

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

COST Action TD1105

4th International Workshop *EuNetAir* on

Innovations and Challenges for Air Quality Control Sensors

organized by Materials Center Leoben Forschung GmbH

hosted at FFG - Austrian Research Promotion Agency - AT COST Association

Vienna, Austria, 25 - 26 February 2016

Action Start date: 01/07/2012 - Action End date: 15/11/2016 - Year 4: 2015-16 (*Extended Action*)

Conclusions

 **COST**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY




Michele Penza

Function in the Action: Action Chair

ENEA - Brindisi, Italy



FOURTH INTERNATIONAL ACTION WORKSHOP on *Innovations and Challenges for Air Quality Control Sensors*

 Vienna (Austria), 25 - 26 February 2016

hosted at FFG - Austrian Research Promotion Agency - AT COST Association
Sensengasse 1, 1090 Vienna, Austria



AGENDA

25 February 2016 - Thursday	
09:00 - 18:00	REGISTRATION
09:30 - 10:00	Welcome Address
10:00 - 11:00	Session 1: Plenary Session
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 2: Oral Presentations
13:00 - 14:30	Lunch
14:30 - 16:00	Session 3: Oral Presentations
16:00 - 16:30	Coffee Break
16:30 - 18:00	Session 4: Oral Presentations
20:00 - 23:00	Social Dinner
26 February 2016 - Friday	
09:00 - 16:00	REGISTRATION
09:00 - 11:00	Session 5: Oral Presentations
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 6: Oral Presentations
13:00 - 14:30	Lunch
14:30 - 15:30	Session 7: Poster Presentations
15:30 - 17:00	Session 8: Keynote Presentations
17:00	Closure of Meeting



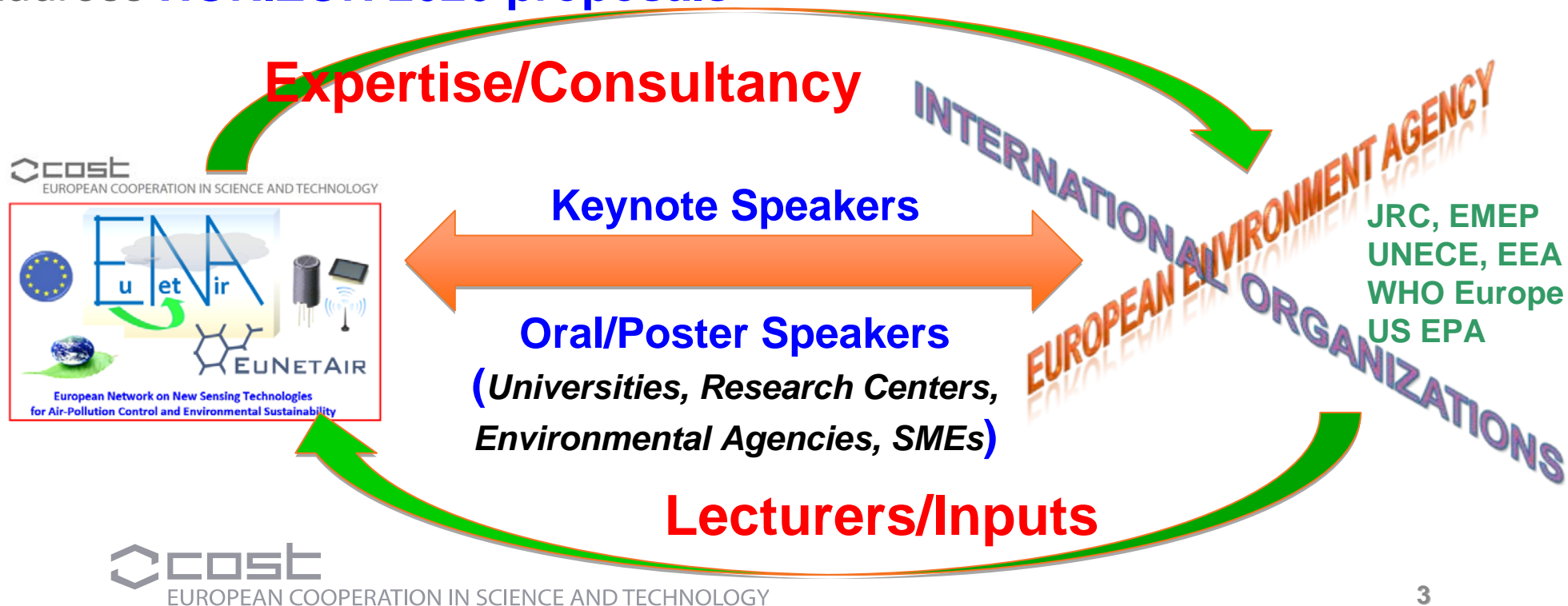
COST is supported by the EU Framework Programme



AIM of *EuNetAir* Workshop at Vienna

Innovations and Challenges for Air Quality Control Sensors

- **Provide** from Action TD1105 *EuNetAir* an Overview of the *Best Available Sensing Technologies, Methods and Best Practices on **Clean Air for Smart Cities in Europe*** to International Organizations (IOs), Policy Makers and Public Institutions, Local Managers.
- **Discuss and Consolidate** on *Future Plans* of the COST Action TD1105 to address **HORIZON 2020** proposals



COST Action TD1105 *EuNetAir*: 4th Workshop at Vienna

Statistics of the Action Workshop at Vienna:	
e-COST Registered Participants / Total Participants:	43 / 50
Sessions including Plenary, Oral & Poster:	8
Keynote/Invited Speakers:	8
Contributed Speakers:	19
Poster Presenters:	11
COST Countries involved in Workshop: <i>Austria, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, France, Germany, Greece, Italy, Norway, Poland, Portugal, Serbia, Spain, Switzerland, Turkey, UK and Russia (Near Neighbour Country)</i>	19
Gender Balance in WGs Meeting:	13 F (30%) 30 M (70%)
Early Stage Researchers (ESRs):	11 (26%)

Topics of Meeting



- **Functional Materials for AQ Sensors**
- **Gas Sensors and Sensor-Systems**
- **Air Pollution Modelling**
- **Methods, Standards, Protocols, Guidelines**
- **Environmental Measurements and Data Fusion**
- **Health Effects of Air Pollution**
- **Environmental Sustainability Applications**
- ***Air Quality Current Status in Europe***



Year 4: Scientific Planning of *EuNetAir* (1/2)

Meetings/Workshops/Training Schools planned for upcoming year
(Year 4: 1 July 2015 - 15 May 2016): EXTENSION: 15 Nov. 2016

- **WG1-WG4 Meeting** on *Air Quality Monitoring and Calibration: Horizons in Sensing Technologies, Methods and Modelling - Start of the 2nd EuNetAir Air Quality Joint-Exercise Intercomparison* organized by the VINCA Institute, Belgrade (**Serbia**), **13 - 14 Oct. 2015**. Local organizer: Dr. Milena Jovasevic-Stojanovic, VINCA and Anka Cvetkovic, Public Health Institute of Belgrade

- The **4th International Workshop of the COST Action TD1105** on *Innovations and Challenges for Air Quality Control Sensors* at FFG (National AT COST Office), Wien (**Austria**), **25 - 26 February 2016**. Local organizer: Dr. Anton Kock, MCL

- The **Action 4th International Training School** on *Modelling, Methods and Technologies for Air Quality Control* at Emdrup Campus in Copenhagen, by Aarhus University (**Denmark**), **19 - 22 April 2016**. Local organizer: Prof. Ole Hertel, Aarhus University. Trainees: 13-15 expected. Trainers: 3-4 expected. Deadline for Trainees Application: 10 March 2016.

Year 4: Scientific Planning of *EuNetAir* (2/2)

MC/WG Meetings planned for the upcoming year

(Year 4: 1 July 2015 - 15 May 2016): EXTENSION: 15 Nov. 2016

- **5th SCIENTIFIC MEETING: WGs Meeting and 8th MC Meeting on New Sensing Technologies for Indoor Air Pollution Monitoring and Environmental Measurements** at Bulgarian Academy of Sciences, Sofia (Bulgaria), 16 - 18 Dec. 2015. Local organizers: Prof. Ivan Nedkov and Prof. Dimiter Syrakov, BAS

- **6th SCIENTIFIC MEETING: WGs Meeting and 9th MC Meeting on New Sensing Technologies for Outdoor Air Quality Monitoring** at Czech Academy of Sciences, Prague (Czech Republic), 5 - 7 October 2016. Local Organizers: Prof. Zdenek Zelinger, Dr. Vera Kurkova, Dr. Roman Neruda, CAS.

- **Special Session EuNetAir / Core-Group Meeting** to EUROSENSORS 2015, Freiburg (Germany), 6 - 10 September 2015

Year 4: Scientific Planning of **EuNetAir**:

New Events to be approved by COST Association (1/1)

(Year 4: 1 July 2015 - 15 May 2016): EXTENSION: 15 Nov. 2016

- **DISSEMINATION EVENT** of the COST Action TD1105 EuNetAir at **EMRS 2016 - Symposium X: Functional Materials for Environmental Sensors and Energy Systems**, Lille (France), **2 - 6 May 2016**. Speaker: Michele Penza, Action Chair, ENEA, Brindisi, Italy.
- **SPECIAL SESSION on Indoor Air Quality Sensors** at **AMA CONFERENCE 2016, SENSOR+TEST 2016**, Nuremberg (Germany), **10 - 12 May 2016**. 4 Speakers from Action MC (to be confirmed). Booth from SenSIndoor, IAQSense, MSP, ESSC and EuNetAir (Booth costs are not eligible by COST Association).
- **SPECIAL SESSION EuNetAir / Core-Group Meeting** to **EUROSENSORS 2016**, Budapest (Hungary), **4 - 7 September 2016**. 4 Speakers from Action MC (to be confirmed).
- **Related FSAC** (max 15%) to Grant Holder.

Action Recommendations: *Roadmap 2015-2020*

- **Micro-Sensors should not substitute but supplement routine environmental monitoring equipments/devices**
- **Future Routine Environmental Networks** may look very different from today and **include low-cost and accurate Sensors ?**
- **Green Routes through the city** or access to information about **air-pollution load** at specific local address **might be future goals**
- **Pervasive low-cost Micro-Sensors for Indoor Energy Efficiency should be a must for future Green-Buildings**
- What do we want to provide (e.g. **AQI**) on the long-term in relation to **Routine Monitoring** and **Public Information to enhance Environmental Awareness ?**

Future Research & Innovation

- **Advanced Functional Materials for Sensor Technologies**
- **Wearable Sensors to Monitor Air-Pollution Personal Exposure**
- **Mobile Sensing (Smartphones, Tablets, Watches)**
- **Fixed Sensor Nodes in Urban Wireless Networks**
- **Mobile Sensor Nodes on Public Transports (Buses, Trams, etc.)**
- ***Sensing City* (bikes, city guardians, citizens, etc.)**
- **Indoor Energy Efficiency Sensors (VOCs, Formaldehyde, etc)**
- **Sensors for Greenhouse Gases Monitoring (CO₂, CH₄, N₂O, etc.)**
- **Sensors for Odour Monitoring**
- **Sensors for PM Detection at Low-Cost**

OUTREACH ACTIVITIES from Action TD1105

COST Action TD1105 - EuNetAir

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

Action website:

www.cost.eunetair.it

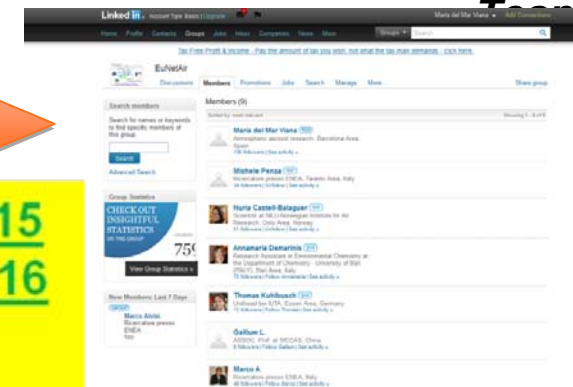
hosted by ENEA

Dr. Marco Alvisi, Webmaster Coordinator

Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli, Webmaster

Social Scientific ESRs Network (SSEN) by LinkedIn

Members: >80 - Moderators: M. Viana, M. Minguillon



4° CALL for Short Exchange Visits launched on September 2015
Short Term Scientific Mission: 9 TO BE FUNDED by 15 Nov. 2016

Dr. Jan Theunis, STSM Coordinator EuNetAir

- Issue 1:** published on Dec. 2012 ✓
- Issue 2:** published on June 2013 ✓
- Issue 3:** published on Dec. 2013 ✓
- Issue 4:** published on June 2014 ✓
- Issue 5:** published on Dec. 2014 ✓
- Issue 6:** published on June 2015 ✓
- Issue 7:** published on Dec. 2015 ✓

Prof. Ralf Moos, Editor-in-Chief

Dr. Daniela Schonauer-Kamin, Editorial Board Manager

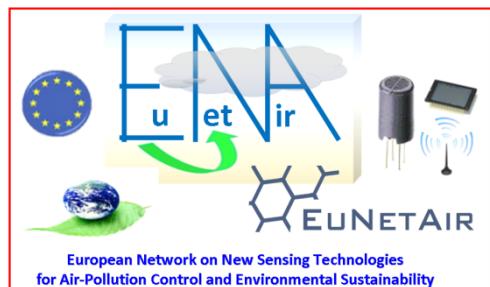


EuNetAir Newsletter

COST Action TD1105 Iss. 1/Dec 2012

Opening Editorial

Contact Details



CSO Approval: 01 Dec. 2011
Kick-off Meeting: 16 May 2012
Start of Grant: 01 July 2012
End of Grant: 15 Nov. 2016

www.cost.eunetair.it

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http://www.cost.eu/domains_actions/essem/Actions/TD1105

Top Story 
▶ all stories

***TD1105 selected as Top-Story
by COST Association***



Taking charge of air quality control in Europe's smart, green cities



A COST funded network of European spin-offs, SMEs, agencies, research centres and universities is working on developing cheaper and energy efficient sensors for air quality control in Europe's future smart cities.

▶ full story

COST Action TD1105 *EuNetAir*: Training Schools

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



3° Training School EuNetAir
Hyytiala (Helsinki), 2-8 May 2015



4° Training School EuNetAir
Copenhagen, 19-22 April 2016



2° Training School EuNetAir

Saarbrücken, 31 Mar - 02 Apr 2014



UNIVERSITÄT
DES
SAARLANDES

EuNetAir at ISOCS 2014
Les Houches, 9-14 Feb. 2014

EuNetAir at ISOCS 2015
Tonale (Brescia), 8-13 March 2015



UNIVERSITAT DE BARCELONA



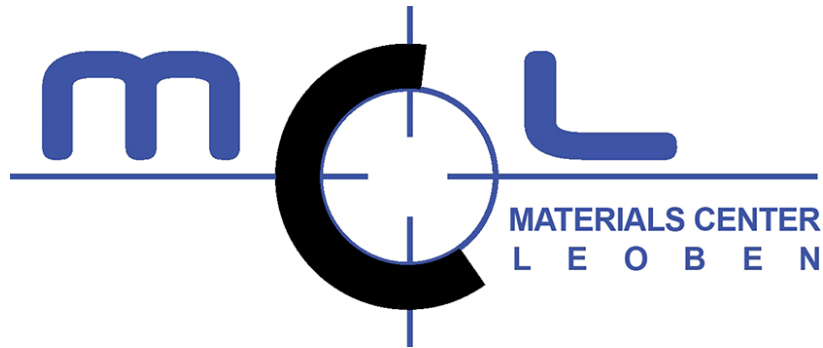
1° Training School EuNetAir
Barcelona, 13-15 June 2013

ACKNOWLEDGEMENTS

Vienna, Austria, 25 - 26 February 2016



THANK YOU VERY MUCH FOR YOUR KIND ATTENTION!



SEE YOU SOON next 6° SCIENTIFIC MEETING (WGs+MC) *EuNetAir*

at Czech Academy of Sciences

Prague, Czech Republic, 5 - 7 October 2016



FFG, Vienna, 25-26 February 2016