



Current & Future Air Quality Monitoring

Current & Future Air Quality Monitoring

**Workshop and Conference
with Posters and Exhibition**

**Jointly organised by the
Automation and Analytical Management Group -
Royal Society of Chemistry
and AirMonTech**

Tuesday 14th & Wednesday 15th December 2010

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

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

Current & Future Air Quality Monitoring

Workshop and Conference with Posters and Exhibition

Tuesday 14th & Wednesday 15th December 2010

The Royal Society of Chemistry, Burlington House, Piccadilly, London

Introduction

Across Europe, member states are experiencing extreme difficulties in meeting air pollution Limit Values set by the 2008 Air Quality Directive. These difficulties raise serious concerns, both because of the consequential health impacts, and because the predicted trends in pollution emissions are not being realised in ambient concentrations, suggesting that our understanding of pollution sources and atmospheric processes is flawed. Although monitoring networks across Europe have increased over the last ten years, monitoring has focused on determining Limit Value compliance, using CEN standard methods, rather than making measurements that clarify the relative impact of different sources and allow the refinement of models. New monitoring approaches and new technologies need to be assessed in good time for the revision of the Directive in 2013.

The AAMG December 2010 meeting, held jointly with the first workshop of the AirMonTech project will provide an authoritative view of the current position for air quality monitoring, and the possibilities for monitoring differently in future.

Tuesday 14th December

09:00 Registration

Measurement Technologies for Regulated Compounds in Air Quality Assessment

- 10:00 Welcome Address
P. Quincey, NPL, UK
- 10:10 EC Expectations to AirMonTech
M. Schoupe, EC, EU
- 10:30 Introduction to AirMonTech
T. Kuhlbusch, IUTA, Germany
- 10:40 Outline of WP1
Ch. Hueglin, EMPA, Switzerland
- 11:00 Tea / Coffee - Exhibition & Posters

Existing Technologies For Regulated Metrics

Chairperson: A. Borowiak, JRC, EU

- 11:20 Principles of Type Approval for Monitoring Systems
P. Woods, NPL, UK
- 11:40 Equivalence Tests: Principles and the PM Issue
U. Pfeffer, LANUV, Germany
- 12:00 Ongoing QA/QC for PM Monitoring: Requirements from AMS Group of TC264/WG15
T. Hafkenscheid, RIVM, Netherlands
- 12:20 Lunch - Exhibition & Posters
- 13:30 Developments and Recommendations for EC/OC Monitoring
J. P. Putaud, JRC, EU

13:50 NO₂ Measurements with Different Converters: Molybdenum Converters vs. Specific NO₂ Measurements
R. Gehrig, EMPA, Switzerland

14:10 Analytical Characteristics for Benzene and VOC Automatic Measuring Systems
N. Lacoge, ENSM-Douai, France

14:30 General Discussion: How to Proceed in WP1
Existing type approvals, SOP and equivalence reports: what exists. What is missing. Where available. How to collect the information. How to assess and disseminate the information.

15:20 Tea / Coffee - Exhibition & Posters

Data Collection and Dissemination Within AirMonTech

Chairperson: R. Otjes, ECN, Netherlands

16:00 The AirMonTech Database, An Important Step Towards The Harmonisation of European Monitoring
A. Borowiak, JRC, EU

New Technologies For Regulated Metrics

16:40 Sensors for Monitoring Regulated Compounds
M. Gerboles, JRC, EU

17:00 Mobile Multi-Species Trace Vapour Sensors for Localised Pollution Monitoring and Mapping
M. Richards, IC, UK

17:20 Performance of Laserspectroscopic Technologies for Determination of Regulated Compounds
Ch. Hueglin, EMPA, Switzerland

17:40 Discussion on New Technologies for Regulated Metrics

Wednesday 15th December

New Metrics, Technologies and Strategies in Air Quality Monitoring

09:00 Introduction Day 2
U. Quass, IUTA, Germany

New Technologies and Alternative Metrics

Chairperson: M. Viana, CSIC, Spain

09:10 Knowns, Unknowns and Needs for Health Relevant New: Metrics
K. Katsouyanni, NKUA, Greece

09:30 ROS - A Potentially Health Relevant Alternative Metric
F. Kelly, KCL, UK

09:50 Particle Surface Area Measurements - Are Current Techniques Applicable?
T. Kuhlbusch, IUTA, Germany

10:10 Tea / Coffee - Exhibition & Posters

- 10:40 A New Potentiometric Method for Automated Detection of Bioaerosols
D. Sarantaridis, UCL, UK
- 11:00 Aerosol Instrumentation Using Particle-to-Liquid Collectors
R. Otjes, ECN, Netherlands
- 11:20 Source Contribution - An Alternative Metric?
X. Querol, CSIC, Spain
- 11:40 Discussion on New Technologies and Alternative Metrics
- 12:20 Lunch - Exhibition & Posters

New Monitoring Strategies - Approaches

Chairperson: P. Quincey, NPL, UK

- 13:20 Application and Limitations of Satellite Remote Sensing Technology for Estimating Air Emissions and Concentrations of Pollution at Ground Level in Low-Altitude Climates
M.A. Fagbeja, UWE, UK
- 13:40 The German Ultrafine Aerosol Network - Experience with Routine Particle Size Distribution Measurement
W. Birmili, ifT, Germany
- 14:00 UK Particle Number Measurement Network
P. Quincey, NPL, UK
- 14:20 Personal Monitoring of Exposure to Black Carbon
E. Dons, VITO, Belgium
- 14:40 Development of a New Measuring Bike for Mapping Dust Levels in Urban Environments: The Aeroflex Bike
M. Van Poppel, VITO, Belgium
- 15:00 Discussion on Metrics and Monitoring Strategies Related to Health Effects
- 15:30 Tea / Coffee - Exhibition & Posters

What is Needed to Evaluate/Establish New Technologies and New Metrics?

Chairperson: A Borowiak, JRC, EU

- 16:00 Future Urban AQ Monitoring in Europe
E. De Saeger, EC, EU
- 16:20 How Can Background Measurements be Linked with Urban Air Quality Monitoring?
K.Tørseth, NILU, Netherlands
- 16:40 Wrap-up and Outlook
T. Kuhlbusch, IUTA, Germany
- 17:00 End of Conference

POSTERS

Poster presentations on the theme of the conference are invited.

Please contact: conference@aamg-rsc.org

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.

Registration Fees:	Non Members	£200
	Members	£170
	Students/Retired	£ 90

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 provided upon registration

Registration Contact

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

AAMG Treasurer

Dr R Narayanaswamy, Address as above
Tel +44 (0) 161 881 2583 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 than 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 or fax to:

AAMG-RSC, PO Box 174, Manchester. M24 4XZ, UK
Fax No: +44 (0) 161 610 3939

Current & Future Air Quality Monitoring

Tuesday, 14th & Wednesday 15th December 2010
Royal Society of Chemistry, Burlington House, Piccadilly, London

Delegate Name & Title

Position

Organization

Address

Post Code

Telephone No:

Fax No:

Email

Special Requirements

Signature

Registration Fees:	Non-Member	£200
	Member	£170
	Student/Retired	£ 90

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)

Cardholder Name

Statement Address

Post Code

Contact Tel No (not mobile)

Signature of Cardholder

Date