

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

COST Action TD1105

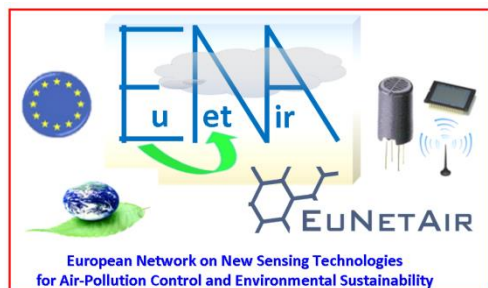
6th MC Meeting at *Bahcesehir University* organized by *GEBZE and Bahcesehir University*

Bahcesehir University, Besiktas, Istanbul (Turkey), 5 Dec. 2014

Action Start date: 01/07/2012 - Action End date: 30/06/2016

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

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



Michele PENZA

Function in the Action: Chair

ENEA / Italy



1. Welcome to Participants

- **Action Parties: 28**
- MCM Participants: 30+

MIT delegate

Friday, 5 December 2014

Action TD1105 MANAGEMENT COMMITTEE Meeting

Main Hall: *Fazil Say Room*

09:30 - 13:00	Action TD1105 6th MANAGEMENT COMMITTEE MEETING <i>Chairman: Michele Penza, Action Chair</i> <i>Italian National Agency for New Technologies, Energy and Sustainable Economic Development - ENEA, Brindisi, Italy</i>
09:30 - 10:00	Integrated Nanosensors for Indoor Air Quality Applications <i>Juan Ramon Morante, WG1 Leader and MC Member, IREC, Barcelona, Spain</i>
10:00 : 13:00	6th Management Committee Meeting <i>Michele Penza, Action Chair, ENEA, Brindisi, Italy</i> <ul style="list-style-type: none">• DISCUSSION (see MCM AGENDA)• Coffee-Break (timely scheduled)
13:00 - 14:30	<ul style="list-style-type: none">• Lunch offered by the Conference Organization
14:30	<ul style="list-style-type: none">• Meeting Closing

2. Adoption of Agenda

Draft Agenda
6th Management Committee Meeting
COST Action TD1105

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

THIRD SCIENTIFIC MEETING
Working Groups and Management Committee
New Sensing Technologies for Indoor Air Pollution Monitoring

Istanbul (Turkey), 3 - 5 December 2014

hosted by **Bahcesehir University**
Ciragan Caddesi Osmanpasa School Sokak, No. 4 - 6,
34353 Besiktas Campus, Istanbul, Turkey

Management Committee Meeting, 5 December 2014, 9:30 - 14:30 (local time)

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

Any new Topics to be introduced in Agenda ?

Planned Single Session

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)
6. Update from the Grant Holder
7. Update from the COST Office
8. Update from the DC Rapporteur
9. Annual Progress Conference (preparation and/or feedback from DC)
10. Follow-up of MoU objectives
 - a. Progress report of working groups
11. 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)
12. Requests for new members
13. Non-COST applications to the Actions
14. AOB
15. Location and date of next meeting
16. Summary of MC decisions
17. Closing

3. Approval of minutes and matters arising of last meeting

DOODLE Survey to

- **Approval of the MC Meeting of New Party as Croatia**
(Doodle launched on First week October 2014)

MC needs to approve by later e-vote:

- **4° MCM Minutes (Cambridge, 20 Dec. 2013)**
- **5° MCM Minutes (Lille, 30 May 2014)**
- **6° MCM Minutes (Istanbul, 5 Dec. 2014)**
- **Work & Budget Plan Year 3 - Budget (178.8 k€)**
approved by COST Office.
Details by Grant Holder later

3. Approval of minutes and matters arising of last meeting

- **Annamaria Demarinis, as Action Scientific Secretary**, is eligible to reimburse for further MC Meetings, and MC approved in Cambridge.
- **Juliane Rossbach, as GH Manager**, is proposed to be reimbursed for further MC Meetings, if MC approves.
- **COST Office agreed, if MC approves.**

Annamaria Demarinis

MC approved in Cambridge Meeting.

included in the 4° MCM Minutes (Cambridge)

Juliane Rossbach

MC approves in Istanbul Meeting ??

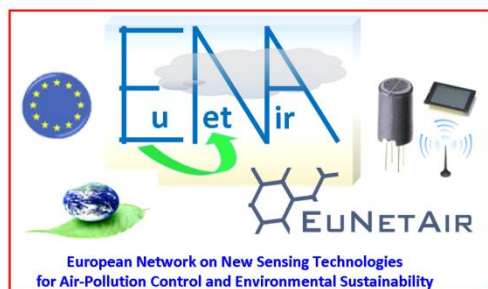
to be included in the 6° MCM Minutes (Istanbul)

4. Update from the Action Chair

a. Status of Action, including participating Countries

Contact Details

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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

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EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

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

Rapporteur ESSEM:

Prof. Kostantinos Kourtidis (GR)
kourtidi@env.duth.gr

Rapporteur MPNS:

Prof. Joao Manuel Vieira (PT)
jvieira@cv.ua.pt

Rapporteur CMST:

Prof. Antonio Lagana (IT)
lagana05@gmail.com

CEASED from 30 Sept 2014

4. Update from the Action Chair

a. **Status** of Action, including participating Countries



PARTIES

Already accepted MoU: 28 (+1) Countries

Austria, Belgium, Bulgaria, **Croatia**, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, The Former Yugoslav Republic of Macedonia, Netherlands, Norway, Poland, **Portugal**, Romania, Serbia, Slovenia, Spain, **Sweden**, Switzerland, Turkey, United Kingdom.

Non-COST Countries

Australia, Canada, China, Morocco, Russia, Ukraine, USA

MC is informed on 1 potential new Non-COST Parties: Georgia
Procedure e-COST needs to be started in collaboration with COST Office

Country

MC Members (54): Male (70%) - Female (30%)

Austria	Dr. Anton KOCK
Belgium	Dr Jan THEUNIS; Dr Anne-Claude ROMAIN
Bulgaria	Dr Dimiter SYRAKOV; Dr Ivan NEDKOV
Croatia (NEW Party)	Dr. Irena CIGLENECKI-JUSIC
Czech Republic	Dr. Vera KURKOVA; Dr. Zdenek ZELINGER
Denmark	Prof. Ole HERTEL
Finland	Prof. Kaarle HAMERI; Prof. Jyrki LAPPALAINEN
France	Prof. Marcel BOUVET; Prof. Jerome BRUNET
Germany	Prof. Andreas SCHUETZE; Dr Corinna HAHN
Greece	Prof. George PAPADOPOULOS; Prof. Kostas KARATZAS
Hungary	Ms Krisztina LABANCZ; Dr Zoltan JEDLNCZ
Iceland	Dr Arngrimur THORLACIUS
Ireland	Dr. Francesco PILLA; Prof. John WENGER
Israel	Dr. Liad ORTAR; Prof. Hossam HAICK
Italy	Dr Michele PENZA; Prof. G. SBERVEGLIERI; Dr. G. DE GENNARO
Latvia	Dr Iveta STEINBERGA; Dr. Gita SAKALE
Macedonia Rep.	Dr. Igor ATASANOV; Dr. Ljupcho GROZDANOVSKI
Netherlands	Dr Sywert BRONGERSMA; Dr. Ernie WEIJERS
Norway	Dr Nuria CASTELL BALAGUER; Dr. Philipp SCHENEIDER
Poland	Dr Monika KWOKA; Prof. Janislaw GAWRONSKI
Portugal	Prof. Bernadete RIBEIRO; Prof. Carlos BORREGO
Romania	Dr Marcel IONICA; Dr Roxana Mirona PITUCESCU
Serbia	Dr. Anka CVETKOVIC
Slovenia	Dr Grisa MOCNIK; Dr Rahela ZABKAR
Spain	Prof. Juan Ramon MORANTE; Prof. Eduard LLOBET VALERO
Sweden	Prof. Anita LLOYD SPETZ; Prof. Ingrid BRYNTSE
Switzerland	Dr Danick BRIAND; Dr. Nicolas MOSER
United Kingdom	Dr John SAFFELL; Prof. Roderic JONES
Turkey	Prof. Zafer ZIYA OZTURK; Prof. Mehmet Fatih DANISMAN

MC Chair: Michele Penza, ENEA, IT

MC Vice Chair: Anita Lloyd Spetz, Linkoping University, SE

Grant Holder: Eurice GmbH, Saarbrucken, DE

Country

MC Substitutes (31)

Austria	Dr Stefan DEFREGGER
Belgium	Dr Julien DELVA
Czech Republic	Dr. Roman NERUDA
Denmark	Dr. Lise Lotte SORENSEN
Finland	Prof. Jorma KESKINEN
France	Dr Jean SUISSE; Prof. Alain PAULY
Germany	Dr Daniela SCHONAUER-KAMIN Dr. Thomas KUHMBUSCH Dr. Juliane ROSSBACH
Greece	Prof. George KIRIKIADIS Dr. Christos KOULAMAS
Italy	Dr. Roberto SIMMARANO Dr. Marco ALVISI; Dr. Saverio DE VITO
Macedonia Rep.	Dr. Beti ANGELEVSKA
Netherlands	Dr. Rene OTJES
Poland	Prof. Jacek SZUBER
Portugal	Dr. Joao Paulo TEIXEIRA
Romania	Dr. Cristina RUSTI; Dr. Marcel Adrian IONICA
Slovenia	Dr. Andrej DOBNIKAR
Spain	Prof. Albert ROMANO-RODRIGUEZ Dr. Jordi LLOSA
Sweden	Dr Ulf THOLE; Dr. Marina VOINOVA
Switzerland	Dr Christoph HUEGLIN
Turkey	Prof. Necmettin KILINC
UK	Prof. Julian GARDNER Dr Robin NORTH; Prof. Florin UDREA

Kick-off Meeting at Brussels on 16 May 2012

COST Action TD1105 EuNetAir: WORKING GROUPS

WG1: Sensor materials and nanotechnology	Sub-WG1.1: Metal oxides nanostructures for AQC fas sensors
	Sub-WG1.2: Carbon nanomaterials for AQC gas sensors
	Sub-WG1.3: Emerging sensor materials (organic/inorganic, hybrid, nanocomposites, polymers, functional)
WG2: Sensors, devices and systems for AQC	Sub-WG2.1: Gas nanosensors and new transducers
	Sub-WG2.2: Portable gas sensor-systems
	Sub-WG2.3: Wireless technology and AQC sensors network
	Sub-WG2.4: Intelligence algorithms and distributed computing for networked AQC gas sensors
WG3: Environmental measurements and air-pollution modelling	Sub-WG3.1: Environmental measurements at laboratory and in field air-quality stations
	Sub-WG3.2: Air-quality modeling and chemical weather forecasting
	Sub-WG3.3: Harmonisation of environmental measurements
WG4: Protocols and standardisation methods	Sub-WG4.1: Protocols, standards and methods for AQC by analyzers/instruments (no-sensors) technologies
	Sub-WG4.2: Protocols, standards and methods for AQC by sensors (no-analyzers) technologies
	Sub-WG4.3: Benchmarking of new products and market of commercial AQC sensors

4. Update from the Action Chair - a. **Status** of Action

- **SIG 1**: *Network of Spin-offs*
- **SIG 2**: *Smart Sensors for Urban Air Monitoring in Cities*
- **SIG 3**: *Guidelines for Best Coupling Air Pollutant-Transducer*
- **SIG 4**: *Expert comments for the Revision of the Air Quality EU Directive*



Special Interest Groups

Ad-Hoc Groups



MANAGEMENT COMMITTEE:

CORE-GROUP & STEERING COMMITTEE

- *Editorial Board*
- *Dissemination Committee*
- *Training Schools Committee*
- *Gender Balance Committee*
- *Short-Term Scientific Mission (STSM) - Early Stage Researchers (ESR) Committee*
- *Intellectual Property Rights (IPR)*
- *Local Organizing Committee (LOC)*
- *International Stakeholders*

4. Update from the Action Chair

a. Status of Action, including participating Countries

Grant Holder:

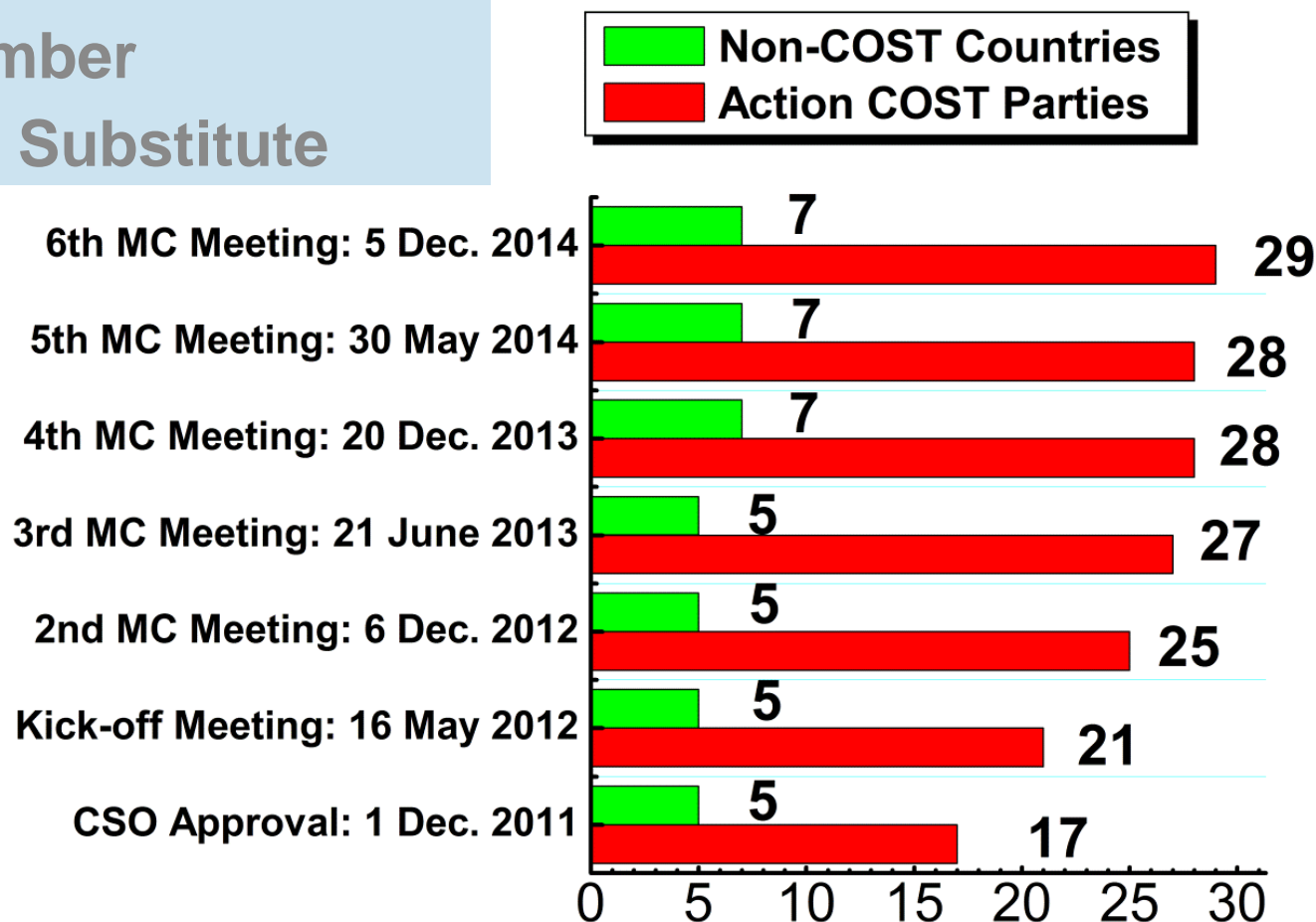
Eurice GmbH, Saarbrücken, Germany

GH Scientific Representatives:

Corinna Hahn, MC Member

Juliane Rossbach, MC Substitute

EuNetAir is growing up



4. Update from the Action Chair

b. Action Budget Status

Work & Budget Plan Year 3: 1 July 2014 - 30 June 2015

Approved by COST Office

III. SUMMARY BUDGET

A.COST Networking Tools	EUR
(1) MEETINGS	108.000,00
(2) TRAINING SCHOOLS	19.000,00
(3) SHORT-TERM SCIENTIFIC MISSIONS	25.800,00
(4) DISSEMINATION	4.000,00
(5) OERSA	1.000,00
B.TOTAL SCIENCE EXPENDITURE (sum of (1) to (5)) AUTOMATIC SUM: Click in cell to the right and click button "F9" to update the autosum	157.8
C.FSAC (max. of 15% of B.)	21.000,00
D.TOTAL EXPENDITURE (B+C) AUTOMATIC SUM: Click in cell to the right and click button "F9" to update the autosum	178.8

April 2014:
New Template COST
for W&B Plan Year 3

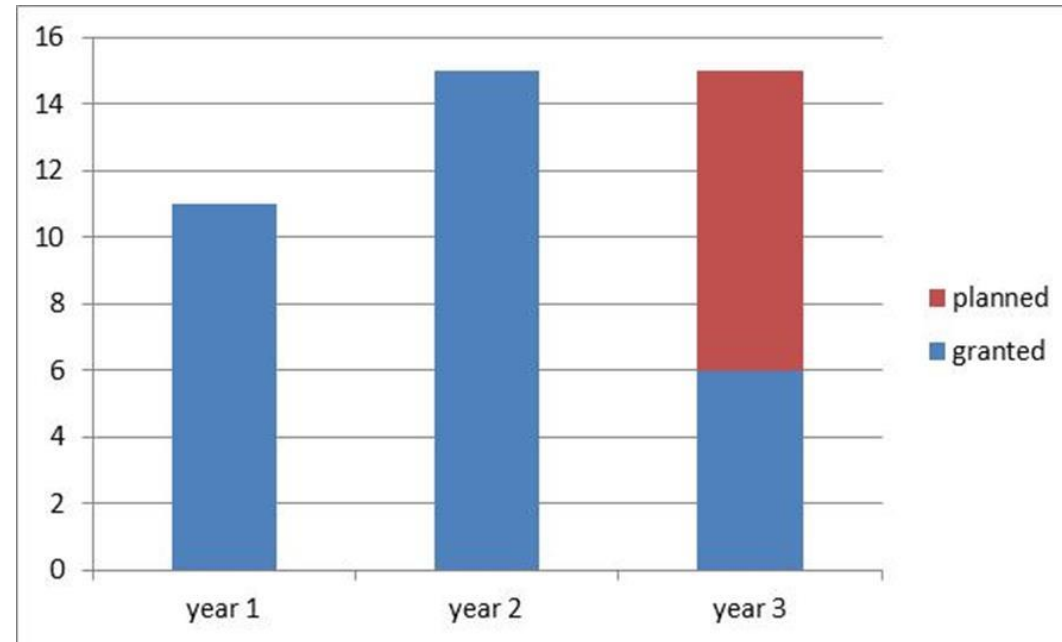
4. Update from the Action Chair

c. STSM status and new applications

STSM - Year 3

- 6 approved STSM
- Target : 15

1 pending application for 01/12/2014



	Title	Home Institution	Host Institution
Saverio De Vito PhD Computer Engineering	Computational Intelligence for Multisensing Device Calibration	ENEA, Portici (NA)(IT)	Centre for Atmospheric Science, University of Cambridge(UK)
Jolanda Palmisani PhD student	Ozone-initiated reactions with selected fragrance products	University of Bari (IT)	National Research Centre for the Working Environment (NRCWE),
Federica Rigoni PhD student	CNT - MSDI heterojunction as ammonia gas sensor in moist environment	Università Cattolica del Sacro Cuore, Brescia(IT)	Institut de Chimie Moléculaire de l'Université de Bourgogne (ICMUB),
Tobias Baur Master student	Study of PLD for MOX sensors	Lab for Measurement Technology, Saarland University, Saarbrücken(DE)	Microelectronics and Materials Physics Laboratories, University of
Marco Schüler PhD student	Advanced impedance measurements on MSDI ammonia sensors	Lab for Measurement Technology, Saarland University, Saarbrücken(DE)	Institut de Chimie Moléculaire de l'Université de Bourgogne (ICMUB),
Mario Catalano PhD - Research Fellow	Developing forecasting techniques and low-cost sensing technologies for urban air pollution control	University of Palermo (IT)	School of Civil Engineering and Geosciences, University of Newcastle (UK)

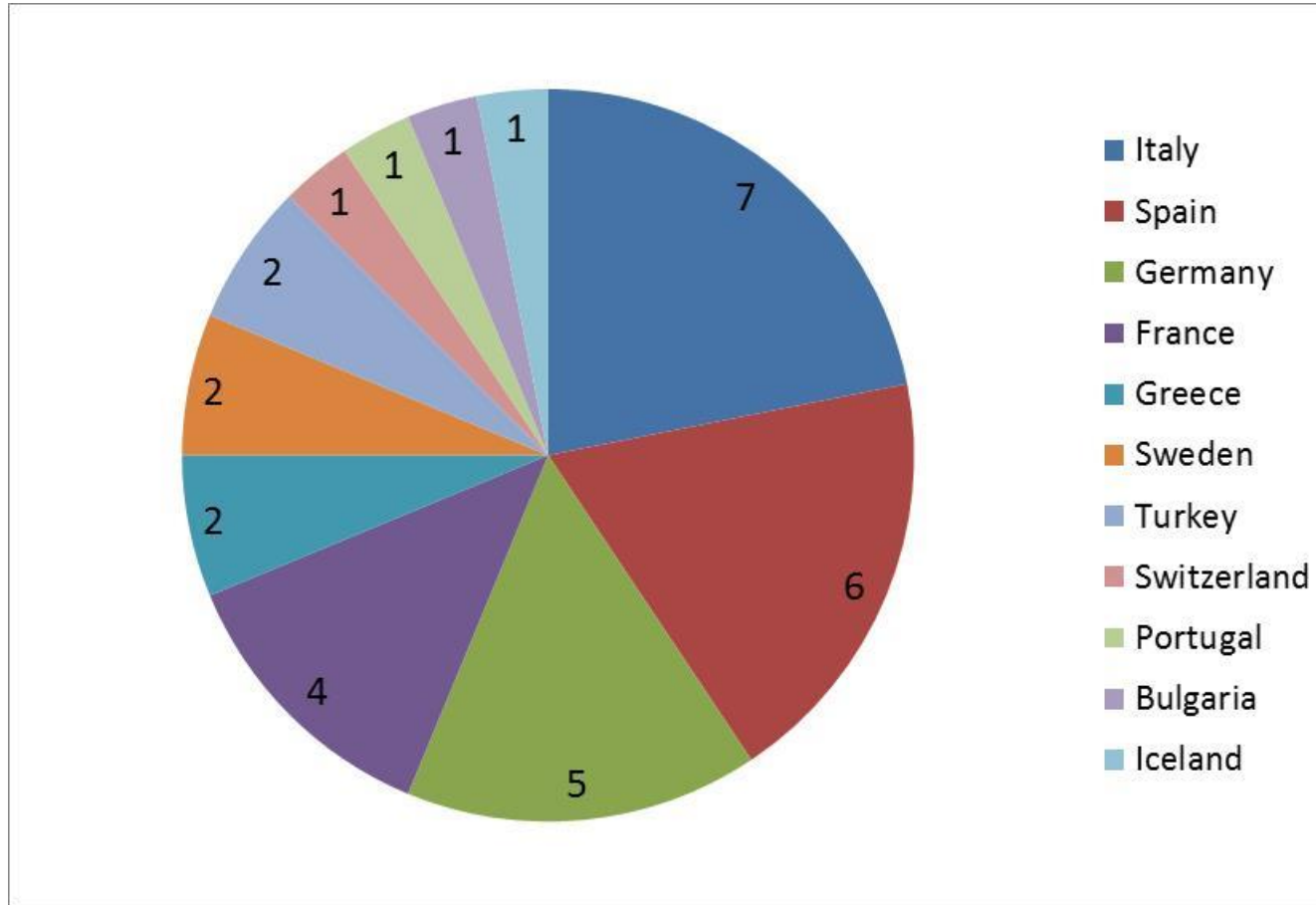
4. Update from the Action Chair

Dr. Jan Theunis

STSM Coordinator EuNetAir

c. **STSM status** and new applications

Country of origin

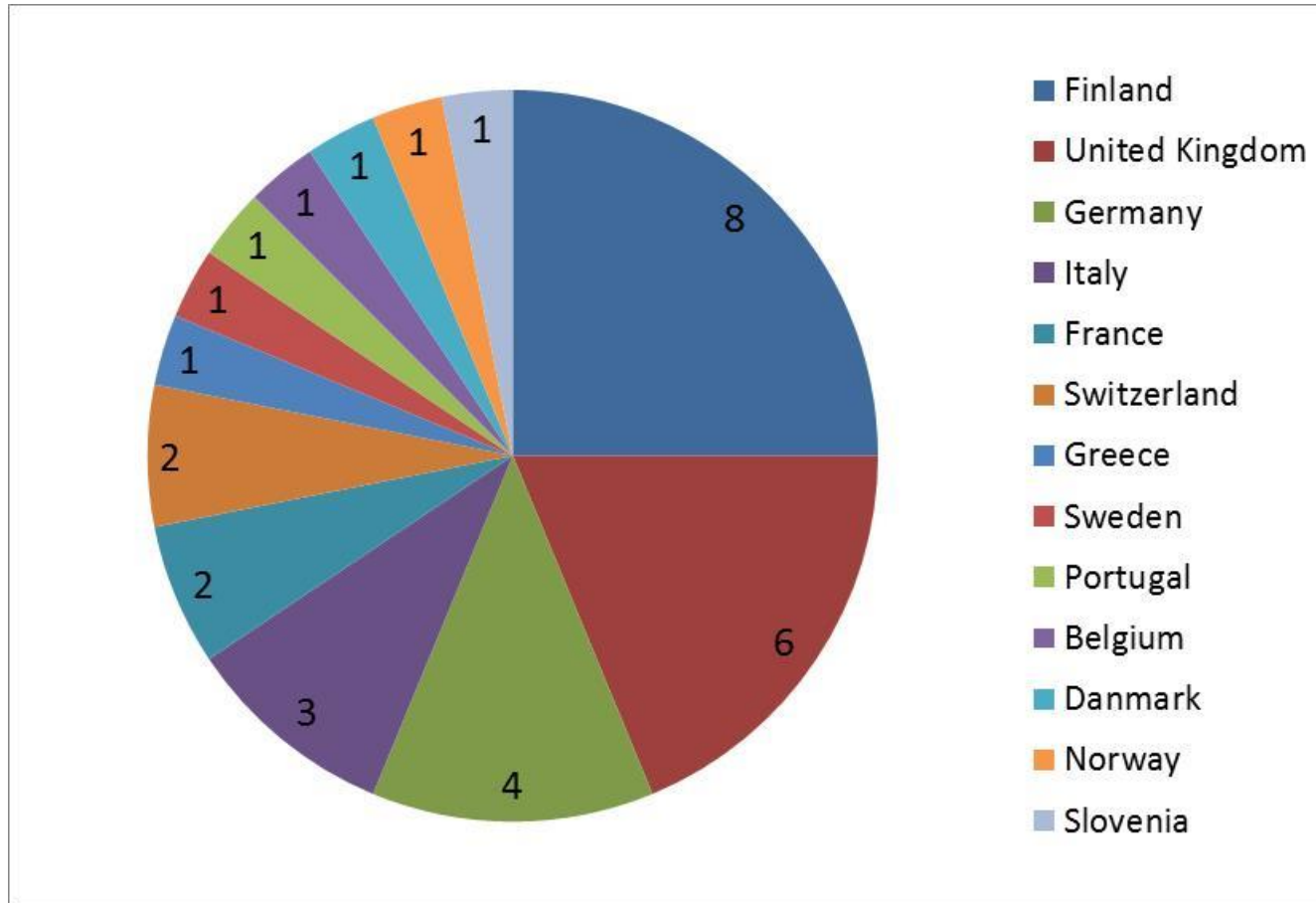
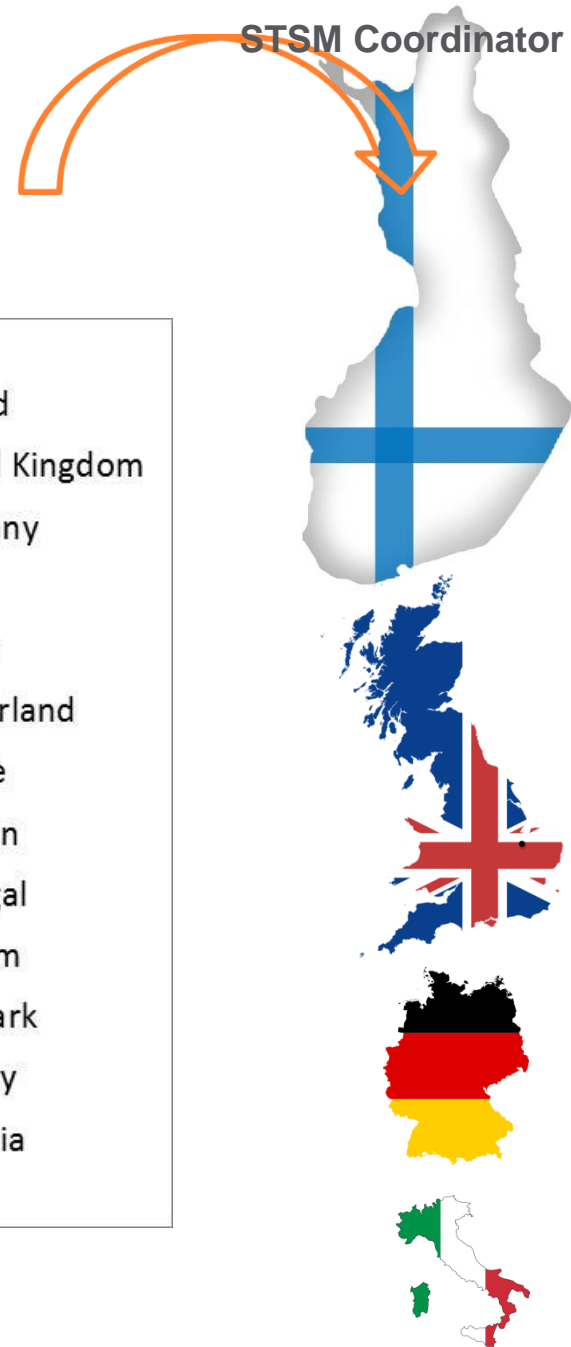


4. Update from the Action Chair

c. **STSM status** and new applications

Country of destination

Dr. Jan Theunis
STSM Coordinator EuNetAir

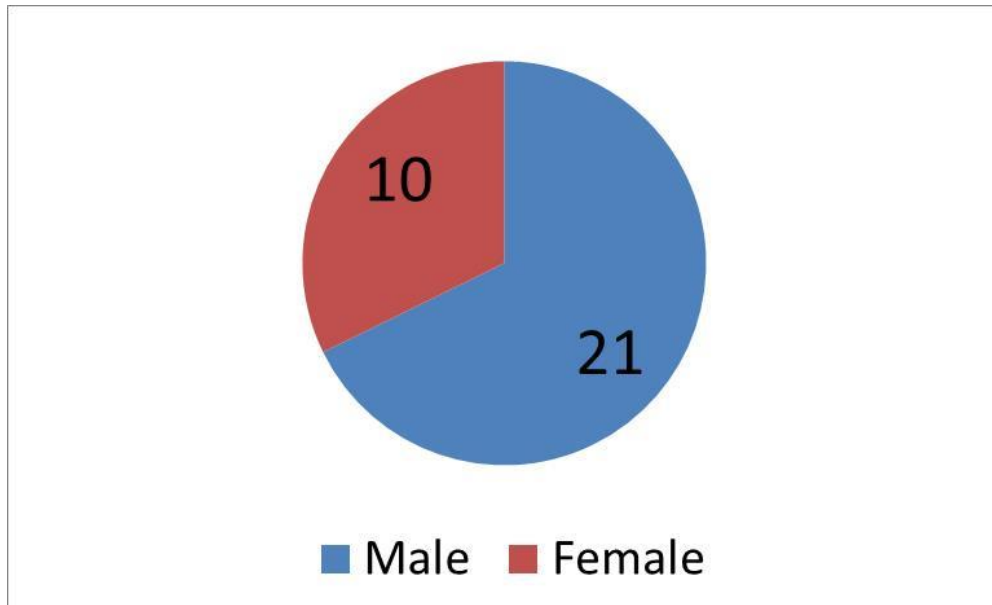


4. Update from the Action Chair

c. **STSM status** and new applications



Gender Balance



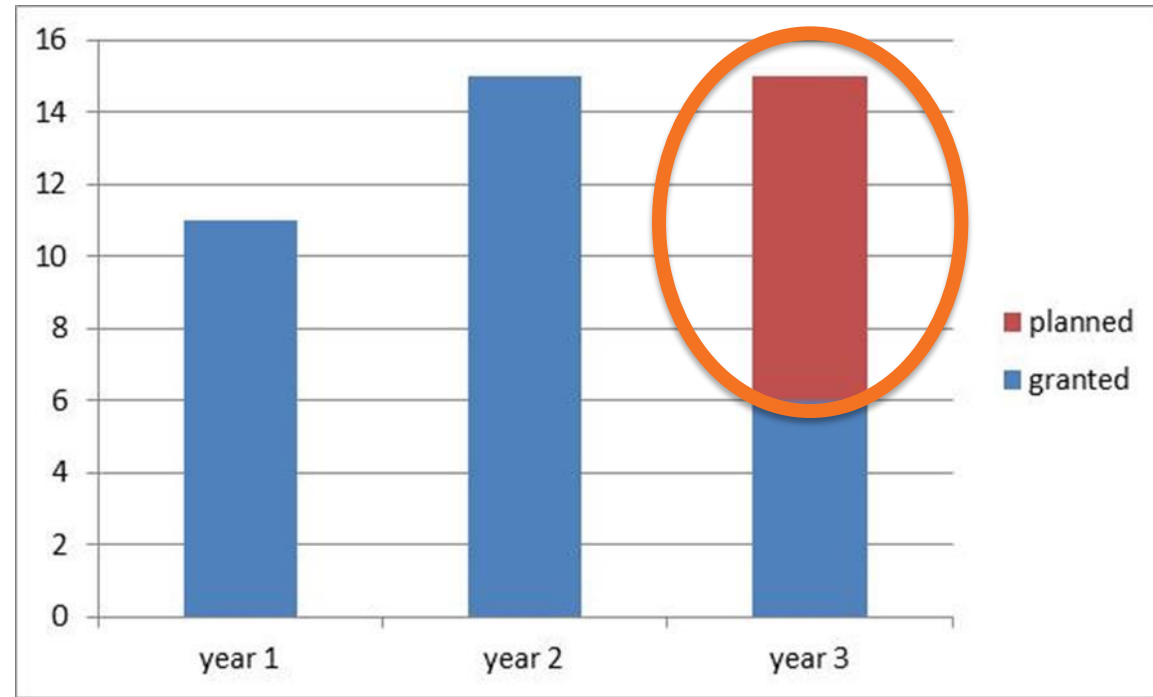
4. Update from the Action Chair

Dr. Jan Theunis
STSM Coordinator EuNetAir

c. **STSM status** and new applications

STSM - Year 3

Target : 9 more STSM



Submit application before 01/03/2015

http://www.eunetair.it/cost/documenti/COST_Action-TD1105_Call-STSM__Year3_V4.pdf

4. Update from the Action Chair

c. **STSM status** and new applications

CALL for Short Exchange Visits (STSM - Short Term Scientific Mission)

- **3° Call launched September 2014 (YEAR 3)**
- Second Period: **1 July 2014 - 30 June 2015**

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- functional nanomaterials, advanced gas sensors, sensor-systems, artificial intelligence for gas sensing, air-quality modeling, environmental measurements, chemical weather forecasting, standards, methods and protocols for air quality control
- **Who ?**
 - 1. **Early Stage Researchers (High Priority)**
 - 2. Experienced scientists
 - assure gender balance, promote “women in science and technology”

4. Update from the Action Chair

c. **STSM status** and new applications

CALL for Short Exchange Visits (STSM - Short Term Scientific Mission)

- **Where ?**
 - a) *To an Institution in another COST participating Country or formally approved host institution in a Non-COST Country*
 - b) *From a formally approved Home Institution in a Near Neighbour Country (NNC) to another COST participating Country.*

Examples STSM

Additional resources from Action Budget to fund more STSMs (> 14).

- Travelling costs and subsistence:
- Travel: 300 EUR recommended not obligatory
- Subsistence: 60 to 90 EUR / day
- **max. 2500 EUR for PhD students**
- **max 3500 EUR for Post-Doc**
- Paid after approval scientific report

1 month visits

30 days at 60 €/day	2.100 €
travel	300 €
total	2.400 €

2 visits

4.800 €

1 week (5 days) visits

5 days at 90 €/day	450 €
travel	300 €
total	750 €

4 visits

3.000 €

total

7.800 €

Total budget

8.000 €

4. Update from the Action Chair

Dr. Jan Theunis
STSM Coordinator EuNetAir

c. **STSM status** and new applications

Call for Year 3: 1 July 2014 - 30 June 2015 - Tentative budget STSM: 26 k€

• **When ?**

– Open Call: Periodic **submission/decision** every 2 - 3 months

• **01/07/2014 - 01/08/2014**

• **01/09/2014 - 01/10/2014**

• **01/12/2014 - 01/01/2015**

• **01/03/2015 - 30/04/2015** (*depending on available budget*)

– At least 3-4 weeks before the mission starts

• **How ?**

– E-mail to COST Action TD1105 Chair – verification of eligibility

– On-line Registration of applicant (<https://e-services.cost.eu/stsm>)

– Send Application

– Assessment and selection

– More Info on Call for STSM on the Action website (www.cost.eunetair.it)

4. Update from the Action Chair c. STSM status and new applications

6 STSMs approved/ongoing + 2 submitted/interested (TD1105-Year3) (1/2)

Nr	ESR Applicant	Topic of STSM	Tutor of Home Institution	Tutor of Host Institution	Period of STSM Duration of STSM	Grant requested	NOTE
First Approval - Batch 1							
1	Saverio De Vito Researcher saverio.devito@enea.it	Computational Intelligence for Multisensing Device Calibration	Dr. Paola Delli Veneri ENEA, Portici (IT) paola.delliveneri@enea.it	Prof. Roderic Jones, Department of Chemistry, University of Cambridge, Cambridge (UK), rlj1001@cam.ac.uk	14 - 25 July 2014 10 Days	1380 €	Approved by STSM Committee 04/07/14
2	Federica Rigoni PhD-student federicarigoni@gmail.com	CNT - MSDI heterojunction as ammonia gas sensor in moist environment	Prof. Luigi Sangaletti, Catholic University of Brescia (IT) l.sangalet@gmail.com	Dr. Jean-Moise Suisse Institut de Chimie Moléculaire de l'Université de Bourgogne (ICMUB), Dijon, France, Jean.Suisse@u-bourgogne.fr	14 - 27 Sept 2014 2 Weeks	1550 €	Approved by STSM Committee 10/07/14
3	Jolanda Palmisani PhD-student jolanda.palmisani@uniba.it	Ozone-initiated reactions with selected fragrance products	Dr. Gianluigi De Gennaro, University of Bari (IT) Gianluigi.degennaro@uniba.it	Peder Wolkoff, National Research Centre for the Working Environment (NRCWE), Copenhagen(DK), pwo@arbejdsmiljoforskning.dk	1 Sept - 1 Dec 2014 3 Months	2500 €	Approved by STSM Committee 10/07/14
Second Approval - Batch 2							
4	Marco Schüller PhD-student m.schueler@lmt.uni-saarland.de	Advanced impedance measurements on MSDI ammonia sensors	Prof. Andreas Schuetze, Saarland University, Saarbrücken (DE) schuetze@lmt.uni-saarland.de	Prof. Marcel Bouvet Institut de Chimie Moléculaire de l'Université de Bourgogne (ICMUB), Dijon (FR), marcel.bouvet@u-bourgogne.fr	17 - 28 Nov 2014 2 Weeks	1200 €	Approved by STSM Committee 10/10/14
5	Tobias Baur Bachelor-student to.baur@gmail.com	Study of PLD for MOX sensors	Prof. Andreas Schuetze, Saarland University, Saarbrücken (DE) schuetze@lmt.uni-saarland.de	Jyrki Lappalainen, Microelectronics and Material Physics Laboratories, Oulu University, Oulu (FI), jyla@ee.oulu.fi	6 - 19 Oct 2014 2 Weeks	2100 €	Approved by STSM Committee 01/10/14
Third Approval - Batch 3							
6	Mario Catalano Fellow-research mariocat73@gmail.com	Developing forecasting techniques and low-cost sensing technologies for urban air pollution control	Prof. Marco Migliore, University of Palermo Palermo (IT)	Fabio Galatioto, School of Civil Engineering and Geosciences University of Newcastle, Newcastle upon Tyne(UK), fabio.galatioto@ncl.ac.uk	22 Nov 2014 - 13 Dec 2014 3 Weeks	2500 €	Approved by STSM Committee 07/11/14

4. Update from the Action Chair c. STSM status and **new applications**

6 STSMs approved/ongoing + 2 submitted/interested (TD1105-Year3) (2/2)

Submitted - Interested							
7	Vania Martins PhD-student vania.ferreira@idaea.csic.es	Modelling of personal exposure and dose to particulate matter in subway systems	Dr. MariaCruz Minguillon, CSIC-IDAEA, Barcelona, Spain mariacruz.minguillon@idaea.csic.es	Prof. Mihalis Lazaridis, Technical University of Crete, Chania, (EL), lazaridi@mred.tuc.gr	16 January 2015 - 15 April 2015 3 Months	2500 €	Approved by STSM Committee xx/12/14
8	Onur Alev Master-student onuralev@gmail.com	ZnO gas sensing !!	Prof. Zafer Ziya Ozturk, GEBZE Institute of Technology Kocaeli, Turkey zozturk@gyte.edu.tr	Prof. Elisabetta Comini, University of Brescia, (IT) elisabetta.comini@ing.unibs.it	March-April 2015 ?? 2 Months	2500 €	Approved by STSM Committee 1x/02/15
					TOTAL (€) - 1st Approval	5.430	
					TOTAL (€) - 2nd Approval	3.300	
					TOTAL (€) - 3rd Approval	2.500	
					TOTAL (€) - 4th Approval	5.000	
					TOTAL (€) - 5th Approval		
					TOTAL (€) STSMs approved	11.230	25.800

Inputs from Action GB Committee (1/2)

In the action (TD1105) **about 25% of the participants are female**, which is in line with the fact that technological and scientific sector of this action is male-dominated. In order to approach a 50% gender balance, for example the Management Committee Vice-Chair, Prof. Anita Lloyd Spetz, is female.

To achieve better gender balance in Working Groups women researchers are encouraged to participate in Short Term Scientific Missions, Training Schools and the overall COST actions.

During **Rome meeting** (Dec. 2012) only 20% of speakers were females. Also, the Rome SIG4 session were composed by 60% female speakers. Finally, significant progress in gender balance at Duisburg meeting (March 2013) was achieved with 45% of female speakers.

In last meeting **at EEA in Copenhagen** (October, 3-4, 2013), a substantial number of female speakers participated. Sessions were chaired to almost 45% by females, and 34% of session presenters were female speakers. The highest numbers of female speakers were in sessions concerning **Environmental Measurements and Modelling** (Session 7) and **Standardization of Methods for Air-Pollution Commercial Sensors** (Session 9).

Inputs from Action GB Committee (2/2)

During **Cambridge meeting** (18 - 20 Dec. 2013) only 31% of speakers were females (17). Also, the Cambridge SIG4 session were composed by 50% female speakers.

During **Brindisi meeting** (25 - 26 March 2014) only 28% of speakers were females (11). Also, an Interview at Dr. Thu-Hoa TRAN-THI, CEA-CNRS, on Indoor Sensors Applications was performed. Video coming soon on EuNetAir webpages (*VIDEO section*). Moreover, a 35% of participants were Early Stage Researchers (14). Most of them (40%) were females.

Gender Balance

I. Steinberga, MC member & GB coordinator, University of Latvia, Latvia

During the last (13-15 October, 2014) workgroup meeting at IDAD, University of Aveiro (Portugal) within 9 sessions totally 27 scientific presentations were presented. The overall balance between female and male presenters reflects the dominating male situation in this COST action - 26

% presentations were given by female action members. In general, the tendency is positive – during the last half-year, new female members from Latvia joined the actions and a female representative from Croatia is in the acceptance process.

5b. Promotion of Early Stage Researchers (ESRs)

Social Scientific ESRs Network (SSEN) by LinkedIn

- Open Group on [LinkedIn "EuNetAir"](#), launched in October 2012.
- Aim: to promote connections between EuNetAir COST Action's ESRs, to create a community connecting ESRs for current and future Science and Technology activities on AQC Technologies, **not only from inside Action but also outside Action community.**
- Invitations sent out to Action participants and members.
- **> 70 Participants** to date.

The screenshot shows the LinkedIn interface for the 'EuNetAir' group. At the top, the LinkedIn logo and user profile 'Maria del Mar Viana' are visible. The group name 'EuNetAir' is prominently displayed. Below the group name, there are tabs for 'Discussions', 'Members', 'Promotions', 'Jobs', 'Search', 'Manage', and 'More...'. The 'Members' tab is selected, showing a list of 9 members. The members listed are: Maria del Mar Viana (YOU), Michele Penza (1st), Nuria Castell-Balaguer (1st), Annamaria Demarinis (2nd), Thomas Kuhbusch (2nd), Gallium L., and Marco A. Each member profile includes their name, a small profile picture, and a brief description of their research or affiliation. On the left side of the group page, there is a 'Search members' section with a search bar and a 'Search' button. Below that is a 'Group Statistics' section with a blue banner that says 'CHECK OUT INSIGHTFUL STATISTICS ON THIS GROUP' and a large number '759' representing the number of members. There is also a 'New Members: Last 7 Days' section showing 'Marco Alvisi' as a new member.

MORE ESRs TO BE LINKED !

Mar Viana and Mariacruz Minguillon
Early Stage Researcher Evaluation Committee
Social Scientific ESRs Network Moderator

5. Update from the Grant Holder

Action finalization second year (I)

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

Finalization of the Second Year (01 July 2013 - 30 June 2014)

- Total budget granted: 187,200.00 EUR
- Total budget used: 170,643.24 EUR (91.2%)
- Recovery of funds: 16,556.76 EUR

5. Update from the Grant Holder

Action finalization second year (II)

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

Second Year 01/07/2013 - 30/06/2014	APPROVED Budget	SPENT Budget	UNSPENT Budget	UNSPENT Budget (%)
Meetings	105,500.00	101,793.48	3,706.52	96.5
Training Schools	24,000.00	19,994.42	4,005.58	83.3
Short Term Scientific Missions	30,700.00	24,690.00	6,010.00	80.4
Dissemination	4,000.00	3,652.34	347.66	91.3
Other Expenses Related To Scientific Activities	1,000.00	458.77	541.23	45.9
Total Science Expenditure	165,200.00	150,589.01	14,610.99	91.2
FSAC	22,000.00	20,054.23	1,945.77	91.2
TOTAL EXPENDITURES	187,200.00	170,643.24	16,556.76	91.2

5. Update from the Grant Holder

Action budget status third year (I)

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

Status of the Third Year (01 July 2014 - 30 June 2015)

- **First instalment from COST Office: 116,220.00 EUR**
65% of approved **Action Budget of 178,800.00 EUR** for Third Year
paid in mid-October 2014

5. Update from the Grant Holder

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

Action budget status third year (II)

Third Year 01/07/2014 - 30/11/2014	APPROVED BUDGET	Payment	Planned payment	Remaining budget
Meetings	108,000.00	22,643.44	904.65	84,451.91
Training Schools	19,000.00	-	-	19,000.00
Short Term Scientific Missions	25,800.00	2,930.00	2,100.00	20,770.00
Dissemination	4,000.00	26.43	261.68	3,711.89
Other Expenses Related To Scientific Activities	1,000.00	100.95	30.00	869.05
Total Science Expenditure	157,800.00	25,700.82	3,296.33	128,802.85
FSAC	21,000.00	-	-	21,000.00
TOTAL EXPENDITURES	178,800.00	25,700.82	3,296.33	149,802.85

5. Update from the Grant Holder

Status of Payments – Meetings

Juliane Roßbach
 Manager Grant Holder
 Eurice GmbH, Germany

Meetings

[Action] TD1105 – European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability – EuNetAir

Start	End	City	Type†	Title	Participants*				Status**	L.O.S.‡	Options
					Forecast	Estimation	Claims	Payments			
Sep 10	Sep 10	Brescia	CG	EuNetAir Core-Group Meeting...	[5/6]	[5/5]	[4/5]	[4/4]	Partially paid	No ✂	
Oct 13	Oct 15	Aveiro	WG	New Sensing Technologies...	[24/37]	[26/26]	[26/26]	[26/26]	Paid	Yes ✂	
Nov 03	Nov 05	Valencia	DM	IEEE SENSORS 2014 Special...	[1/50]	[1/1]	[1/1]	[0/1]	TBR	No ✂	
Dec 03	Dec 05	Istanbul	MC,WG	New Sensing Technologies...	[40/50]	[43/43]	[3/43]	[0/3]	TBR	Yes ✂	
Mar 26	Mar 27	Riga	W/C	New Trends and Challenges...	[25/50]	[0/0]	[0/0]	[0/0]	Planned	No ✂	
Jun 03	Jun 05	Linkoping	MC,WG	New Sensing Technologies...	[40/60]	[0/0]	[0/0]	[0/0]	Planned	No ✂	

Payment of TRR pending

5. Update from the Grant Holder

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

Status of Payments – STSMs

Short Term Scientific Mission	Short Term Scientific Mission – Status	Grant Amount	Payment Status
Saverio de Vito	STSM finished, Report submitted	1,380.00	Paid
Jolanda Palmisani	STSM finished, Report to be submitted	2,500.00	Not paid yet
Frederica Rigoni	STSM finished, Report submitted	1,550.00	Paid
Tobias Baur	STSM finished, Report submitted	2,100.00	Not paid yet
Marco Schüler	STSM finished, Report to be submitted	1,200.00	Not paid yet
Mario Catalano	STSM ongoing	2,500.00	Not paid yet
Total STSMs budgeted		11,230.00	
Further STSMs budgeted / still to be planned		14,570.00	
TOTAL STSMs		25,800.00	

7. Update from the COST Office

Science Officer: Deniz Karaka, ESSEM

Administrative Officer (AdO): Andrea Tortajada, ESSEM

- **Deniz Karaca**

Science Officer of Action TD1105

..... **Inputs**

8. Update from the DC Rapporteur(s)

ESSEM Rapporteur: Kostantinos Kourtidis, EL - Demokritos University of Thrace

MPNS Rapporteur: Joaquim Manuel Vieira, PT - University of Aveiro

CMST Rapporteur: Antonio Laganà, IT - Università di Perugia

ESSEM Rapporteur: Not attending

MPNS Rapporteur: Not Attending

CMST Rapporteur: Not Attending

The DC Rapporteurs ceased the Action monitoring from 30 September 2014.

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www.cost.eunetair.it

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MC Chair:	Dr. Michele Penza, ENEA, IT michele.penza@enea.it
MC Vice Chair:	Prof. Anita Lloyd Spetz Linkoping 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
Science Officer:	Dr. Deniz Karaca deniz.karaca@cost.eu
Adm. Officer:	Dr. Andrea Tortajada andrea.tortajada@cost.eu
Rapporteur ESSEM:	Prof. Kostantinos Kourtidis (GR) kourtidi@env.duth.gr
Rapporteur MPNS:	Prof. Joaquim Manuel Vieira (PT) jvieira@cv.ua.pt
Rapporteur CMST:	Prof. Antonio Lagana (IT) lagana05@gmail.com

CEASED from 30 Sept 2014

9. Annual Progress Conference - Preparation and/or feedback from DC

11:30 – 12:00 11:40 – 12:10 TD1105 | European Network on New Sensing Technologies for Air-
Pollution Control and Environmental Sustainability - EuNetAir | Michele Penza (Chair)

Konstantinos Kourtidis (Rapporteur)

12:00 – 12:30 ES 1006 | Evaluation, improvement and guidance for the use of local-scale emergenc
prediction and response tools for airborne hazards in built environments | Bernd Leiti
(Chair) | Vidmantas Ulevicius (Rapporteur)

12:30-13:30 Lunch

Moderator: Dick Blaauboer

13:30 – 14:00 ES1207 | A European BREWer NETwork – EUBREWNET | John Rimmer (Chair) | Niels
Larsen (Rapporteur)

13:50 – 14:10 ES1305 | European Network for the Radar surveillance of Animal Movement (ENRAM) |
Jason Chapman | Teresa Abrantes (Rapporteur)

14:10 – 14:40 ES1206 | Advanced Global Navigation Satellite Systems tropospheric products for
monitoring severe weather events and climate (GNSS4SWEC) | Jonathan Jones (Chair) |
Anders Lindroth (Rapporteur)

14:40 – 15:00 ES1303 | Towards operational ground based profiling with ceilometers, doppler lidars
and microwave radiometers for improving weather forecasts (TOPROF) | Anthony
Illingworth (Chair) | Hugo De Backer (Rapporteur)

15:00 - 15:20 Coffee break (including poster review)

Moderator: Ipek Erzi

15:20 – 15:40 ES1304 | European network on invasive parakeets: Understanding invasion dynamics
and risks to agriculture and society (ParrotNet) | Jim Groombridge (Chair) | Zorica
Svircev (Rapporteur)

15:40 – 16:10 ES1005 | Towards a more complete assessment of the impact of solar variability on the
Earth's climate | Thierry Dudok De Wit (Vice-Chair) | Hugo De Backer (Rapporteur)

16:10 – 16:40 ES1002 | Weather Intelligence for Renewable Energies | Anna Maria Semprevia (Vice-
Chair) | Zoltan Dunkel (Rapporteur)

16:40 – 16:50 Closing remarks – Ipek Erzi

Earth System Science and Environmental Management

Annual Progress Conference 2014

Hotel Valamar Lacroma Dubrovnik

34 Iva Dulčića - 20000 Dubrovnik, Croatia

12th and 13th May 2014

**Monitoring Progress Report
submitted to COST Office
by 1 April 2014 (Year 2)**

**TD1105 APC 2014:
Dubrovnik, Croatia
12-13 May 2014**

9. Annual Progress Conference - Preparation and/or feedback from DC

Earth System Science and Environmental Management

Annual Progress Conference 2014

Hotel Valamar Lacroma Dubrovnik

34 Iva Dulčića - 20000 Dubrovnik, Croatia

12th and 13th May 2014

[TD1105 APC 2014:](#)
Dubrovnik, Croatia
12-13 May 2014

**Monitoring Progress Report
submitted to COST Office
by 1 April 2014 (Year 2)**



2. Results versus objectives

The main objective of the trans-domain Action TD1105 *EuNetAir* is the development of new sensitive nanostructured materials, low-cost gas sensors, low-powered sensor-systems, wireless sensor network, air-quality modelling, environmental measurements, methods, protocols and standards for air quality monitoring in lab-tests and real-world practice. The results achieved and S&T joint activities from the Action are referenced in the list of the published/submitted papers (**>17 records**), conference/workshop communications (**>19 records**) and ongoing research collaborations between *EuNetAir* partners (**> 28 records**).

They all reflect the objectives set by the Action.

6. Coordination and management

The Cambridge meeting was successful and the work in the WGs is moving forward with the definition of scientific updating of the future research agenda. The management structures are well-established, including the procedures for assigning STSMs, meetings support, organization of Training Schools. Overall, the coordination and management work very effectively.

7. Strengths and weaknesses

A critical administrative issue has been the mismatch between national fiscal/administrative rules and EC rules/procedures applied to manage the Action grant. These are generating delays in the reimbursements and payments, despite the efforts of the Grant Holder. At the 3rd MCM in Barcelona (21 June 2013), the MC decided to elect Eurice GmbH (Saarbrücken, Germany), a qualified company in project management, as new GH because the German fiscal rules fit better the EU fiscal rules, as requested by COST Office.

At the current stage, no significant problems have been encountered in the Action and the project is progressing according to the approved plan without noteworthy deviations.

10. Follow-up of MoU Objectives - List of Meetings

COST ACTION TD1105 MEETINGS 2012-13 (Year 1)

COST ACTION TD1105 *EuNetAir*

Kick-off Meeting of Action Management Committee

COST Office, 16 May 2012, Brussels (BE)



COST ACTION TD1105 *EuNetAir*

First Meeting and 2nd Management Committee and Working Groups

ENEA Headquarters, 4-6 December 2012, Rome (IT)



COST ACTION TD1105 *EuNetAir*

WG3-WG4 Meeting joined to AirMonTech project

Fraunhofer Inhaus Zentrum, 4-6 March 2013, Duisburg (DE)



COST ACTION TD1105 *EuNetAir*

3rd Management Committee Meeting (21 June 2013)

Training School (13-15 June 2013)

Open Satellite Workshop (20 June 13)

inside *Transducers-2013*, 16-20 June 2013, Barcelona (ES)



9. Follow-up of MoU Objectives – Dissemination Events

COST ACTION TD1105 DISSEMINATION EVENTS



IMCS 2012
The 14th International Meeting on Chemical Sensors
May 20 - 23, 2012, Nürnberg/Nuremberg



Special Session: Chemical Sensors and New Technologies for Air-Pollution Control

COST Action TD1105 EuNetAir

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

IMCS 2012 - The 14th International Meeting on Chemical Sensors, May 20-23, 2012 - Nuremberg, Germany



SGS 2012

VIII International Workshop on
Semiconductor Gas Sensors
September 11 - 15, 2012, Cracow, Poland



3th Intelligent Systems for Quality of Life information
Services Workshop (ISQL 2012)

8th AIAI Conference, September 27- 30, 2012,
Halkidiki, Greece



TCM 2012

The 4th International Symposium on Transparent
Conductive Materials
October 21- 26, 2012, Hersonissos, Crete, Greece



IN SCIE



10. Follow-up of MoU Objectives - Year 2 (1/2)

- **WGs MEETING**: *New Sensing Technologies and Methods for Air Pollution Control*

European Environment Agency, Copenhagen, DK, 3-4 Oct. 2014

OUTCOME: *New Networking and **Special Issue Urban Climate** (Elsevier)*

- **SECOND SCIENTIFIC MEETING**: WGs and MC

University of Cambridge, Queens' College, UK, 18 - 20 Dec. 2013

OUTCOME: *Updating of the **Action Research & Innovation Needs***

- **SECOND INTERNATIONAL WORKSHOP**: *New Sensing Technologies for Indoor and Outdoor Air Quality Control*

ENEA, at Municipality of City Brindisi, Italy, 25 - 26 March 2014

OUTCOME: *S&T Cooperation in **Clean Air for Smart Cities***

10. Follow-up of MoU Objectives - Year 2 (2/2)

- **SECOND TRAINING SCHOOL:** *Optimized Operation of Solid State Gas Sensors for Environmental Technologies and Air Quality Monitoring*

Saarland University, Saarbrücken, Germany, 31 March - 2 April 2014

OUTCOME: *24 Trainees and 5 Trainers involved*

- **ISOCS Short Course Winter 2014:** *Reactivity of Solids, Kinetics, Catalysis, Definitions and Applications of Chemical Sensors*

Ecole de Physique, Université Joseph Fourier (Grenoble), Les Houches, France, 9 - 14 Feb. 2014

OUTCOME: *EuNetAir supports 5 Trainees from 5 COST Countries*

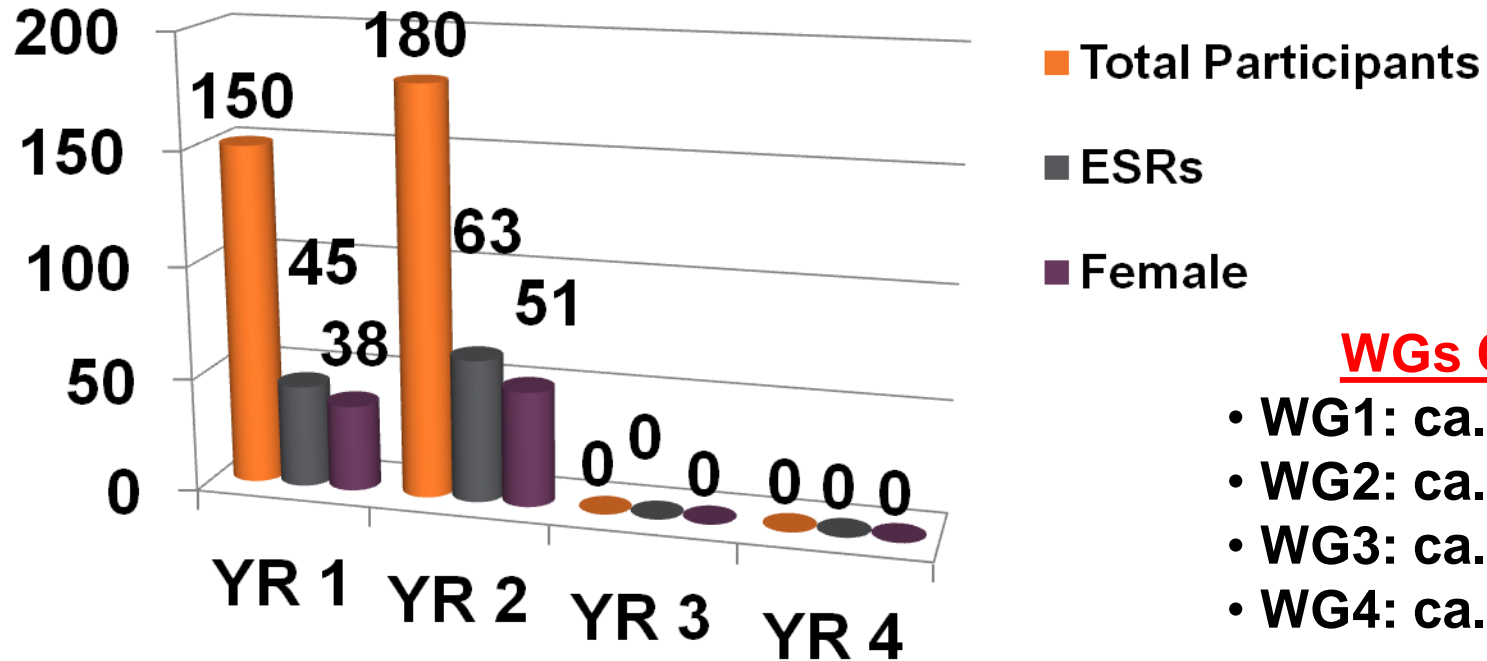
- **MCM (30 May 2014) joined to EMRS-2014 SYMPOSIUM B:** *Advanced Functional Materials for Environmental Monitoring and Applications*

European Materials Research Society, Lille, France, 26-30 May 2014

OUTCOME: *202 Abstracts and more than 200 Participants at Symposium B*

10. Follow-up of MoU Objectives

a1. Progress report of working groups



WGs Composition:

- WG1: ca. 30 participants
- WG2: ca. 45 participants
- WG3: ca. 40 participants
- WG4: ca. 25 participants

Summary YEAR 2: 1 July 2013 - 30 June 2014

- Total Number of Participants: 180 (80% active)
- Early Stage Researchers (ESRs): 63 (35%)
- Females: 51 (28%)
- MC Members: 52 - Male: 38 (73%); Female: 14 (27%)
- MC Substitutes: 29 - Male: 24 (83%); Female: 5 (17%)₄₂

10. Follow-up of MoU Objectives:

INTERNATIONAL WG1-WG4 MEETING on

New Sensing Technologies and Methods for Air-Pollution Monitoring

European Environment Agency - EEA

Copenhagen, Denmark, 3 - 4 October 2013



European Environment Agency



**Meeting Proceedings
at Action webpages:**

www.cost.eunetair.it

*50+ Speakers involved
from 21 COST Countries*

**Letter of Support
from COST Office Director
Dr. Monica Dietl**

10. Follow-up of MoU Objectives: **WGs Meeting at EEA**

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **Special Issue Urban Climate (Elsevier)**

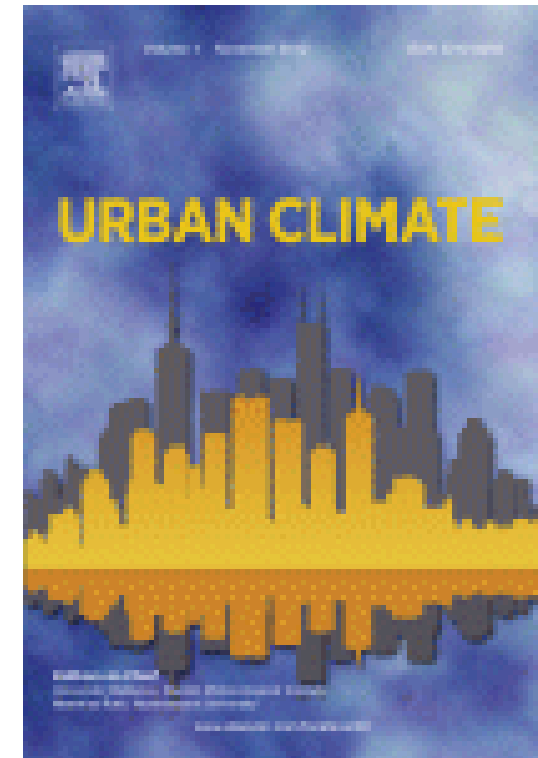
New Sensing Technologies and Methods for Air-Pollution Monitoring

Proceedings of the Action EEA Meeting open to external contributors.

Peer-review process (<http://ees.elsevier.com/uclim/>)

- **Guest Editors:**

- ✓ Michele Penza, ENEA, Italy
- ✓ Anita Lloyd Spetz, Linkoping University, Sweden
- ✓ Ole Hertel, Aarhus University, Denmark
- ✓ Ulrich Quass, IUTA eV, Germany
- Deadline for submission: 28 February 2014 (**Close**)
- Number of Submissions: **22 Manuscripts**
- Expected Publication: February-March 2015



9. Follow-up of MoU Objectives – a8. International Workshop

COST Action TD1105 at FP7 Project MACPoll WORKSHOP:

Metrology of Sensors for Air-Quality Monitoring

JRC-Ispra, Italy, 19 November 2013

09:00 Welcome & Introduction: The MACPoll project –A. Borowiak/M. Gerboles/J. Walden

Micro-Sensors & Air Pollution – (WP 4 of MACPoll)

Chair: Michele Penza. Rapporteur: Jan Theunis

09:15 *EuNetAir* – Michele Penza, ENEA, IT

09:35 *Sensor principles and sensor system performance* – Andreas Schuetze, Saarland University, DE

10:05 *On the use of Sensors* – Jan Theunis (VITO)

10:35 COFFEE BREAK

11:00 *The graphene sensor* – Serguei Novikov, University of Aalto, FI

11:30 *Calibration of Small Resistive Commercial Sensors to measure O₃*, Manuel Aleixandre, CSIC, ES

11:45 *O₃ and NO₂ sensor validation* – Laurent Spinelle, JRC, EC

12:15 *Summary and discussion* – Michele Penza, Jan Theunis, Michel Gerboles

12:45 LUNCH BREAK

10. Follow-up of MoU Objectives: **SECOND SCIENTIFIC MEETING**

University of Cambridge, Queens' College, Cambridge, 18-20 Dec. 2013

Letter of Commitment

to host 4th MC Meeting
and *WG1-WG4 Meeting*
from Prof. Rod Jones, Cambridge
Action SIG2 Leader and UK MC Member

18 - 20 Dec. 2013, Cambridge, UK

*60+ Speakers involved
from 22 COST Countries and 1 IPC
Invited Speaker from US EPA*

**Research & Innovation Needs
discussed and defined
by Action TD1105**

Location and date:

4rd MC Meeting, 20 December 2013, and
WG1-WG4 Meeting, 18-19 December 2013
Queens' College, Cambridge, UK



10. Follow-up of MoU Objectives

a2. Progress report of working groups

Rome Workshop addressing this issue:

Updating of Scientific Programme with Action Priorities were cited in the Rome Meeting Minutes and uploaded in the Action webpages.

Cambridge Meeting addressing to Research & Innovation Needs in connection to Rome Meeting

- from WG1 Leader: Definitions of objectives discussed in WG meeting
- from WG2 Leader: Definitions of objectives discussed in WG meeting
- from WG3 Leader: Definitions of objectives discussed in WG meeting
- from WG4 Leader: Definitions of objectives discussed in WG meeting
- from SIG1-4 Leader: Definitions of objectives discussed in each SIG meeting

SCIENTIFIC WORKPLAN of COST Action TD1105 updated at Rome/Cambridge Meetings:

WG1: the overall objectives of the WG1 are to develop new **sensor materials** and nanotechnologies such as metal oxides nanostructures, carbon nanomaterials and emerging materials (organic/inorganic, hybrid, nanocomposites, polymers, functional, etc.) for air-quality monitoring.

WG2: the overall objectives of the WG2 are to develop **new gas sensors**, new transducers, portable gas sensor-systems, wireless technology and AQC sensors network, intelligent algorithms and distributed computing for networked sensors applied to air-quality monitoring.

WG3: the overall objectives of the WG3 are to perform **environmental measurements at laboratory and in field air-quality stations**, air-quality modelling and chemical weather forecasting, harmonisation of environmental measurements.

WG4: the overall objectives of the WG4 are to perform **protocols, standards and methods for AQC** including conventional analyzers/monitors and sensor technologies. Benchmarking of new products and market of commercial AQC sensors.

SIG1: the overall objectives of the SIG1 are to develop a **network of spin-offs** at European level starting from existing national activities on environmental technologies/modelling inside Action partnership for new business.

SIG2: the overall objectives of the SIG2 are to develop **smart sensors and wireless networks for urban air monitoring in cities** including academia and SMEs from Action partnership.

SIG3: the overall objectives of the SIG3 are to develop **guidelines for best coupling air-pollutant and transducer** to be applied for environmental monitoring.

SIG4: the overall objectives of the SIG4 are to perform **expert comments for the Revision of the Air Quality Directive 2008/50/EC.**

10. Follow-up of MoU Objectives:

**2ND INTERNATIONAL WORKSHOP *EuNetAir* on
New Sensing Technologies for Indoor and Outdoor Air Quality Control
organized by ENEA, Brindisi Research Center
Palazzo Granafei-Nervegna - Headquarters of Municipality of City Brindisi
Brindisi, Italy, 25 - 26 March 2014**



**Workshop Booklet
at Action webpages:**

www.cost.eunetair.it

*30+ Speakers involved
from 14 COST Countries*

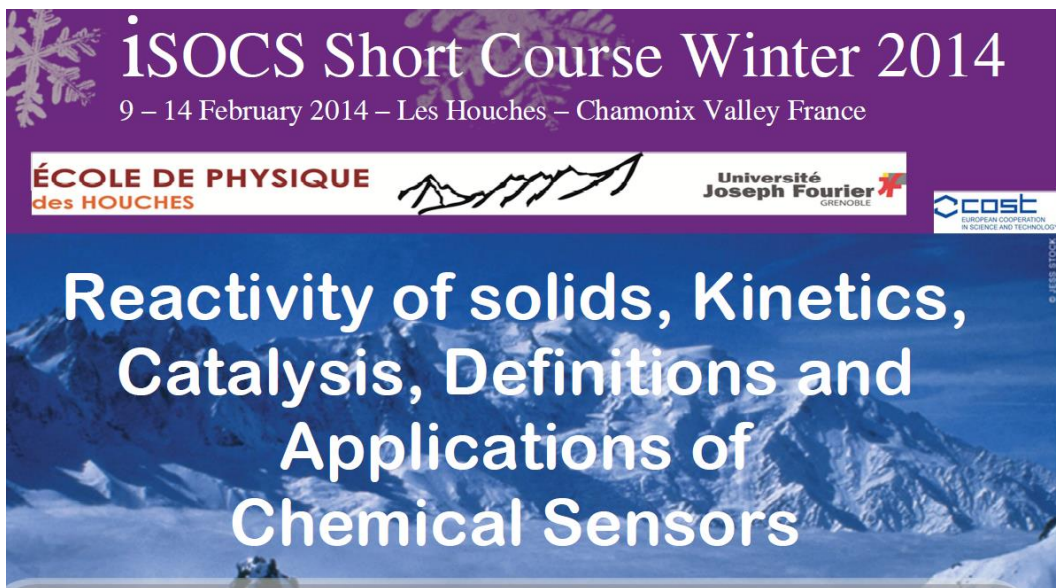
**Focus on
Clean Air for Smart Cities
*Local Municipality interested***

COST Action TD1105 EuNetAir at ISOCS 2014 in Les Houches

Les Houches (France), 9 - 14 February 2014

Call for Participation of the Trainees:

5 Grants for Trainees assigned to 5 ESRs from 5 COST Countries



ISOCS Short Course Winter 2014
9 – 14 February 2014 – Les Houches – Chamonix Valley France

ÉCOLE DE PHYSIQUE
des HOUCHES

Université Joseph Fourier
GRENOBLE

COST
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

**Reactivity of solids, Kinetics,
Catalysis, Definitions and
Applications of
Chemical Sensors**

© JESS ETOKO



10. Follow-up of MoU Objectives:

(2/4)

ISOCS Short Course Winter 2014, 9 - 14 February 2014, Les Houches-Chamonix Valley, France

ISOCS Short Course Winter 2014

9 – 14 February 2014 – Les Houches – Chamonix Valley France

ÉCOLE DE PHYSIQUE
des HOUCHES



Université
Joseph Fourier
GRENOBLE

cost
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

Reactivity of solids, Kinetics,
Catalysis, Definitions and
Applications of
Chemical Sensors

(3/4)

Develop your knowledge on chemical sensors systems and applications at the ISOCS Short Course in Les Houches (Chamonix Valley), France

This Short Course will cover topics including:

- Adsorption and kinetics of transformation in solids
- Catalysis for gas-solid interactions
- Point defects in solids
- Biosensors
- Electronic Noses and their application
- Definition of sensors
- Nano-sensor preparation
- Automotive gas sensors
- Food application of Electronic Nose
- Practical demonstrations
- Presentation COST Action EuNetAir

Speakers

- Prof. Michèle Pijolat, EMSE St-Etienne
- Dr. Philippe Vernoux, Institute of Catalysis Lyon
- Dr. Jean-Paul Viricelle, EMSE St-Etienne
- Prof. Krishna Persaud SCEAS University of Manchester
- Prof. Julian Gardner, University of Warwick
- Prof. Corrado Di Natale, University Tor Vergata, Roma
- Prof. Elisabetta Comini, University of Brescia
- Prof. Christophe Pijolat, EMSE St-Etienne
- Dr. Veronica Sberveglieri, University Modena e Reggio Emilia
- Dr. Jan Mitrovics, JLM Innovation, Tübingen, Germany
- Dr. Michele Penza, ENEA, Brindisi, Italy

Who should attend?

The Short Course is ideal for anyone with an interest in chemical sensors and olfaction, and is new to the field; for example, PhD students, researchers, technologists and industrialists.

Short Courses organized by ISOCS are a unique combination of fundamental theory lectures and practical application exercises. They provide an introduction into selected topics of current research and new developments in the area of chemical sensing and olfaction. Most lecturers will be present throughout the duration of the course. Ample opportunity is given for discussion and networking.



Register now! Limited places available only!

For more information please visit www.olfactionsociety.org/wintercourse2014

10. Follow-up of MoU Objectives:

(4/4)

ISOCS Short Course Winter 2014, 9 - 14 February 2014, Les Houches-Chamonix Valley, France

ISOCS
International Society for
Olfaction and Chemical Sensing



CMC2

Club Micro Capteurs Chimiques

COST Action TD1105 is asked to funded:

- **5 Grants for Trainees**
- The price (**795 €**) includes ACCOMODATION (single room) and MEALS.
- Travelling costs (about **205 €**) should be added to the individual Grant.
- *EuNetAir* could support 5 Grants (5 Trainees) with a **TOTAL BUDGET as 5000 €** (5 Grants x 1000 €).
- A Call for Trainees was launched in Action partnership, after MC approval.

10. Follow-up of MoU Objectives:

(1/4)

2nd Training School at Saarland University, Saarbrücken, Germany, 31 March - 2 April 2014

Open Call for Participation of the Trainees

Deadline for Application of Grants: 14 February 2014

More info at Action webpages - Section *Training Schools*



*24 Trainees and 5 Trainers (1 from USA)
involved from 15 COST Countries*



**Director of Training School:
Prof. Andreas Schuetze**

10. Follow-up of MoU objectives

Training School, **31 March - 2 April 2014 (TBC)**, Saarbrucken, Germany

(2/4)



2nd EuNetAir training school



Focus topic:

**Optimized operation of solid state gas sensors,
especially for low concentrations**

- 2nd **TRAINING SCHOOL** COST Action TD1105, Saarbrucken, March-April 2014, and hosted by **Prof. Andreas Schuetze**, Saarland University, Germany.

Symposium B:

Advanced functional materials for environmental monitoring and applications

About three quarters of the European population
Environmental sustainability of the urban society
based on functional materials have been develop
up the possibility to develop a new generation of a
personal level and system levels.

Hot topics to be covered by the symposium:

The specific technological areas are:

- Advanced gas sensing semiconducting materials
- Hybrid materials and nanocomposites for gas sensing
- Catalytic sensing materials
- Device fabrication, packaging, testing and aging
- New (nano)sensors for monitoring gaseous and liquid pollutants
- Ab initio modeling of gas/surface interaction
- Surface-sensitive spectroscopies for studying sensor/gas interaction
- Modeling of materials, devices and sensor systems
- Functional applications

Symposium organizers:

Michele Penza
ENEA Italian National Agency for New Sensing
Technologies
Energy and Sustainable Economic Development
PO BOX 51 Br-4
I-72100 Brindisi
Italy
Phone: +39 0831 201422
michele.penza@enea.it

Anita Lloyd Spetz
Linköping University/Oulu University
Dept. Physics, Chemistry and Biology
Linköping University
SE-581 83 Linköping
Sweden
Phone: +46 13 281710
spetz@ifm.liu.se

Albert Romano-Rodriguez
University of Barcelona
Departament d'Electrònica
Martí i Franquès 1
08028 Barcelona
Spain
Phone: +34 93 4039156
aromano@el.ub.es

Yongxiang Li
Shanghai Institute of Ceramics
Chinese Academy of Sciences
No.1295 Dingxi Road
Shanghai
China
Phone: +86 21 52411066
yxli@mail.sic.ac.cn

Meyya Meyyappan
NASA
Ames Research Center
MS 229-3
Moffett Field, CA 94035
USA
Phone: +1 650 604 2616
m.meyyappan@nasa.gov

E-MRS SPRING
MEETING 2014

May 26th-30th - Lille Congress Center, France

CALL FOR PAPERS

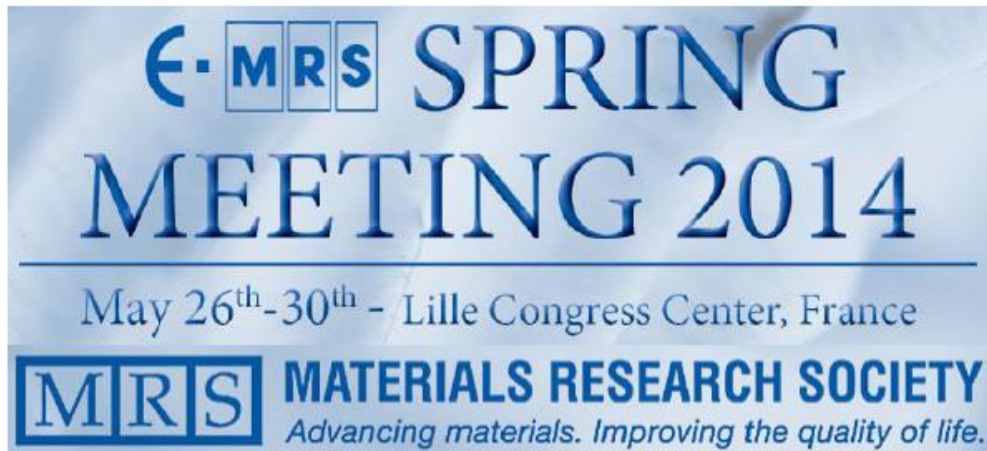
Deadline for abstract submission: January 16th, 2014



Including Bilateral Energy Conference

E-MRS **MRS** MATERIALS RESEARCH SOCIETY
Advancing materials. Improving the quality of life.

cost
EUROPEAN COOPERATION I



Call for Abstracts and Papers

Symposium B: Advanced Functional Materials for Environmental Monitoring and Applications

E-MRS - Spring Meeting 2014, May 26 - 30, Lille Congress Center, France

Symposium Organizers and Guest Editors

Michele Penza
Technologies for Materials
ENEA
I-72100, Brindisi, Italy
michele.penza@enea.it

Anita Lloyd Spetz
Dept. of Physics, Chemistry & Biology
Linköping / Oulu University
SE-581 83 Linköping, Sweden
spetz@ifm.liu.se

Albert Romano-Rodriguez
Department of Electronics
University of Barcelona
08028 Barcelona, Spain
aromano@el.ub.es

Yongxiang Li
Shanghai Institute of Ceramics
Chinese Academy of Sciences
1295 Shanghai, China
yxli@mail.sic.ac.cn

Meyya Meyyappan
Ames Research Center
NASA
94035 Moffett Field, CA, USA
m.meyyappan@nasa.gov

**EMRS-2014 Symposium B Proceedings
In Special Issue JSSS
Journal of Sensors and Sensor Systems**

Number of EMRS Submissions:

202 Abstracts



The poster features a green background with a stylized leaf and a grid of numbers from 0.2 to 0.9. At the top, it reads 'www.european-mrs.com' and '€·MRS'. The main title is 'SPRING MEETING 2014' with 'Lille Congress Center France' and 'May 26th-30th' below it. The central text is 'CALL FOR PAPERS'. It lists conference chairs: Ian BOYD (U.K.), Gilles DENNLER (France), Roberto FARIA (Brazil), Roberto FORNARI (Germany), and Elvira FORTUNATO (Portugal). It also mentions a bilateral energy conference with Hans RICHTER (Germany) and William TUMAS (USA). The scientific program is divided into several sections: MATERIALS FOR ENERGY AND ENVIRONMENT (A-D), NANOMATERIALS (E-I), MATERIALS AND LIGHT (J-K), HYBRID, ORGANIC AND BIO-MATERIALS (M-O), CRYSTAL GROWTH IN MATERIALS SCIENCE (T-V), and BILATERAL ENERGY CONFERENCE (W-AA). A workshop on 'grand challenges in materials' is also mentioned. The bottom of the poster states 'Deadline for abstract submission: 16 Jan 2014'.



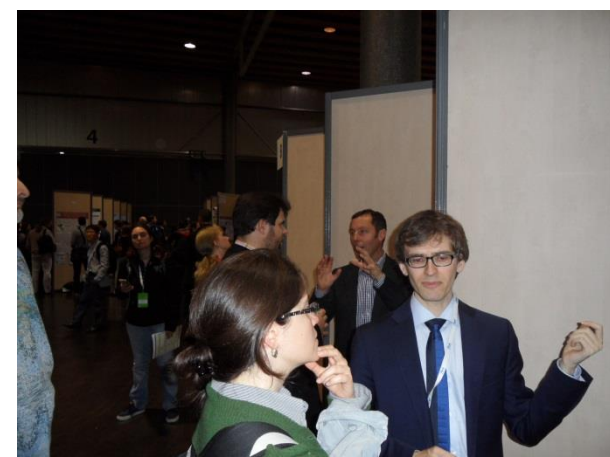
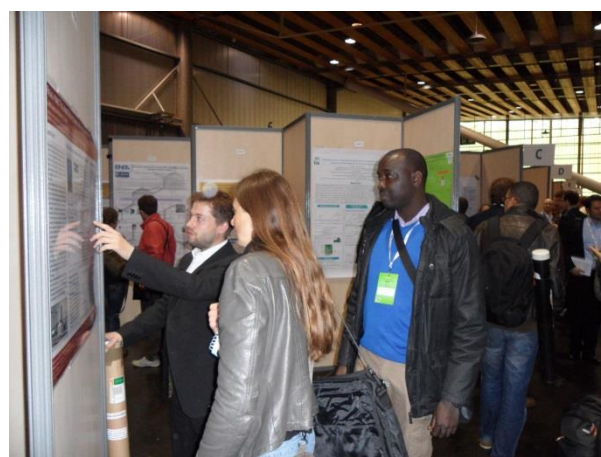
SPRING MEETING
May 26-30, 2014
Lille

Deadline for
abstract submission:

January 16, 2014

- Special Issue in *Journal of Sensors and Sensor Systems (JSSS)*
- Deadline for Submission of Extended Manuscripts: **31 July 2014**
- Expected Publication: **February-March 2015**
- URL: (http://www.journal-of-sensors-and-sensor-systems.net/submission/manuscript_submission.html)

EMRS-2014 Symposium B - Lille, 26 - 30 May 2014



11. Scientific planning - a. Scientific strategy - **MC APPROVED**

Main Activities planned in the Year 3 (1 July 2014 - 30 June 2015):

- **15 STSMs:** 9 STSMs of 5 days and 6 STSMs of 1 month (30 days), **or equivalently.**
- **EuNetAir Core-Group Meeting at EUROSENSORS 2014**, Special Session COST Action TD1105, Brescia, Italy, 7 - 10 September 2014 (half-day Special Session).
- **WG1-WG4 Meeting**, IDAD and University of Aveiro, Aveiro, Portugal, 13 - 15 October 2013.
- **WG1-WG4 Meeting**, Istanbul, 3 - 4 Dec. 2014 (joined to 6th MC Meeting)
- **3rd Action Workshop** on *New Trends and Challenges on Air Quality Control*, 26 - 27 March 2015, Riga, Latvia
- **3rd Training School of Action**, 2 - 8 May 2015 (tbc), Hyytiala (Helsinki), Finland
- **WG1-WG4 Meeting**, Linköping, 3 - 4 June 2015 (joined to 7th MC Meeting)
- **NEWSLETTER: Issue 5** (Nov-Dec. 2014); **Issue 6** (May-June 2015)
- **LEAFLET/BROCHURE:** UPDATED Issues
- **6th MC Meeting:** 5 Dec. 2014, Istanbul, Turkey, by GEBZE at Bahcesehir University
- **7th MC Meeting:** 5 June 2015, Linköping, Sweden, organized by Linköping University
- **DISSEMINATION & OUTREACH ACTIVITIES**

Year 3: Scientific Planning of *EuNetAir* (1/2)

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* (2/2)

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.

11. Scientific planning - b. Action Budget Planning for Year 3 - MC Approved

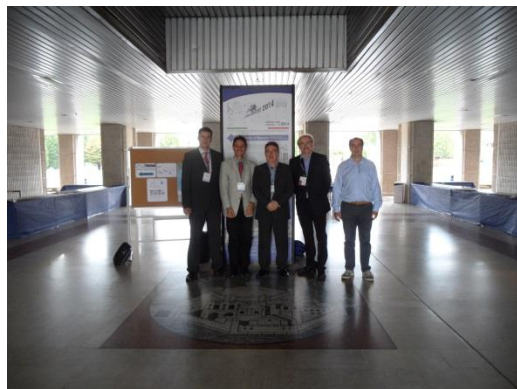
DESCRIPTION OF ACTIVITIES	BUDGET (€)
15 STSMs: 9 STSMs (5 days) and 6 STSMs (30 days), <i>or equivalently</i>	25.800
EuNetAir Core-Group Meeting at EUROSENSORS 2014 , Special Session COST Action TD1105, Brescia, Italy, 7 - 10 September 2014 (half-day Special Session)	2.000
WG1-WG4 Meeting , IDAD and University of Aveiro, Aveiro, Portugal, 13 - 15 Oct. 2013	20.000
WG1-WG4 Meeting , Istanbul, 3 - 4 Dec. 2014 (joined to 6 th MC Meeting)	13.000
3rd Action Workshop on <i>New Trends and Challenges on Air Quality Control</i> , 26 - 27 March 2015, Riga, Latvia	20.000
3rd Training School of Action , 2 - 8 May 2015 (tbc), Hyytiala (Helsinki), Finland	19.000
WG1-WG4 Meeting , Linkoping, 3 - 4 June 2015 (joined to 7 th MC Meeting)	13.000
NEWSLETTER: Issue 5 (Nov-Dec. 2014); Issue 6 (May-June 2015)	2.000
LEAFLET/BROCHURE: UPDATED Issues	
6th MC Meeting: 5 Dec. 2014, Istanbul, Turkey, organized by GEBZE at University	20.000
7th MC Meeting: 5 June 2015, Linkoping, Sweden, organized by Linkoping University	20.000
DISSEMINATION & OUTREACH ACTIVITIES	2.000
OTHER	1.000
TOTAL SCIENCE EXPENDITURE	157.800
Financial & Scientific Administration and Coordination (max 15%)	21.000
TOTAL EXPENDITURE	178.800

COST Session & Core-Group Meeting at *EUROSENSORS 2014*



*The 28th European Conference
on Solid-State Transducers*

**Brescia, Italy
September 7-10, 2014**



09:30 - 12:30 **Open Session COST: New Sensing Technologies for Air-Quality Monitoring**
Chairperson: Michele Penza, ENEA, Brindisi, Italy

09:30 - 10:00 **COST Action TD1105: European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability. Overview of Sensor-Systems for Air Quality Monitoring**
Michele Penza, Action Chair, ENEA, Brindisi, Italy

10:00 - 10:30 **Performance Analysis of Low-Cost Gas Sensors for Air Quality Control**
Michel Gerboles and Laurent Spinelle, JRC, EC DG ENV, Institute for Environment and Sustainability, Ispra, Italy

10:30 - 11:00 **Break**

11:00 - 11:20 **Gas and Particle Sensors for Air Quality Monitoring**
Anita Lloyd Spetz, Action Vice-Chair, Linköping University, Linköping, Sweden

11:20 - 11:40 **Nanostructured Metal Oxides Low-Cost Gas Sensors: Trends and Challenges**
Juan Ramon Morante, Action WG1 Leader, IREC, Barcelona, Spain

11:40 - 12:00 **Highly Sensitive and Selective VOC Detection for Indoor Air Quality Applications**
Andreas Schuetze, Action WG2 Leader, Saarland University, Saarbrücken, Germany

12:00 - 12:20 **Smart Sensors in Mobile Phones for Environmental Monitoring Applications**
Julian W. Gardner, Action MC Substitute, University of Warwick, Coventry, UK

Special Session Smart Cities Sensors at IEEE SENSORS 2014



10:00 - 11:30 **Special Session: Smart Cities Sensors**
Chairperson: Michele Penza, ENEA, Brindisi, Italy

10:00 - 10:30 **INVITED TALK: COST Action TD1105 - New Sensing Technologies for Environmental Sustainability in Smart Cities**
Michele Penza, Action Chair, ENEA, Brindisi, Italy

10:30 - 10:45 **Analysis of Efficient Dense Wireless Sensor Network Deployment in Smart City Environments**
Peio López-Iturri, Erik Aguirre, Leire Azpilicueta, Carlos Fernández-Valdivielso, Ignacio Raúl Matías, Francisco Falcone Universidad Pública de Navarra, Spain

10:45 - 11:00 **A Maker Friendly Mobile and Social Sensing Approach to Urban Air Quality Monitoring**
Luca Capezzuto², Luigi Abbamonte², Saverio De Vito¹, Ettore Massera¹, Fabrizio Formisano¹, Grazia Fattoruso¹, Girolamo Di Francia¹; ¹ Italian National Agency for New Technologies, Energy and Sustainable Economic Development, Italy; ² Università degli Studi di Napoli Federico II, Italy

11:00 - 11:15 **vCity Map: Crowdsensing Towards Visible Cities**
Yoshito Tobe¹, Itaru Usami¹, Yusuke Kobana¹, Junji Takahashi¹, Guillaume Lopez¹, Niwat Thepvilojanapong²; ¹ Aoyama Gakuin University, Japan; ² Mie University, Japan

11:15 - 11:30 **Calibration of a Cluster of Low-Cost Sensors for the Measurement of Air Pollution in Ambient Air**
Laurent Spinelle³, Michel Gerboles³, Maria Gabriella Villani², Manuel Aleixandre¹, Fausto Bonavitacola⁴; ¹ Consejo Superior de Investigaciones Científicas, Spain; ² ENEA, Italy; ³ Joint Research Center, Italy; ⁴ Phoenix Sistemi & Automazione s.a.g.l., Switzerland

Session Numbers:

- 5 Speakers
- 150+ Participants
- 700+ Delegates

Aveiro Joint-Exercise Intercomparison & WG Meeting

13 - 27 October 2014: Starting Joint-Exercise (2 weeks duration)

14 - 15 October 2014: EuNetAir WG1-WG4 Meeting

EuNetAir Air Quality Joint-Exercise Intercomparison 2014

Local Organizers: Prof. Carlos Borrego and Dr. Ana Margarida Costa (IDAD)

Air Quality Monitoring campaign at Aveiro (Portugal) city centre 2014



Continuous measurements: CO, benzene, NO_x, SO₂, PM₁₀, VOC

Temperature, humidity, wind velocity, wind direction, solar radiation, precipitation

COST partners (15 teams joined from 12 COST Countries) installed their microsensors side-by-side to compare performance with referenced equipment in the Air-Quality Mobile Laboratory

COST Action TD1105 *EuNetAir: Aveiro* INTERCOMPARISON

New Sensing Technologies and Modelling for Air-Pollution Monitoring

CAMBRIDGE
CMOS
SENSORS



Cambridge, UK



Kjeller, NO



Delsbo, SE



Cambridge, UK

Eindhoven, NL



Saarbr., DE



SIEMENS

Warwickshire, UK



Mol, BE



Louvain, BE

Petten, NL



Munich, DE



Leoben, AT



Corcelles, CH



Aveiro, PT



Barcelona, ES



Brindisi, IT



Thessaloniki, EL



EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

THIRD SCIENTIFIC MEETING: WG & 6th MC Meeting

New Sensing Technologies for Indoor Air-Pollution

Bahcesehir University, **Istanbul** (Turkey), 3 - 5 December 2014

PLENARY SESSION:

***EU Projects Cluster on
Indoor Environments
Quality and Applications***

Multidisciplinary Meeting:

*International Experts and Coordinators
of FP7 and H2020 research projects
related to the IEQ Cluster
are highly expected to participate*



Local Organizers:

**Prof. Zafer Ziya Ozturk,
GEBZE, Istanbul (Turkey)**



**Prof. Ali Gungor,
Bahcesehir University,
Istanbul (Turkey)**



11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c3: **3rd International WORKSHOP EuNetAir:**

New Trends and Challenges for Air Quality Control

hosted by University of Latvia, **Riga** (Latvia), 26 - 27 March 2015,

(1/2)

Local Organizer:

**Prof. Iveta Steinberga,
University of Latvia,
Riga (Latvia)**



11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c3: **3rd International WORKSHOP EuNetAir:**

New Trends and Challenges for Air Quality Control

hosted by University of Latvia, **Riga** (Latvia), 26 - 27 March 2015, **(2/2)**

Letter of invitation to host a COST Action TD1105 meeting at
Riga, Latvia, on 26-27 March, 2013

Local Organizer:

**Prof. Iveta Steinberga,
University of Latvia,
Riga (Latvia)**



Dear Michele,

I am delighted to be able to offer Faculty of Geography and Earth Sciences (University of Latvia), Riga (Latvia) as the venue for a COST Action TD1105 3rd workshop to be held in Riga on 26-27, March 2015.

The intention is that this meeting will be formally hosted by me, but local arrangements will be made through the University of Latvia.

This invitation is based on the assumption that the main costs will be covered by the COST Action TD1105, with administrative management as ruled by COST Vademecum by activation of the Local Organizing Support (LOS) tool, if needed.

I look forward to a very successful meeting in highly conducive surroundings, perhaps even matching those of Action EuNetAir last years!

Best wishes



*Person in charge to sign
Dr. Iveta Steinberga
Latvia MC Member*

11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c4: **3rd TRAINING SCHOOL *EuNetAir*** at Hyytiala Forestry Field Station
Atmospheric Aerosol Physics, Measurements and Sampling

hosted by University of Helsinki, **Hyytiala** (Helsinki), 2 - 8 May 2015, (1/2)

Local Organizer:

Prof. Kaarle Hameri,
University of Helsinki,
Helsinki (Finland)



11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c4: **3rd TRAINING SCHOOL *EuNetAir*** at Hyytiälä Forestry Field Station
Atmospheric Aerosol Physics, Measurements and Sampling

hosted by University of Helsinki, **Hyytiälä** (Helsinki), 2 - 8 May 2015, **(2/2)**

Letter of invitation to host a COST Action TD1105 meeting at
Hyytiälä, Finland, on 2-8 May 2015

Local Organizer:

**Prof. Kaarle Hämeri,
University of Helsinki,
Helsinki (Finland)**



Dear Michele,

I am delighted to be able to offer Hyytiälä research station of the University of Helsinki, Finland as the venue for a COST Action TD1105 meeting to be held in Hyytiälä on 2-8 May 2015.

The intention is that this meeting will be formally hosted by me, but local arrangements will be made through the University of Helsinki, with whom maybe you have had preliminary contacts.

This invitation is based on the assumption that the main costs will be covered by the COST Action TD1105, with administrative management as ruled by COST Vademecum by activation of the Local Organizing Support (LOS) tool, if needed.

I look forward to a very successful meeting in highly conducive surroundings, perhaps even matching those of Action *EuNetAir* last years !

Best wishes

Professor Kaarle Hämeri

Finland MC Member
Local Organizing Committee Chair

11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c5: **FOURTH SCIENTIFIC MEETING**: WG & 7th MC Meeting

hosted by Linköping University, **Linköping** (Sweden), 3 - 5 June 2015, (1/2)

Local Organizer:

Prof. Anita Lloyd Spetz,
Linköping University,
Linköping (Sweden)



11. Scientific planning

c. Long-term Planning including anticipated locations and dates of future activities.

c5: **FOURTH SCIENTIFIC MEETING**: WG & 7th MC Meeting

hosted by Linköping University, **Linköping** (Sweden), 3 - 5 June 2015, (2/2)

Local Organizer:

**Prof. Anita Lloyd Spetz,
Linköping University,
Linköping (Sweden)**

**Letter of commitment to host a COST Action TD1105 meeting at
Linköping, Sweden, 3-5:th of June 2013**

Dear Michele,

It is my pleasure to offer Linköping University, Linköping Sweden, as the venue for a Working Group meeting and the Management Committee meeting the 3-5:th of June 2015. I will be the local organizer together with Therese Dannetun, administrative coordinator. We will come back with details regarding meeting room, food and accommodation.

Best regards



Anita Lloyd Spetz, Professor



11. Scientific planning - New proposed events (1/4)

Focus Group: Innovation on Environmental Sensor Technologies

EuNetAir will install, after MC approval, a Focus Group
Innovation on Environmental Sensor Technologies

Group Members: *EuNetAir* participants on voluntary basis

Expertise: Environmental modellers, industrial managers, researchers, scientists, business managers, consultants of policy-makers, innovators, practitioners, etc.

First Members (*tbc*): Marco Alvisi (*Coordinator*), Carlos Borrego, Nuria Castell-Balaguer, M. Foysol Chowdhury, Kostas Karatzas, Ole Hertel, Andreas Schuetze, Corinna Hahn, Juliane Rossbach, Annamaria Demarinis, Rod Jones, Irena Ciglenecki-Jusic, Zafer Ziya Ozturk, Stanislaw Gawronski, others !

Deliverable: Report on *Innovation* and Joint-Publication(s)

Agenda: At least *one-day meeting* on February-March 2015

Venue/Place: Eurice Office in Berlin ??

Estimated Budget: 2000 Euro (depending on available budget)

11. Scientific planning - New proposed events (2/4)

Focus Group: Follow-up of Aveiro Intercomparison - Data Analysis

EuNetAir will install, after MC approval, a Focus Group
Innovation on Environmental Sensor Technologies

Group Members: **EuNetAir** participants joined to Aveiro Exercise

Expertise: data analysis, etc.

First Members (tbc): Kostas Karatzas (*Coordinator*), 3-4 others !

Deliverable: Report and Joint-Publication(s)

Agenda: At least *one-day meeting* on February-March 2015

Venue/Place: Eurice in Berlin ?? Siemens in Munich ??

Estimated Budget: 2000 Euro (depending on available budget)

11. Scientific planning - New proposed events (3/4)

ISOCS 2015 Short Course Winter Course

Electronic Noses and their Panorama of Sensors

8 - 13 March 2015, Ponte di Legno (Brescia), Italy

Funding 3-4 Young Trainees to Training Course

EuNetAir would finance Young Trainees and 1 Trainer

Type: Grant (Example: 700 euro x 3 trainees)

Estimated Budget: 2100 Euro (depending on available budget)

11. Scientific planning - New proposed events (4/4)

16th ISOEN 2015

International Symposium on Olfaction and Electronic Nose

28 June - 1 July 2015, Dijon, France

Funding 3 Speakers + 2 Young ESRs to attend Symposium

EuNetAir would finance:

3 Speakers + 2 Young Researchers for Flash Presentations

Type: Reimbursement of Travelling Costs (Accommodation + Transportation). Conference-fee is not eligible for reimbursement. This should be charged to own funds of the EuNetAir speakers attending to ISOEN 2015. Example: 500 euro x 5 speakers.

Estimated Budget: 2500 Euro (depending on available budget)

11. Scientific planning

d. Dissemination Planning (Publications and outreach activities).

d1: Action website: www.cost.eunetair.it



Action website:

www.cost.eunetair.it

hosted by ENEA

Dr. Marco Alvisi, Webmaster Coordinator

Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli, Webmaster Team

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

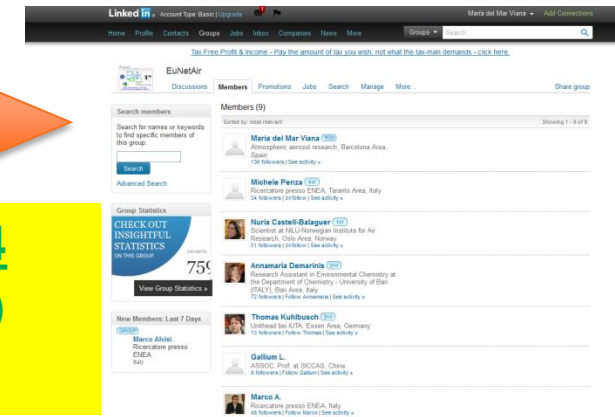
hosted by ENEA

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 ✓

Prof. Ralf Moos, Editor-in-Chief

Dr. Daniela Schonauer-Kamin, Editorial Board Manager

Video/Interview: www.cost.eunetair.it - Section VIDEO

- **Hans-Guido Muecke**, Manager at WHO CC and Federal Environment Agency
- **Oliver von Sicard**, Researcher at Siemens AG, Munich
- **Thu-Hoa Tran-Thi**, Research Director on Indoor Sensors, CEA-CNRS, France
- **Tim Watkins**, Deputy Director US EPA Air, Climate & Energy Programme, USA
- **Andrea C. Ferrari**, Chairman of Executive Board of Graphene Flagship, UK
- **Cristina Guerreiro**, Coordinator of EEA AQ Report 2012-2013, Norway
- **Meyya Meyyappan**, Chief Scientist, NASA Ames Research Center, USA
- **Michele Penza**, Action Chair at RAI3 Italian TV Show GeO&GeO, Italy



11. Scientific planning

d. Dissemination Planning (Publications and outreach activities).

d2: NEWSLETTER, LEAFLET, BROCHURE (1/2)



- 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 ✓



Brochure

Release 1:
published on January 2013

Leaflet

Release 2:
to be published Spring 2015

Relevant Events/Meetings in NEWSLETTER *EuNetAir* Issue 5

11. Scientific planning d4: DISSEMINATION PLAN

Dr. Fabio Galatioto
Chair of Dissemination Committee

Upcoming Events

ICEPPHI2015 - International Conference on Environmental Pollution, Public Health and Impacts

January 26-27, 2015, Istanbul, Turkey

<http://www.waset.org/conference/2015/01/Istanbul/ICEPPHI/call-for-papers>

ICAPC 2015 - International Conference on Air Pollution and Control

February 23-24, 2015, Paris, France

<https://www.waset.org/conference/2015/02/Paris/ICAPC>

3rd International Workshop of the COST Action TD1105 on New Trends and Challenges on Air Quality Control

March 26-27, 2015, University of Latvia, Riga, Latvia

3rd International Training School on Atmospheric Aerosol Physics, Measurements and Sampling

May 2-8, 2015, Hyytiala Station of the University of Helsinki, Helsinki, Finland

10th Annual International Symposium on Environment

May 11-14, 2015, Athens, Greece

<http://www.atiner.gr/environment.htm>

ECCA 2015 - European Climate Change Adaption Conference

May 12-15, 2015, Copenhagen, Denmark

<http://www.burchardt-apps.dk/ecca2015.eu/>

Sensor 2015 - 16th International Conference on Sensors and Measurement Science

May 19-21, 2015, Nuremberg, Germany

<http://www.sensor-test.de>

Air Pollution 2015 - 23rd International Conference on Modelling, Monitoring and Management of Air Pollution

June 1-3, 2015, Valencia, Spain

<http://www.wessex.ac.uk/15-conferences/air-pollution-2015.html>

4th SCIENTIFIC MEETING: WGs Meeting and 7th MC Meeting

June 3-5, 2015, Linköping University, Linköping, Sweden

EAC 2015 - European Aerosol Conference

September 6-11, 2015, Milan, Italy

<http://www.aec2015.it/>

COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **COST Domain-Specific CMST Strategic Event**

COST Actions: A Great Opportunity as Incubators for Molecular Science and Technology

Brussels (Belgium), 27-28 March 2014

Action TD1105 represented as **Invited Speaker** by Dr. Marco Alvisi, MC Substitute and SIG1 (*Network of Spin-offs*) Leader, ENEA, Brindisi, Italy.

- **COST Domain ESSEM, ISCH, ICT Strategic Event**

Cities of Tomorrow

Turin (Italy), 24-27 September 2014 (tbc !)

Action TD1105 represented as **Invited Speaker** by Prof. Anita Lloyd-Spetz, Action Vice-Chair, Linköping University (Sweden) and Oulu University (Finland).

COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **Air Sensors 2014: A New Frontier**

Workshop Series US EPA: Workshop in the Next Generation Air Monitoring (NGAM)

EPA Campus in Research Triangle Park, North Carolina (USA), 9-10 June 2014

Action TD1105 represented as **Invited Speaker** by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy.

- **NATO Advanced Research Workshop**

NATO ARW on Nanotechnology to Aid Chemical and Biological Defense

organized by Prof. Terri A. Camesano, Chemical Engineering, Worcester Polytechnic Institute, USA

Antalya (Turkey), 22-26 September 2014

Action TD1105 represented as **Invited Speaker** by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy.

Prof. G. Sberveglieri, University of Brescia, Invited Speaker.

COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **Eurosenors 2014**

XXVIII Edition of Conference Series: *European Forum to cover the entire field of Sensors, Actuators, Microsystems and Nanosystems*

Brescia, (Italy), 7-10 September 2014

General Conference Chair: Prof. G. Sberveglieri

Action TD1105 represented as **Technical Program Committee (TPC)**

Member by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy

- **IEEE SENSORS 2014**

2014 Edition of Conference Series: *Worldwide Forum*

Valencia (Spain), 2-5 November 2014

Technical Program Chair: Prof. Ignacio R. Matias

Action TD1105 represented as **Track Co-Chair for Europe/Africa (Track 9: Materials, Processes, Circuits, Signals & Interfaces)** by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy.

Track 4 Chemical Sensors Co-Chair: Prof. Eduard Llobet, MC Member.

COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **ECTP 2014 - Brussels, 17-19 June 2014**

COST Action TD1105 **EuNetAir** and FP7 project **SensIndoor** represented Prof. Anita Lloyd-Spetz, Action Vice-Chair, Linköping University (Sweden) and Oulu University (Finland), and Partner of SensIndoor project.

Thursday 19th June 2014, 09:00 to 10:30

PARALLEL SESSIONS: How the Built Environment will meet Europe Needs and its Societal Challenges - Foreseen Innovation & Future Horizons

09:00 to 10:30 INDOOR ENVIRONMENT QUALITY (Parallel Session)

Chairs: Jürgen Frick (MPA University of Stuttgart), Monique Levy - Maria Yeroyanni - Ugo Guarnacci (EC DG Research and Innovation)



ECTP Construction and Built Environment: Future Horizons
17-19 June 2014, Brussels

Organized by: **ECTP** **encord** **ENBRI** Supported by: **ECCREDI** Co-located with: **BUILDING TEST EXPO**

<http://www.ectp.org/Conference2014.asp>

After Paris, Versailles, Amsterdam, Brussels and Warsaw, the European Construction Technology Platform is organizing its 6th Conference at SQUARE BRUSSELS Meeting Centre in central Brussels, jointly with ENCORD (European Network of Construction Companies for Research and Development) and ENBRI (European Network of Building Research Institutes), and with the support of ECCREDI (European Council for Construction Research, Development and Innovation).

This event co-locates with Building Test Expo 2014. ECTP Conference delegates and Expo Exhibitors will thus benefit from exclusive networking opportunities.

Some Related Events

- **European Cluster CHARACTERIZATION - Sensors Kick-off MEETING: Brussels, 27 November 2014**
European Commission - DG Research & Innovation
Directorate Key Enabling Technologies
Unit Advanced Materials and Nanotechnologies
EuNetAir Participants: Michele Penza, Andreas Schuetze, Corinna Hahn
Nominated Chair of the EU Cluster SENSORS: Michele Penza, ENEA, Italy
- **European Conference**
Renaturing Cities: Systemic Urban Governance for Social Cohesion
Milan, 1 - 2 December 2014
Under the auspices of the *2014 Italian Presidency of the Council of the EU*
European Commission - DG Research & Innovation
Unit Sustainable Management of Natural Resources
***EuNetAir* Participants as Main Discussants:** Jurgen Frick, Michele Penza

12. Requests for new members - List of New WGs Members (1/2)

COST ACTION TD1105 - 6th MCM in Istanbul, 5 Dec. 2014

New Affiliations: 9

9 NEW AFFILIATIONS from 7 Countries

Nr	NAME	ORGANIZATION	COUNTRY	EXPERTISE / KEYWORDS	WG INTERESTED	E-MAIL
1	Oliver von SICARD	Siemens AG, Munich	DE	Gas Sensors and Sensor-Systems	WG2, WG4, SIG1, SIG2	oliver.v.sicard@siemens.com
2	Nicolas ANDRE	Université Catholique de Louvain	BE	Humidity Sensors and Sensor-Systems	WG1-WG3, SIG2	nicolas.andre@uclouvain.be
3	Laurent FRANCIS	Université Catholique de Louvain	BE	Humidity Sensors and Sensor-Systems	WG1-WG3, SIG2	laurent.francis@uclouvain.be
4	Helena LOPES	LNEG, Lisbon	PT	Environmental Technologies and Air Quality Management	WG3-WG4, SIG2, SIG4	helena.lopes@lneg.pt
5	Francisco FALCONE	Public University of Navarra	ES	Sensor-Systems and Mapping for Smart Cities	WG2, WG3, SIG2	francisco.falcone@unavarra.es
6	Jamal Jokar ARSANJANI	University of Heidelberg	DE	<ul style="list-style-type: none"> • Crowd Sourced Mapping • Geosimulation and Agent-Based Modeling on Environmental Phenomena • GeoComputation, GIS and Spatial Planning • Remote Sensing and spatio-temporal monitoring of Environment • Big data, Data fusion, and Data quality analysis 	WG3, SIG2	jokar.arsanjani@geog.uni-heidelberg.de
7	Olivier MARTINOT	Nano-Sense Boulogne Billancourt	FR	<ul style="list-style-type: none"> • IAQ Sensors • Sensor-Systems Integration 	WG2, WG3, WG4, SIG2, SIG3	martimort@nano-sense.com
8	Lutfi ARDA	Bahcesehir University	TR	Sensor Materials, Gas Sensors	WG1, WG2	lutfi.arda@bahcesehir.edu.tr
9	Nikolay NIKOLOV	Mikrosystems Ltd	BG	Measurement and Control Systems	WG2, WG3, SIG1, SIG2	n.nikolov@mikrosistemi.com

12. Requests for new members - List of New WGs Members (2/2)



COST Action TD1105 Affiliation/Information Form

Photo is optional.

COST Action TD1105 Information Form for New Action Participants and New Working Group Members

Personal Details	
1. Surname	
2. First name(s)	
3. Email	
4. Institute/company	
5. Address	
6. Postal address	
7. Telephone	
8. Fax	
9. Mobile	
Background related to the COST Action (research activities, institute/company background in relation to COST Action, etc) (Max 10 lines)	
Personal Activities related to the COST Action (Max 10 lines)	
Planned contribution to the COST Action (Max 10 lines)	
Involved member of:	
MC	<input type="checkbox"/>
CG	<input type="checkbox"/>
SC	<input type="checkbox"/>
WG 1	<input type="checkbox"/>
WG 2	<input type="checkbox"/>
WG 3	<input type="checkbox"/>
WG 4	<input type="checkbox"/>
SIG 1	<input type="checkbox"/>
SIG 2	<input type="checkbox"/>
SIG 3	<input type="checkbox"/>
SIG 4	<input type="checkbox"/>
OTHER	<input type="checkbox"/>
Remarks (Max 10 lines)	

**Application Form
filled by New Members
asked by email and replied filled.**

Please, New WG Member and/or Action Participant should provide own CV (max 1 page)

13. Non-COST applications to the Action

(1/2)

List of Non-COST Members: New NNC and IPC

EuNetAir: List of Experts from NNC and IPC



170 EXPERTS from **28** COST Countries and **7** Non-COST Countries



AU - Australia

Dr. Phil MARTIN



MA - Morocco

Dr. Radouane LEGHRIB
Dr. Houda LAHLOU



CA - Canada

Prof. John YEOW



UA - Ukraine

Dr. Olena TUROS
Dr. Arina PETROSIAN
Dr. Oksana ANANYEVA
Dr. Liudmyla MYKHINA
Dr. Liliia PETRUK
Dr. Tetiana MAREMUKHA



CN - China

Dr. Yongxiang LI
Dr. Zhifu LIU



RU - Russian Federation

Dr. Alexey VASILIEV



US - United States

Prof. Andrei KOLMAKOV
Dr. Meyya MEYYAPPAN

7 Non-COST Countries and 8 Non-COST Institutions

GEORGIA as NNC is interested to join EuNetAir

Non-COST Countries:
Australia, Canada, China,
Morocco, Russia, **Ukraine**,
USA

Non-COST Institutions:
CSIRO (**Australia**);
University of Waterloo
(**Canada**); Chinese Academy
of Sciences, Shanghai
Institute of Ceramics
(**China**); University of Agadir
IBN Zohr (**Morocco**);
National Research Center
Kurchatov Institute (**Russia**);
O.M. Marzeiev Institute for
Hygiene and Medical
Ecology of Academy of
Science of Ukraine
(**Ukraine**); Southern Illinois
University Carbondale,
NASA Ames Research
Center (**USA**).

Non-COST EuNetAir PARTICIPANTS



NNC - Near Neighbour Countries
IPC - International Partner Countries

14. AOB of the Action - List of AOB

- **Joint-Publications** should be encouraged more.
 - PAPERS
 - A **List of Joint-Publications** (Year 2: 2013-14) from Action is downloadable at Action webpages (www.cost.eunetair.it) in the Section **LIBRARY - Publications**
 - **Other JOINT-PUBLICATIONS are HIGHLY welcomed !**

Publications of EuNetAir participants

List of publications related to EuNetAir

Metal oxide semiconductor gas sensor self-test using Fourier-based impedance spectroscopy

M. Schüller, T. Sauerwald, and A. Schütze

J. Sens. Sens. Syst., 3, 213-221, 2014

Aerosol-deposited BaFe_{0.7}Ta_{0.3}O_{3-δ} for nitrogen monoxide and temperature-independent oxygen sensing

M. Bektas, D. Hanft, D. Schönauer-Kamin, T. Stöcker, G. Hagen, and R. Moos

J. Sens. Sens. Syst., 3, 223-229, 2014

Devices based on series-connected Schottky junctions and β-Ga₂O₃/SiC heterojunctions characterized as hydrogen sensors

S. Nakagomi, K. Yokoyama, and Y. Kokubun

J. Sens. Sens. Syst., 3, 231-239, 2014

A simple method to recover the graphene-based chemi-resistor signal

F. Fedi, F. Ricciardella, M. L. Miglietta, T. Polichetti, E. Massera, and G. DiFrancia

J. Sens. Sens. Syst., 3, 241-244, 2014

Electrophoretic deposition of Au NPs on CNT networks for sensitive NO₂ detection

E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, D. Suriano, R. Rossi, F. Palmisano, L. Torsi, and N. Cioffi

J. Sens. Sens. Syst., 3, 245-252, 2014

Selective detection of hazardous VOCs for indoor air quality applications using a virtual gas sensor array

M. Leidinger, T. Sauerwald, W. Reimringer, G. Ventura, and A. Schütze

J. Sens. Sens. Syst., 3, 253-263, 2014

Catalytic and thermal characterisations of nanosized PdPt / Al₂O₃ for hydrogen detection

T. Mazingue, M. Lomello-Tafin, M. Passard, C. Hernandez-Rodriguez, L. Goujon, J.-L. Rousset, F. Morfin, and J.-F. Laithier

J. Sens. Sens. Syst., 3, 273-280, 2014

2 Special Issues coming soon:

- **JSSS, Copernicus**
- **Urban Climate, Elsevier**

15. Location and Date of next MC Meeting

FOURTH SCIENTIFIC MEETING: WGs & 7th MC Meeting

hosted by Linköping University, **Linköping** (Sweden), 3 - 5 June 2015

**Letter of commitment to host a COST Action TD1105 meeting at
Linköping, Sweden, 3-5:th of June 2015**

Dear Michele,

It is my pleasure to offer Linköping University, Linköping Sweden, as the venue for a Working Group meeting and the Management Committee meeting the 3-5:th of June 2015. I will be the local organizer together with Therese Dannetun, administrative coordinator. We will come back with details regarding meeting room, food and accommodation.

Best regards



Anita Lloyd Spetz, Professor

**Local Organizer: Prof. Anita Lloyd Spetz, Vice-Chair,
Linköping University, Linköping (Sweden)
University of Oulu (Finland)**



16. Summary of MC decisions 6th MC Meeting, 5 Dec. 2014, Istanbul, Turkey

DESCRIPTION OF DECISIONS DISCUSSED BY ACTION TD1105 MC	APPROVED
MC6D01. 15 STSMs: 9 STSMs (5 days) and 6 STSMs (30 days), <i>or equivalently</i>	YES
MC6D02. EuNetAir Core-Group Meeting at EUROSENSORS 2014 , Special Session COST Action TD1105, Brescia, Italy, 7 - 10 September 2014 (half-day Special Session)	DONE
MC6D03. WG1-WG4 Meeting , IDAD and University of Aveiro, Aveiro, Portugal, 13 - 15 Oct. 2013	DONE
MC6D04. WG1-WG4 Meeting , Istanbul, 3 - 4 Dec. 2014 (joined to 6 th MC Meeting)	DONE
MC6D05. 3rd Action Workshop on <i>New Trends and Challenges on Air Quality Control</i> , 26 - 27 March 2015, Riga, Latvia	YES
MC6D06. 3rd Training School of Action , 2 - 8 May 2015 (tbc), Hyytiala (Helsinki), Finland	YES
MC6D07. WG1-WG4 Meeting , Linköping, 3 - 4 June 2015 (joined to 7 th MC Meeting)	YES
MC6D08. NEWSLETTER: Issue 5 (Nov-Dec. 2014); Issue 6 (May-June 2015) LEAFLET/BROCHURE: UPDATED Issues	YES
MC6D09. 6th MC Meeting: 5 Dec. 2014, Istanbul, Turkey, organized by GEBZE at University	DONE
MC6D10. 7th MC Meeting: 5 June 2015, Linköping, Sweden, organized by Linköping University	YES
MC6D011. DISSEMINATION & OUTREACH ACTIVITIES:	YES

16. Summary of MC decisions 6th MC Meeting, 5 Dec. 2014, Istanbul, Turkey

DESCRIPTION OF NEW DECISIONS DISCUSSED BY ACTION TD1105 MC	APPROVED
MC6D12. Focus Group Meeting: Innovation on Environmental Sensor Technologies Budget estimated: 2000 EURO	YES
MC6D13. Focus Group Meeting: Data Analysis Aveiro Joint-Exercise Budget estimated: 2000 EURO	YES
MC6D14. ISOCS 2015 Short Course Winter School. Grants: 3 Trainees + 1 Trainer Budget estimated: 2500 EURO	YES
MC6D15. 16th ISOEN 2015 International Symposium on Olfaction and Electronic Nose: 3 Speakers + 2 Young Researchers Budget estimated: 2500 EURO	YES
TOTAL AMOUNT: 9000 EURO (estimated !)	
MC6D16. Increase the FSAC amount to Grant Holder from current 13.3% to max 15%, as permitted by COST Office. Heavier workload of GH due to increasing EuNetAir partnership. To be contacted COST Officers on how to manage this. Budget estimated: 3000 EURO	YES
GRAND TOTAL: 12000 EURO (estimated !)	

17. Closing

6th MC Meeting, 5 Dec. 2014, Istanbul, Turkey, hosted at Bahcesehir University

WELCOME from Chair addressing the 6th MC Meeting, Istanbul

SEE YOU in **LINKÖPING**, 3 - 5 June 2015



COST Action TD1105 EuNetAir at Bahcesehir University & GEBZE

Istanbul, Turkey, 5 December 2014



THANK YOU VERY MUCH FOR YOUR KIND ATTENTION !

