ulrich Quass, *I U T A, Germany*

14:30 UFP monitoring at Heathrow airport

Brian Stacey, *Ricardo Energy & Environment, UK*

15:00 Taking ambient air monitoring to the next level - Multiple applications with the Fidas® technology for fine and ultrafine particles measurements

Frederik Weis, *Palas GmbH, Germany*

15:30 Tea / Coffee - Exhibition & Posters

16:00 Characterization of PM pollution within the French CARA program

Olivier Favez, *I N E R I S, France*

16:30 Chemical composition measurements and source apportionment of PM₁₀ in Port Talbot

David C Green, *King's College London, UK*

Tuesday 13th December

09:30 Coffee and Exhibition

Session 3: AQEG - Small Sensors

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

10:00 Application of low cost sensors in air pollution monitoring

Ally Lewis, *University of York, UK*

10:30 Using a commercial low cost sensor network (Aqmesh) to quantify urban air quality: Comparing measured and modelled (ADMS urban) pollutant concentrations

Rod Jones, *University of Cambridge, UK*

11:00 The CurieuzeNeuzen citizen science project: large-scale air quality mapping of NO₂ concentrations in Antwerp, Belgium

Joris van den Bossche, *Vrije Universiteit Brussel, Belgium*

11:30 Tea / Coffee - Exhibition & Posters

Session 4: AQEG - Agricultural Emissions

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

12:00 Agricultural emissions, their contribution to air quality and the likely value of control measures

David Fowler, *C E H, UK*

12:30 The UK particulate episode of March-April 2014: More than saharan dust

Christine Braben, *C E H, UK*

13:00 Low cost sensor for continuous monitoring of the ammonia emission from a pig house

Jacob Mønster, *F O R C E Technology, Denmark*

13:30 Lunch - Exhibition & Posters

Session 5: Exposure Reduction - Photocatalytic Paints

Chair: **T B C** -

14:30 Photocatalytic solutions to mitigate local pollution problems

Robert McIntyre, *Cristal Global, UK*

14:50 Development of more durable photocatalytic coating for pre-coated metal

Chandrakant Mistry, *Becker Industrial Coatings, UK*

Session 6: New Techniques and Recent Developments

Chair: **T B C** -

15:10 New method for the measurement of engineered TiO₂ nanoparticles

Stephan Leinert, *L A N U V, Germany*

15:30 On-filter determination of particulate matter oxidative potential: A seasonal analysis of the London particulate airshed

Nuria Camiña, *King's College London, UK*

15:50 Combination of plant monitoring results and weather data as a method to identify PCB-sources

Dieter Gladtko, *L A N U V, Germany*

16:10 Controlling air pollution at construction sites

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

16:30 Closing Remarks

16:35 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 Society of Chemical Industry
14/15 Belgrave Square,
London
SW1X 8PS

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.