

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

COST Action TD1105

FOURTH SCIENTIFIC MEETING

Working Groups and Management Committee on

New Sensing Technologies for Outdoor Air-Pollution Monitoring

organized by Linköping University, Division of Applied Sensor Science

Physics Building, Campus Valla, Linköping, 3-5 June 2015

CONCLUSIONS

Action Start date: 01/07/2012 - Action End date: 30/06/2016 Year 3: 1 July 2014 - 30 June 2015

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



Michele Penza

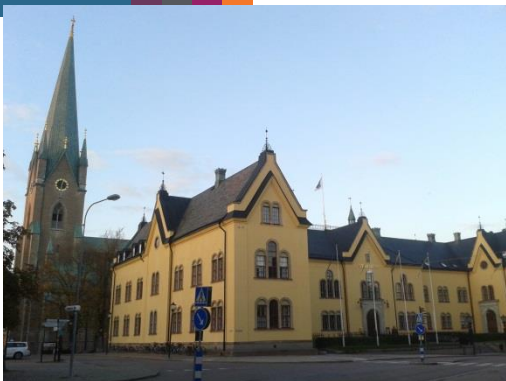
Function in the Action: Action Chair

ENEA - Brindisi, Italy



FOURTH SCIENTIFIC MEETING: WGs and MC - Linköping

hosted by Linköping University, Physics Building, Campus Valla



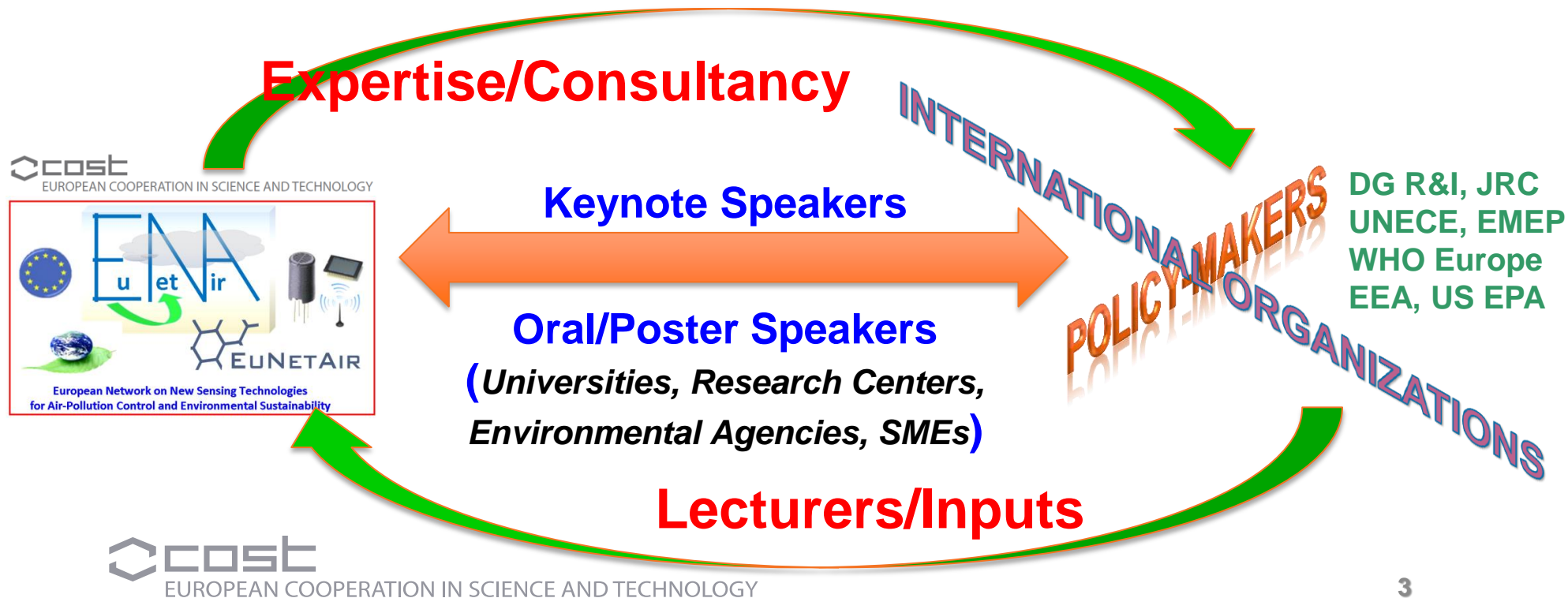
Meeting AGENDA

3 June 2015 - Wednesday	
08:30 - 18:00	REGISTRATION
09:00 - 09:30	WELCOME SESSION
09:30 - 11:00	PLENARY SESSION 1: Outdoor Environment Quality Applications
11:00 - 11:30	<i>Coffee-Break</i>
11:30 - 13:00	PLENARY SESSION 2: Indoor Environment Quality Applications
13:00 - 14:30	<i>Lunch</i>
14:30 - 16:30	WG1-WG2 Meeting WG3-WG4 Meeting
16:30 - 17:00	<i>Coffee-Break</i>
17:00 - 18:30	WG1-WG2 Meeting WG3-WG4 Meeting
18:30	<i>Gathering of Day</i>
19:15	<i>Optional Guided Tour at Gamla Linköping Open-Air Museum</i>
20:30 - 23:00	<i>Social Dinner</i>
4 June 2015 - Thursday	
09:00 - 18:00	REGISTRATION
09:00 - 09:30	Wrap-Up and Inputs from Action TD1105
09:30 - 10:30	KEYNOTE SESSION
10:30 - 11:00	<i>Coffee-Break</i>
11:00 - 12:30	SIG SESSIONs: SIG1-SIG4 Meeting
12:30 - 14:00	<i>Lunch</i>
14:00 - 14:50	ROUNDTABLE: The European Sensor Systems Cluster and EC R&I Policy
15:00 - 16:30	POSTER SESSION (outside Planck room)
16:30 - 17:00	<i>Coffee-Break</i>
17:00 - 18:30	Action WGs/SIGs GENERAL ASSEMBLY
18:30	CONCLUSIONS
19:00	<i>Optional Guided Tour at Arwen - Transmission Electron Microscope</i>
20:30	<i>Free Dinner</i>
5 June 2015 - Friday	
09:30 - 13:00	7th MANAGEMENT COMMITTEE MEETING
13:00 - 14:00	<i>Lunch</i>
14:30	Meeting Closing

AIM of the *EuNetAir* FOURTH SCIENTIFIC MEETING

New Sensing Technologies for Indoor Air-Pollution Monitoring

- **Provide** from Action TD1105 *EuNetAir* an Overview of the *Best Available Sensing Technologies, Methods, Best Practices on **Outdoor Air-Pollution Monitoring*** to International Organizations (IOs), Policy Makers and Public Institutions, Local Managers.
- **Discuss** on building/ongoing *European CLUSTERS* related to COST Action TD1105 issues/topics to address **HORIZON 2020 proposals**



COST Action TD1105 *EuNetAir*: FOURTH SCIENTIFIC MEETING

New Sensing Technologies for Outdoor Air-Pollution Monitoring

Statistics of Action Meeting at Linköping:

e-COST Registered Participants / Total Participants:	51 / 60
Sessions including Plenary, Oral & Poster:	15
Keynote/Invited Speakers:	8
Oral Speakers (Contributed Talks):	26
Poster Presenters:	9
Round-Table Speakers:	3
Reimbursed Participants:	39
COST Countries (including 1 NNC) involved in WGs/MC Meeting: <i>Belgium, Bulgaria, Croatia, Estonia, France, Germany, Greece, Finland, Italy, Latvia, Portugal, Romania, Russia, Serbia, Spain, Sweden, Switzerland, Turkey, UK</i>	19
Gender Balance in WGs Meeting:	16 F (31%) 35 M (69%)
Early Stage Researchers (ESRs):	12 (23%)

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**
- ***ESSC - European Sensor Systems Cluster***



Year 3: Scientific Planning of *EuNetAir* (1/3)

Meetings/Workshops/Training Schools planned for upcoming year
([Year 3: 1 July 2014 - 30 June 2015](#)):

- **WG1-WG4 Meeting** on *New Sensing Technologies for Air-Pollution Monitoring and Start of the Air Quality Joint-Exercise Intercomparison* at IDAD - University of Aveiro, Aveiro (**Portugal**), 13 - 15 Oct. 2014.
- The **3rd International Workshop of the COST Action TD1105** on *New Trends and Challenges on Air Quality Control* at University of Latvia, Riga (**Latvia**), 26 - 27 March 2015.
- The **Action 3rd International Training School** on *Atmospheric Aerosol Physics, Measurements and Sampling* at Hyytiala Station of the University of Helsinki, Helsinki (**Finland**), 2 - 8 May 2015.

Year 3: Scientific Planning of *EuNetAir* (2/3)

MC/WG Meetings planned for the upcoming year

([Year 3: 1 July 2014 - 30 June 2015](#)):

- **3rd SCIENTIFIC MEETING: WGs Meeting and 6th MC Meeting on Indoor Air Quality Monitoring** at Bahcesehir University and GEBZE Institute of Technology, Istanbul (**Turkey**), 3 - 5 Dec. 2014.
- **4th SCIENTIFIC MEETING: WGs Meeting and 7th MC Meeting on Outdoor Air Quality Monitoring** at Linkoping University, Linkoping (**Sweden**), 3 - 5 June 2015.
- **Special Session EuNetAir / Core-Group Meeting** to EUROSENSORS 2014, Brescia (**Italy**), 7 - 10 September 2014.
- **Special Session EuNetAir / Smart Cities Sensors** to IEEE SENSORS 2014, Valencia (**Spain**), 2 - 5 November 2014.

Year 3: Scientific Planning of *EuNetAir* (3/3)

MC/WG Meetings planned for the upcoming year

(Year 3: 1 July 2014 - 30 June 2015):

- ***EuNetAir* FOCUS GROUP: Data Analysis of Aveiro Air Quality Sensors Intercomparison** hosted at WHO Collaborating Centre for Air Quality Management and Air Pollution Control - Federal Environment Agency, Berlin (Germany), 17 April 2015. Expected Persons: 10.
- ***EuNetAir* FOCUS GROUP: Innovation on Environmental Sensor Technologies** hosted at Siemens AG, Munich (Germany), 29 April 2015. Expected Persons: 10.
- ***EuNetAir* FOCUS GROUP: ISOEN 2015 - International Symposium on Olfaction and Electronic Noses**, Dijon (France), 28 June - 1 July 2015. Expected Persons: 5 (3 Speakers + 2 Flash Presenters).

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 ?**

EU Sensor Systems Cluster: *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**

EuroNanoForum 2015 - *Riga, 10 - 12 June 2015*

Invited Speaker: Michele Penza, ENEA, Brindisi, Italy

The European Sensor-Systems Cluster (ESSC):

High Impact EC Initiative on Sensor Technologies for Sustainable Applications



10-12 June 2015, Riga, Latvia

www.euronanoforum2015.eu

The seventh ENF is Europe's largest conference on nanotechnologies, advanced materials science, innovations and business.

3 days of conference and networking:

1000 Delegates

100 Speakers

50 Countries

**under Latvian Presidency of the EU Council
hosted and organized by University of Latvia
supported by EC DG R&I**

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

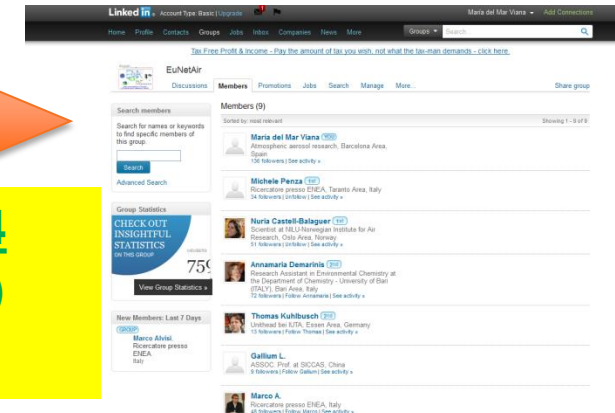
hosted by ENEA

Dr. Marco Alvisi, Webmaster Coordinator

Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli, Webmaster Team

Social Scientific ESRs Network (SSEN) by LinkedIn

Moderator(s): Mar Viana, Mariacruz Minguillon



3^o CALL for Short Exchange Visits launched on June 2014
(STSM - Short Term Scientific Mission - by 30 June 2015)

Dr. Jan Theunis, STSM Coordinator EuNetAir



EuNetAir Newsletter

COST Action TD1105 Iss. 1/Dec 2012

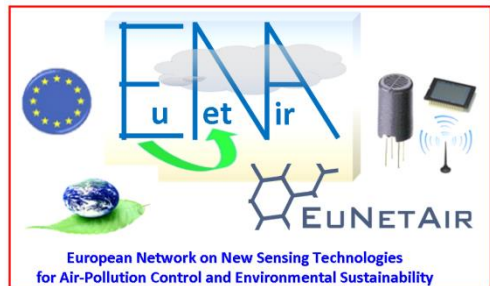
Opening Editorial

- 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 ✓

Prof. Ralf Moos, Editor-in-Chief

Dr. Daniela Schonauer-Kamin, Editorial Board Manager

Contact Details



CSO Approval: 01 Dec. 2011

Kick-off Meeting: 16 May 2012

Start of Grant: 01 July 2012

End of Grant: 30 June 2016

www.cost.eunetair.it

MC Chair:

Dr. Michele Penza, ENEA, IT
michele.penza@enea.it

MC Vice Chair:

Prof. Anita Lloyd Spetz
Linköping University, SE
spetz@ifm.liu.se

Grant Holder:

Dr. Corinna Hahn, Dr. Juliane Rossbach
Eurice GmbH, DE
c.hahn@eurice.eu; j.rossbach@eurice.eu

Scientific Secretary:

Dr. Annamaria Demarinis Loiotile
annamaria.demarinis@uniba.it

Science Officer:

Dr. Deniz Karaca
deniz.karaca@cost.eu

Administrative Officer:

Dr. Andrea Tortajada
andrea.tortajada@cost.eu

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

ACKNOWLEDGEMENTS

Linköping, Sweden, 3 - 5 June 2015

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

 **cost**
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY



THANK YOU VERY MUCH FOR YOUR KIND ATTENTION !

Tack !



 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

SEE YOU SOON at **WGs MEETING** *EuNetAir*

Belgrade, Serbia, 13 - 14 October 2015 (TBA by MC)



Linköping, Linköping University, 3-5 June 2015