



Tuesday, 4 December 2012

COST Action TD1105 PLENARY SESSION

Central Hall

14:00 - 19:00	Registration
	EU Research Policy and International Overview on Air Quality Monitoring <i>Chairman: Michele Penza, Action Chair</i> ENEA, Italy
15:00 - 15:10	Welcome Address Giovanni Lelli, ENEA Commissioner
15:10 - 15:15	Introductory Technical Address Leander Tapfer, Head of Unit Materials Technologies, Brindisi, ENEA
15:15 - 15:30	COST Action TD1105: European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability Michele Penza, Action Chair, ENEA, Italy
15:30 - 16:00	EU Research Policy on Materials and Environmental Technologies in Horizon 2020 AirReview on the Revision of the Air Quality Directive 2008/50/EC Renzo XRTW, EC DG RES, Head of Unit Materials, Belgium
16:00 - 16:30	Low-cost Gas Sensors for Air Quality Control: Overview in Europe and New Trends Michel Gerboles, JRC, Institute for Environment and Sustainability, Ispra, Italy
16:30 - 17:00	Nanosensors for Air Quality Monitoring in USA Meyya Meyyappan, NASA Ames Research, USA
17:00 - 17:30	Coffee Break
	FP7 Projects on Air Quality Monitoring Technologies <i>Chairman: Anita Lloyd Spetz, Action Vice-Chair</i> University of Linköping, Sweden
17:30 - 17:50	FP7 Project EURUSSIA S3 (NMP 2009-2012): Surface ionization and novel concepts in nano-MOX gas sensors with increased Selectivity, Sensitivity and Stability for detection of low concentrations of toxic and explosive agents Giorgio Sberveglieri, EURUSSIA S3 Coordinator, University of Brescia, Italy
17:50 - 18:10	FP7 Project AirMonTech (ENV 2010-2013): Air Quality Monitoring Technologies for Urban Areas Thomas Kuhlbusch, AirMontech Coordinator, Institute of Energy and Environmental Technologies (IUTA eV), Duisburg, Germany
	Health Effects of Air Pollution in Europe <i>Chairman: Ole Hertel, Action WG3 Chair</i> Aarhus University, Denmark
18:10 - 18:30	WHO activities to abate health impacts of air pollution in the European Region Hans-Guido Mucke, WHO Collaborating Centre for Air Quality Management and Air Pollution Control - Federal Environment Agency, Berlin, Germany
18:30 - 18:50	Assessment of the health impact of the industrial emissions in the environmental management of the "Taranto case" Giorgio Assennato, Director of Environmental Protection Regional Agency (ARPA-Puglia), Bari, Italy
	Applications of Environmental Sustainability in Europe <i>Chairman: Juan Ramon Morante, Action WG1 Chair</i> Catalonia Institute for Energy Research (IREC), Barcelona, Spain
18:50 - 19:10	COST Action ES1004: European Framework for Online Integrated Air Quality and Meteorology Modelling Peter Suppan, Action ES1004 WG1 Leader, Karlsruhe Institute of Technology, Garmisch-Partenkirchen, Germany
19:10 - 19:30	Networked Low-cost Sensors for Environmental Monitoring in Cities Rod Jones, University of Cambridge, Centre for Atmospheric Science, UK
19:30	Closure of Plenary Session



Wednesday, 5 December 2012

Action TD1105 Working Groups and Special Interest Groups Meetings

Central Hall

09:00 - 19:00 **Registration**

Introduction and Adoption of the AGENDA for WGs and SIGs Meetings

08:45 - 09:00 **Wrap Up**

Michele Penza, Action Chair, ENEA, Italy

Parallel Session of WG1. Location: Central Hall

09:00 - 11:00 **WG1: Sensor Materials and Nanotechnology**

*Chairman: Juan Ramon Morante, Action WG1 Chair
Catalonia Institute for Energy Research (IREC), Barcelona, Spain*

Specific Presentations from WG1

09:00 - 09:10 **Mixed metal-oxides layers for AQC gas sensors**

Jyrki Lappalainen, Action Vice-WG1 Leader, Oulu University, Oulu, Finland

09:10 - 09:20 **Metal oxides nanostructures for AQC gas sensors**

George Kiriakidis, Action Sub-WG1.1 Leader, FORTH, Crete, Greece

09:20 - 09:30 **Carbon nanomaterials for AQC gas sensors**

Eduard Llobet, Action Sub-WG1.2 Leader, Universitat Roviri I Virgili, Tarragona, Spain

09:30 - 09:40 **Emerging sensor materials (organic/inorganic, hybrid, nanocomposites, polymers, functional, etc.) for air-pollution detection**

Marcel Bouvet, Action Sub-WG1.3 Leader, Université de Bourgogne, Dijon, France

Partner Presentations from WG1

09:40 - 09:45 *Monika Kwoka, Silesian University of Technology, Gliwice, Poland*

09:45 - 09:50 *Ivan Nedkov, Bulgarian Academy of Sciences, Sofia, Bulgaria*

09:50 - 09:55 *Roxana Mioara Piticescu, IMNR, Pantelimon, Romania*

09:55 - 10:00 **Partner 4, Name of organization**

10:00 - 11:00 **Discussions of WG1: Priorities, R&D needs, Roadmap**

Deliverable: Definition of WG1 Priorities for WGs General Assembly and Action Workplan

Parallel Session of WG2. Location: Council Room

09:00 - 11:00 **WG2: Sensors, Devices and Systems for AQC**

*Chairman: Andreas Schuetze, Action WG2 Chair
Saarland University, Saarbrücken, Germany*

Specific Presentations from WG2

09:00 - 09:10 **CMOS-based gas sensors**

Florin Udrea, Action Vice-WG2 Leader, Cambridge CMOS Sensors Ltd, Cambridge, UK

09:10 - 09:20 **Gas sensors and new transducers**

Danick Briand, Action Sub-WG2.1 Leader, EPFL, Neuchatel, Switzerland

09:20 - 09:30 **Portable gas sensor-systems**

Sywert Brongersma, Action Sub-WG2.2 Leader, IMEC, Eindhoven, The Netherland

09:30 - 09:40 **Wireless technology and AQC sensors network**

George Papadopoulos, Action Sub-WG2.3 Leader, ISI-Athena, Patras, Greece

09:40 - 09:50 **Intelligent algorithms and distributed computing for networked AQC gas sensors**

Julian Gardner, Action Sub-WG2.4 Leader, University of Warwick, Coventry, UK

Partner Presentations from WG2

09:50 - 09:55 *Radu Adrian Ionica, IPA SA, Craiova, Romania*

09:55 - 10:00 *J. Daniel Prades, University of Barcelona, Spain*

10:00 - 10:05 *Daniela Schonauer-Kamin, University of Bayreuth, Germany*

10:05 - 10:10 *Branko Ster, University of Ljubljana, Slovenia*

10:10 - 11:00 **Discussions of WG2: Priorities, R&D needs, Roadmap**

Deliverable: Definition of WG2 Priorities for WGs General Assembly and Action Workplan



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Parallel Session of WG3. Location: Technical Committee Room

09:00 - 11:00 WG3: Environmental Measurements and Air-Pollution Modelling

*Chairman: Ole Hertel, Action WG3 Chair
Aarhus University, Roskilde, Denmark*

Specific Presentations from WG3

09:00 - 09:10 Aerosol particle monitoring and characterisation

Kaarle Hameri, Action Vice-WG3 Leader, University of Helsinki, Helsinki, Finland

09:10 - 09:20 Environmental measurements at laboratory and in field air-quality stations

Nuria Castell-Balaguer, Action Sub-WG3.1 Leader, NILU - Norwegian Institute for Air Research, Kjeller, Norway

09:20 - 09:30 Air-quality modelling and chemical weather forecasting

Kostas Karatzas, Action Sub-WG3.2 Leader, Aristotle University, Thessaloniki, Greece

09:30 - 09:40 Harmonisation of environmental measurements

Ulrich Quass, Action Sub-WG3.3 Leader, IUTA - Institute of Energy and Environmental Technology, Duisburg, Germany

Partner Presentations from WG3

09:40 - 09:45 *Krisztina Labancz, Hungarian Meteorological Service, Budapest, Hungary*

09:45 - 09:50 *Arngrimur Thorlacius, Agricultural University of Iceland, Iceland*

09:50 - 09:55 *Mariacruz Minguillon, CSIC-IDAEA, Barcelona, Spain*

09:55 - 10:00 *Liad Ortar, AirBase Systems, Israel*

10:00 - 10:05 **Partner 5, Name of organization**

10:05 - 11:00 **Discussions of WG3: Priorities, R&D needs, Roadmap**

Deliverable: Definition of WG3 Priorities for WGs General Assembly and Action Workplan

Parallel Session of WG4. Location: External Room

09:00 - 11:00 WG4: Protocols and Standardisation Methods

*Chairman: Ingrid Bryntse, Action WG4 Chair
SenseAir SA, Delsbo, Sweden*

Specific Presentations from WG4

09:00 - 09:10 Development of miniaturized sensor systems for air quality monitoring

Nicolas Moser, Action Vice-WG4 Leader, SGX Sensortech Ltd (ex e2V Microsensors), Corcelles, Switzerland

09:10 - 09:20 Protocols, standards and methods for AQC by analyzers/instruments (no-sensors) technologies

Grisa Mocnik, Action Sub-WG4.1 Leader, Aerosol doo, Ljubljana, Slovenia

09:20 - 09:30 Protocols, standards and methods for AQC by sensors (no-analyzers) technologies

Anne-Claude Romain, Action Sub-WG4.2 Leader, Université de Liège, Arlon, Belgium

09:30 - 09:40 Benchmarking of new products and market of commercial AQC sensors

John Saffell, Action Sub-WG4.3 Leader, Alphasense Ltd, Essex, UK

Partner Presentations from WG4

09:40 - 09:45 *Magda Brattoli, University of Bari, Italy*

09:45 - 09:50 **Partner 2, Name of organization**

09:50 - 09:55 **Partner 3, Name of organization**

09:55 - 10:00 **Partner 4, Name of organization**

10:00 - 10:05 **Partner 5, Name of organization**

10:05 - 11:00 **Discussions of WG4: Priorities, R&D needs, Roadmap**

Deliverable: Definition of WG4 Priorities for WGs General Assembly and Action Workplan

11:00 - 11:30

Coffee-Break



Central Hall

- 11:30 - 13:00** **Action WGs GENERAL ASSEMBLY**
Chairman: Michele Penza, Action Chair
Italian National Agency for New Technologies, Energy and Sustainable Economic Development – ENEA, Brindisi, Italy
- 11:30 - 11:40** **Introductory Keynote Current Research on Particle Detection and Gas Sensors for Environmental Monitoring**
Anita Lloyd Spetz, Action Vice-Chair, University of Linköping (Sweden) and Oulu University (Finland)
- 11:40 - 11:50** **Priorities and Roadmap of WG1: Sensor Materials and Nanotechnology**
Juan Ramon Morante, Action WG1 Leader, IREC, Barcelona, Spain
- 11:50 - 12:00** **Priorities and Roadmap of WG2: Sensors, Devices and Systems for AQC**
Andreas Schuetze, Action WG2 Leader, Saarland University, Saarbrücken, Germany
- 12:00 - 12:10** **Priorities and Roadmap of WG3: Environmental Measurements and Air-Pollution Modelling**
Ole Hertel, Action WG3 Leader, Aarhus University, Roskilde, Denmark
- 12:10 - 12:20** **Priorities and Roadmap of WG4: Protocols and Standardisation Methods**
Ingrid Bryntse, Action WG4 Leader, SenseAir SA, Delsbo, Sweden
- 12:20 - 13:00** **Discussion of Action Participants:**
Comments and Inputs on Priorities, R&D Needs, Strategies, Roadmap for future joint-activities of Action TD1105 EuNetAir
Definition of the Action: Priorities, R&D Needs, Recommendations, Roadmap

13:00 - 14:30 Lunch offered by the Conference Organization

Parallel Session of SIG1. Location: External Room

- 14:30 - 16:30** **SIG1: Network of spin-offs**
Chairman: Marco Alvisi, Action SIG1 Leader
Italian National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA, Brindisi, Italy
- 14:30 - 14:40** **Definition of the objectives, activities, deliverables and strategies for SIG1 - Part I**
Marco Alvisi, Action SIG1 Leader, ENEA, Brindisi, Italy
- 14:40 - 14:50** **Definition of the objectives, activities, deliverables and strategies for SIG1 - Part II**
Florin Udrea, Action SIG1 Deputy, Cambridge CMOS Sensors Ltd, Cambridge, UK
- 14:50 - 15:00** **Cooperative instruments for EU spin-offs and innovative SMEs: Enterprise Europe Network (EEN) and Bridg€conomies**
Filippo Ammirati, EEN - South Italy Manager, ENEA, Naples, Italy
- 15:00 - 15:45** **Partner Presentations from SIG1**
Christine Aleppe, SGX-Sensortech Ltd (ex- e2v microsensors), Corcelles, Switzerland
Roberto Simmarano, Sensichips srl, Aprilia (Latina), Italy
Anne-Claude Romain, representing Odometric SA, Arlon, Belgium
Marco Brini, EnvEve SA, Bioggio, Switzerland
Thorsten Conrad, 3S GmbH, Saarbrücken, Germany
Pierluigi Barbieri, ARCO-Solutions srl, Trieste, Italy
Ulf Thole, SenSiC AB, Linköping, Sweden
Livia Trizio, Lenviros srl, Bari, Italy
Liad Ortar, AirBase Systems, Granot (Israel) and Berlin (Germany)
Marcel Ionica, IPA SA, Craiova, Romania
- 15:45 - 16:30** **Discussions of SIG1: Priorities, R&D needs, Roadmap**
Deliverable: Definition of SIG1 Priorities for SIGs General Assembly and Action Workplan





Parallel Session of SIG2. Location: Council Room

14:30 - 16:30 SIG2: Smart Sensors for Urban Air Monitoring in Cities

Chairman: Rod Jones, Action SIG2 Leader

University of Cambridge, Centre for Atmospheric Science, Cambridge, UK

Specific Presentations from SIG2

14:30 - 14:40 Definition of the objectives, activities, deliverables and strategies for SIG2

Rod Jones, Action SIG2 Leader, University of Cambridge, Cambridge, UK

14:40 - 14:50 Examples of applications of sensors for urban air quality monitoring in Spain

Jordi Llosa, Action SIG2 Deputy, Worldsensing SL, Barcelona, Spain

14:50 - 15:00 Examples of applications of sensors for urban air quality monitoring in Switzerland

Christoph Hueglin, EMPA - Swiss Federal Laboratories for Materials Science and Technology, Duebendorf, Switzerland

15:00 - 15:10 Examples of applications of sensors for urban air quality monitoring in UK

Fabio Galatioto, Newcastle University, Newcastle, UK

15:10 - 15:20 Examples of Applications of sensors for urban air quality monitoring in Greece

Kostas Karatzas, Aristotle University, Thessaloniki, Greece

15:20 - 15:30 Examples of applications of sensors for urban air quality monitoring in Belgium

Jan Theunis, VITO, Mol, Belgium

15:30 - 15:40 Examples of applications of sensors for urban air quality monitoring in Turkey

Zafer Ziya Ozturk, Gebze Institute of Technology, Kocaeli, Turkey

15:40 - 15:50 Examples of applications of sensors for urban air quality monitoring in Ireland

Francesco Pilla, Trinity College Dublin, Dublin, Ireland

15:50 - 16:00 Partner Presentations from SIG2

15:50 - 15:55 Branko Šter, University of Ljubljana, Slovenia

15:55 - 16:00 Partner 1, University of XYZ, Country

16:00 - 16:30 Discussions of SIG2: Priorities, R&D needs, Roadmap

Deliverable: Definition of SIG2 Priorities for SIGs General Assembly and Action Workplan

Parallel Session of SIG3. Location: Technical Committee Room

14:30 - 16:30 SIG3: Guidelines for Best Coupling Air Pollutants and Transducer

Chairman: Giorgio Sberveglieri, Action SIG3 Leader

University of Brescia, Italy

Specific Presentations from SIG3

14:30 - 14:40 Definition of the objectives, activities, deliverables and strategies for SIG3

Giorgio Sberveglieri, Action SIG3 Leader, University of Brescia, Italy

14:40 - 14:50 Examples of guidelines/applications of sensors for urban air quality monitoring in Germany

Thorsten Conrad, 3S GmbH, Saarbrücken, Germany

14:50 - 15:00 Examples of guidelines/applications of sensors for urban air quality monitoring in France

Jerome Brunet, Université Blaise Pascal, LASMEA-CNRS, Aubiere, France

15:00 - 15:10 Examples of guidelines/applications of sensors for urban air quality monitoring in Holland

Ernie Weijers, ECN, Petten, The Netherlands

15:10 - 15:20 Examples of guidelines/applications of sensors for urban air quality monitoring in Spain

Albert Romano-Rodriguez, University of Barcelona, Spain

15:20 - 15:30 Examples of guidelines/applications of sensors for urban air quality monitoring in Norway

Philipp Schneider, NILU, Kjeller, Norway

15:30 - 15:40 Examples of guidelines/applications of sensors for urban air quality monitoring in Romania

Radu Adrian Ionica, IPA SA, Craiova, Romania

15:40 - 15:50 Partner Presentations from SIG3

15:40 - 15:45 Bera Rib XXXXX, University of Coixtr, Portugal TEMPLATE

15:45 - 15:50 Anjd Dobtrekew YYYYYY, University of Ljuxtrp, Slovenia TEMPLATE

15:50 - 16:30 Discussions of SIG3: Priorities, R&D needs, Roadmap

Deliverable: Definition of SIG3 Priorities for SIGs General Assembly and Action Workplan



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Parallel Session of SIG4. Location: Central Hall

14:30 - 16:30 SIG4: Expert Comments for the Revision of the Air Quality Directive (AQD)

*Chairman: Thomas Kuhlbusch, Action SIG4 Leader
Institute of Energy and Environmental Technologies (IUTA), Germany*

Specific Presentations from SIG4

14:30 - 14:40 Definition of the objectives, activities, deliverables and strategies for SIG4

Thomas Kuhlbusch, Action SIG4 Leader, IUTA, Germany

14:40 - 14:50 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Italy

Gianluigi De Gennaro, University of Bari, Italy

14:50 - 15:00 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Norway

Nuria Castell-Balaguer, NILU, Kjeller, Norway

15:00 - 15:10 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Finland

Kaarle Hameri, University of Helsinki, Finland

15:10 - 15:20 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Spain

Mariacruz Minguillon, CSIC-IDAEA, Barcelona, Spain

15:20 - 15:30 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Bulgaria

Dimiter Syrakov, Bulgarian Academy of Sciences, Sofia, Bulgaria

15:30 - 15:40 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Latvia

Iveta Steinberga, University of Latvia, Riga, Latvia

15:40 - 15:50 Examples of guidelines/applications of environmental technologies for the Revision of the AQD in Hungary

Krisztina Labancz, Hungarian Meteorological Service, Budapest, Hungary

16:00 - 16:30 Discussions of SIG4: Priorities, R&D needs, Roadmap

Deliverable: Definition of SIG4 Priorities for SIGs General Assembly and Action Workplan

16:30 - 17:00

Coffee-Break

Central Hall

17:00 - 18:30 Action SIGs GENERAL ASSEMBLY

*Chairman: Anita Lloyd Spetz, Action Vice-Chair
University of Linköping (Sweden) and Oulu University (Finland)*

Specific Presentations from SIGs Leaders

17:00 - 17:10 Priorities and Roadmap of SIG1: Network of Spin-offs

Marco Alvisi, Action SIG1 Leader, ENEA, Brindisi, Italy

17:10 - 17:20 Priorities and Roadmap of SIG2: Smart Sensors for Urban Air Monitoring in Cities

Rod Jones, Action SIG2 Leader, University of Cambridge, UK

17:20 - 17:30 Priorities and Roadmap of SIG3: Guidelines for Best Coupling Air Pollutants and Transducer

Giorgio Sberveglieri, Action SIG3 Leader, University of Brescia, Italy

17:30 - 17:40 Priorities and Roadmap of SIG4: Expert Comments for the Revision of the Air Quality Directive (AQD)

Thomas Kuhlbusch, Action SIG4 Leader, IUTA, Duisburg, Germany

17:40 - 18:30 Discussion of Action Participants:

Comments and Inputs on Priorities, R&D Needs, Strategies, Roadmap for future joint-activities of Action TD1105 EuNetAir

Definition of the Action: Priorities, R&D Needs, Recommendations, Roadmap



Central Hall

18:30 - 20:00

Action TD1105 ROUND-TABLE DISCUSSIONS

Chairman: Michele Penza, Action Chair

Italian National Agency for New Technologies, Energy and Sustainable Economic Development – ENEA, Brindisi, Italy

Environmental Research for Innovation to support Green-Economy in Europe

- **Wrap up and Inputs**

Michele Penza, Action Chair, ENEA, Brindisi, Italy

- **Planned Speeches from WGs and SIGs Leaders**
- **Free Comments from Action Participants**
- **Free Comments from Action Stakeholders**

Discussion of Action Participants:

Comments and Inputs on Priorities, R&D Needs, Strategies, Roadmap for future joint-activities of Action TD1105 EuNetAir

21:00

Social Dinner

Thursday, 6 December 2012

Action TD1105 MANAGEMENT COMMITTEE Meeting

Central Hall

09:00 - 13:00

Action TD1105 MANAGEMENT COMMITTEE MEETING

Chairman: Michele Penza, Action Chair

Italian National Agency for New Technologies, Energy and Sustainable Economic Development – ENEA, Brindisi, Italy

- **DISCUSSION** (see MCM AGENDA)

13:00 - 14:30

- **Lunch offered by the Conference Organization**

14:30

- **Meeting Closing**



Draft Agenda
Management Committee Meeting
COST Action TD1105

European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

ENEA Headquarters, Lungotevere Thaon de Revel, 76, Rome, Italy

6 December 2012, 9:00 - 14:30

To be completed by the meeting secretary and circulated to the MC, the DC Rapporteur(s) and the COST Office (Science and Administrative Officer)

1. Welcome to participants
2. Adoption of agenda
3. Approval of minutes and matters arising of last meeting
4. Update from the Action Chair
 - a. Status of Action, including participating countries
 - b. Action budget status
 - c. STSM status and new applications
5. Promotion of gender balance and of Early Stage Researchers (ESR)
Update from the Grant Holder
6. Update from the COST Office
7. Update from the DC Rapporteur
8. Annual Progress Conference (preparation and/or feedback from DC)
9. Follow-up of MoU objectives
 - a. Progress report of working groups
10. Scientific planning
 - a. Scientific strategy
 - b. Action Budget Planning
 - c. Long-term planning (including anticipated locations and dates of future activities)
 - d. Dissemination planning (Publications and outreach activities)
11. Requests for new members
12. Non-COST applications to the Actions
13. AOB
14. Location and date of next meeting
15. Summary of MC decisions
16. Closing