AirMonTech

Current and future air quality monitoring

T.A.J. Kuhlbusch

www.airmontech.eu
• CAFE started 2001 with the aim of improving European air by
  - revising the directives (e.g. PM2.5)
  - national emission ceilings
  - revising traffic emission standards

• Major European research projects on Air Quality – Exposure – Health Effects (e.g. APHEA 1+2, ESCAPE)

• Major extension of the approach of monitoring air quality with new AQ Directive in 2008 – Average Exposure Index

• Upcoming: Revision of AQD 2013 and FP8!
Aims of AirMonTech

• Facilitating harmonisation and comparability of European air quality monitoring by making information on metrics, techniques and instrumentation available via a database

• Identification of trends and future options in measurement strategies, data quality and comparability

• Discussing and drafting recommendations of future urban air quality monitoring strategies in view of closer linkage to exposure, health effects and assessment of abatement strategies
Time line of policy relevant aims

- **2010**: Revision of AQD
- **2012**: Start of FP8
- **2013**: Research Map and FP 8 Recommendations
  - In view of DG ENV and AQD 2018
- **2018**: Revision of AQD

**Recommendation for Revision of AQD**

**Harmonisation through Data Base**
Today

➔ We will present and discuss the database, new strategies, new techniques and trends in AQ monitoring, research & development recommendations

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In close cooperation with all stakeholders developers, manufacturers, national and urban AQ monitoring networks, researcher, decision makers, politicians and the EU commission
The AirMonTech team is looking forward to this workshop!

www.airmontech.eu

AirMonTech Consortium: (from left) J. Moeltgen (UDE), U. Quass (IUTA), K. Torseth (NILU), K. Katsouyanni (NKUA), B. Vogel (UDE), R. Otjes (ECN), E. Weijers (ECN), P. Woods (NPL), T. Kuhlbusch (IUTA, Coordinator), P. Quincey (NPL), M. Viana (CSIC), R. Gehrig (EMPA), X. Querol (CSIC), A. Borowiak (JRC), C. Hueglin (EMPA).
Workshop Program

'Current and Future Air Quality Monitoring'  
Barcelona, 25<sup>th</sup>-26<sup>th</sup> April 2012

Day 1 (25.04.2012)
12:00  Registration of participants
13:00  Welcome address & technical information  
       T. Kuhlbusch, IUTA e.V., Germany & M. Viana, CSIC, Spain

1<sup>st</sup> Session
Chairperson: T. Kuhlbusch, IUTA e.V., Germany

13:20  Options for Integration of Air Quality and Health Effects Monitoring  
       K. Katsouyanni, University of Athens, Greece

13:50  Air Quality Monitoring for Exposure Assessment  
       G. Hoek, University Utrecht, The Netherlands

14:20  Coffee break (Exhibitors)
2nd Session

Chairperson: X. Querol, CSIC, Spain

14:45 Monitoring Technologies at a Glance: The AirMonTech Database
M. Barbiere, JRC, Italy

15:15 Quality needs Assurance: SOPs, Type Approvals, Equivalence Tests for Regulated Pollutants
R. Gehrig, EMPA, Switzerland

16:00 EN 15267 - The latest standard in Type Approval and Certification of Automated Measuring Systems in Europe
K. Pletscher, TüV Rheinland Energie und Umwelt GmbH, Germany

16:30 Coffee break (Exhibitors)

16:50 Time-resolved and Online Determination of Reactive Oxygen Species (ROS) in Ambient Air
M. Kalberer, University of Cambridge, United Kingdom

17:20 Personal monitoring: How the data compare to air quality measurements and what additional information can be derived
M. Nieuwenhuijsen, CREAL, Spain

18:00 End of Day 1

19:30 Social Dinner (participants registered for the dinner only)
Day 2 (26.04.2012)

1st Session
Chairperson: C. Hüglin, EMPA, Switzerland

08:30  Wrap up of day 1 and Introduction to day 2 - X. Querol, CSIC, Spain

08:40  Diffusion Charging for Easy Monitoring of Integral Particle Metrics (Average Diameter, Number and Surface Concentration)
       M. Fierz, FHNW, Switzerland

09:10  Developments and Applications of Sensor Technologies for Ambient Air Monitoring
       M. Gerboles, JRC, Italy

09:40  COST Action EuNeTAir
       M. Penza, ENEA, Italy

10:00  Coffee break (Exhibitors)

10:20  Black Carbon Measurements for Improved Urban Air Quality Monitoring
       X. Querol, CSIC, Italy

10:50  The Potential of the Aerosol Chemical Speciation Monitor for Long-Term Monitoring
       A. Prévot, Paul Scherrer Institut, Switzerland

       T. Kuhlbusch, IUTA e.V., Germany

12:00  Discussion New Instruments / Metrics
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12:20  Lunch break (Exhibitors)

2nd Session
Chairperson: E. Weijers, ECN, The Netherlands
13:30  Future Options and Strategies in Urban Air Quality Monitoring
       P. Quincey, NPL, United Kingdom

14:00  EU Commission’s Perspective
       M. Schouppe, European Commission, EU

14:30  General Discussion & Concluding Remarks

15:15  Farewell Coffee

15:45-17:15  Core Stakeholder Cycle - CSC Members & AMT WP leaders

15:15 End of Day 2 (and 17:15 for Core Stakeholders)