

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

COST Action TD1105

7th MC Meeting at *Linköping University*

organized by Linköping University, Division of Applied Sensor Science

Physics Building, Campus Valla, Linköping (Sweden), 5 June 2015

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

Friday, 5 June 2015

Action TD1105 MANAGEMENT COMMITTEE Meeting

Main Hall: *Planck Room*

• **Action Parties: 31**

• MCM Participants: 25+

Russia NNC Observer

Action TD1105 7th MANAGEMENT COMMITTEE MEETING

09:30 - 13:00

Chairman: Michele Penza, Action Chair

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

WORLD ENVIRONMENT DAY (WED) 2015

Global Celebration on 5 June

by United Nations Environment Programme (UNEP)

This year's WED slogan is 'Seven Billion Dreams. One Planet. Consume with Care'

See more at: <http://www.unep.org/wed/news/wed-2015>

09:30 - 10:00

New Methods for Control of Nanoparticles in Indoor-versus-Outdoor Environment

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

10:00 : 13:00

7th Management Committee Meeting

Michele Penza, Action Chair, ENEA, Brindisi, Italy

- **DISCUSSION** (see MCM AGENDA)
- **Coffee-Break** (timely scheduled)

12:00 : 12:20

Live VideoChat Brussels-Linköping: Inputs from the COST Association

Deniz Karaca, Science Officer of the COST Action TD1105, COST Association, Brussels, Belgium

12:20 : 12:30

- **QUESTION TIME** with COST Science Officer

13:00

- **End of the 7th MCM of the COST Action TD1105 - EuNetAir**

13:00 - 14:30

- **Lunch offered by the Conference Organization**

14:30

- **Meeting Closing**

2. Adoption of Agenda

Draft Agenda
7th Management Committee Meeting
COST Action TD1105

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

FOURTH SCIENTIFIC MEETING
Working Groups and Management Committee

New Sensing Technologies for Outdoor Air Pollution Monitoring

Linköping (Sweden), 3 - 5 June 2015

Planck Room - Physics Building at Department of Physics, Chemistry and Biology
Olaus Magnus väg, Campus Valla, Linköping University, 58183 Linköping, Sweden

Management Committee Meeting, 5 June 2015, 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:**
- **30° Party: Luxembourg** (*Doodle launched/approved Feb. 2015*)
- **31° Party: Estonia** (*Doodle launched/approved April 2015*)

MC approved by e-Doodle. MC needs to confirm approval:

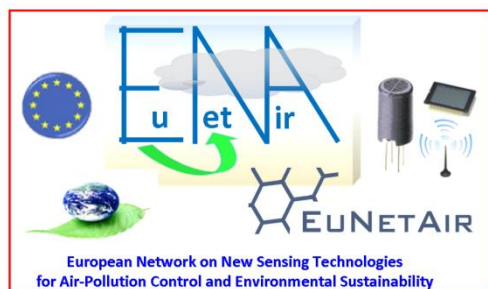
- **6° MCM Minutes (Istanbul, 5 Dec. 2014)**
- **Work & Budget Plan Year 3 - Total Budget (190.8 k€)**
Approved 2° Instalment (March 2015) by COST Office -
Money Transfer from COST to GH expected in June 2015 !
Details by Grant Holder later

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)
kourtidis@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** (June 2015) of Action, including participating Countries

PARTIES

Already accepted MoU: 31 Countries

Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Luxembourg, 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

Country

MC Members (58): Male (69%) - Female (31%)

Austria	Dr. Anton KOCK
Belgium	Dr Jan THEUNIS; Dr Anne-Claude ROMAIN
Bulgaria	Dr Dimiter SYRAKOV; Dr Ivan NEDKOV
Croatia	Dr. Irena CIGLENECKI-JUSIC; Prof. Vedran BILAS
Czech Republic	Dr. Vera KURKOVA; Dr. Zdenek ZELINGER
Denmark	Prof. Ole HERTEL
Estonia	Prof. Raivo Jaaniso
Finland	Prof. Kaarle HAMERI; Prof. Jyrki LAPPALAINEN
France	Prof. Marcel BOUVET; Prof. Jerome BRUNET
Germany	Prof. Andreas SCHUETZE; Dr Corinna HAHN
Greece	Prof. George PAPAPOULOS; Prof. Kostas KARATZAS
Hungary	Ms Krisztina LABANCZ; Dr Zita FERENCZI
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
Luxembourg	Dr. Arno GUTLEB
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 Mioara PITICESCU
Serbia	Dr. Anka CVETKOVIC; Dr. Milena JOVASEVIC-STOJANOVIC
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

**Kick-off Meeting
Brussels
16 May 2012**

**MANAGEMENT
COMMITTEE**

MC Chair: Michele Penza, ENEA, IT

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

Grant Holder: Eurice GmbH, Saarbrucken, DE

Country

MC Substitutes (33)

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 SUISSSE; Prof. Alain PAULY Dr. Daniela SCHONAUER-KAMIN
Germany	Dr. Thomas KUHMBUSCH Dr. Juliane ROSSBACH
Greece	Prof. George KIRIKIADIS Dr. Christos KOULAMAS
Hungary	Prof. Zoltan HORVATH
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 Dr. Ana Margarida COSTA
Romania	Dr. Cristina RUSTI; Dr. Marcel Adrian IONICA
Slovenia	Prof. 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

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:

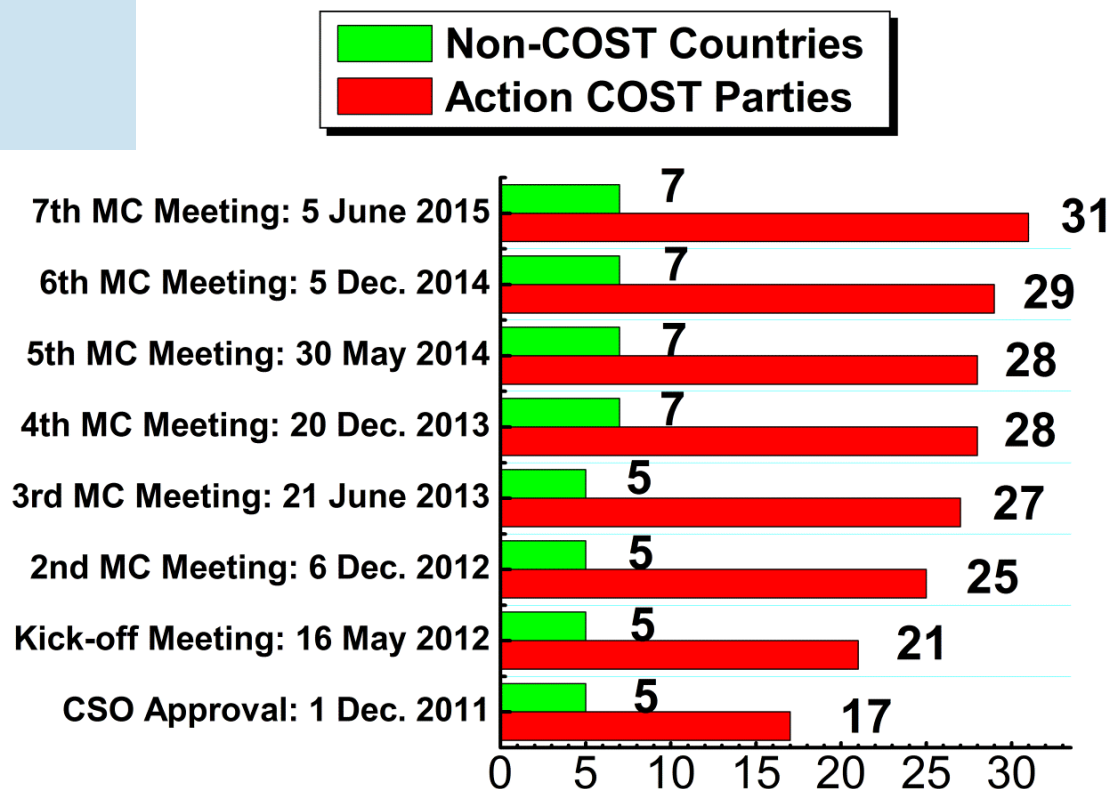
Eurice GmbH, Saarbrücken, Germany

GH Scientific Representatives:

Corinna Hahn, MC Member

Juliane Rossbach, MC Substitute

EuNetAir is growing up



4. Update from the Action Chair

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

b. Action Budget Status

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

Approved by COST Office

III. SUMMARY BUDGET

ET

2° Instalment

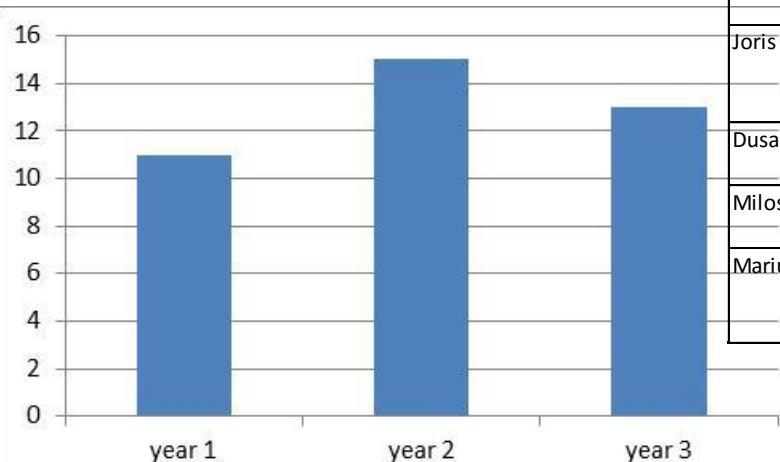
1° Instalment

A.COST Networking Tools	EUR	EUR
(1) MEETINGS	114.500,00	108.000,00
(2) TRAINING SCHOOLS	21.500,00	19.000,00
(3) SHORT-TERM SCIENTIFIC MISSIONS	25.800,00	25.800,00
(4) DISSEMINATION	4.000,00	4.000,00
(5) OERSA	1.000,00	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 (k€)	166.8	157.8
C.FSAC (max. of 15% of B.)	24.000,00	21.000,00
D.TOTAL EXPENDITURE (B+C) AUTOMATIC SUM: Click in cell to the right and click button "F9" to update the autosum (k€)	190.8	178.8

Action Mean Budget: 130 k€ !

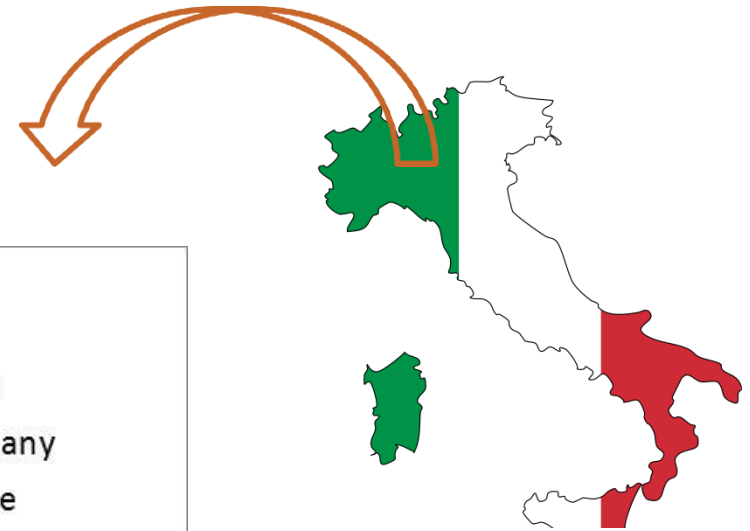
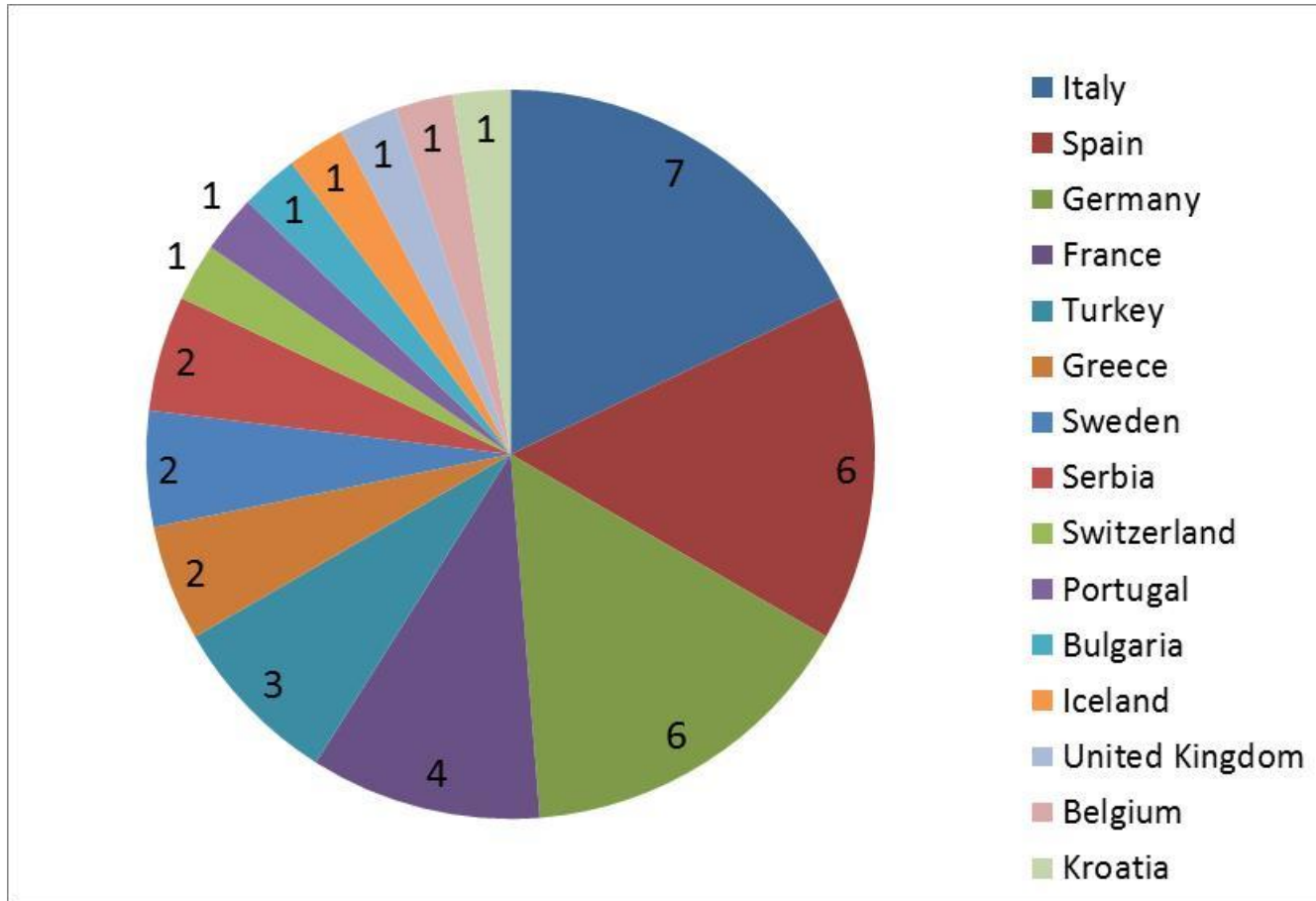
STSM – Year 3

- 13 approved STSM
- 22 430 €

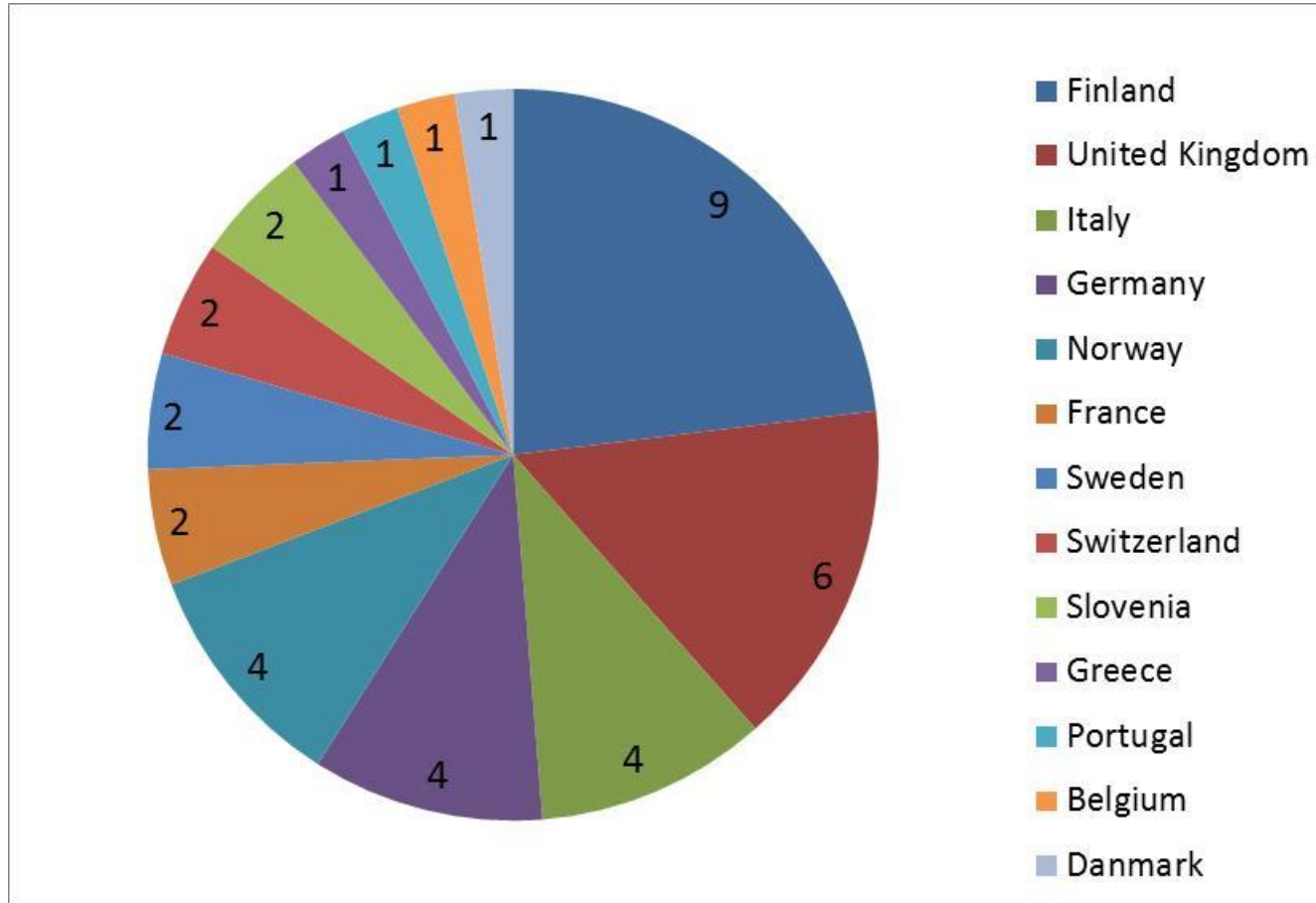


	Title	Home Institution	Host Institution
Saverio De Vito PhD Computer Engineering	Computational Intelligence for Multisensing Device Calibration	ENEA, Portici (NA)(IT)	Centre for Atmospheric Science, University of Cambridge(UK)
Jolanda Palmisani PhD student	Ozone-initiated reactions with selected fragrance 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), Dijon(FR)
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 Oulu (FI)
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), Dijon(FR)
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)
Onur Alev	FABRICATION OF ONE DIMENSIONAL TiO2NANOSTRUCTURES MODIFIED WITH ORGANIC MATERIALS FOR DEVICE	Gebze Technical University Dept. of Physics, Faculty of Fundamental Science, Gebze	Dipartimento di Ingegneria dell'Informazione, University of Brescia (IT)
Paul Smith	Investigation of SenseAir's LPL (Long Path Length) platform iBASS for precise gas measurements	University of Cambridge, Cambridge (UK)	SenseAir AB,Delsbo(SE)
Ana Cvitesic	Physical-chemical characterization of the water soluble fraction of the marine aerosols	Center for Marine and Environmental Research, Rudjer Bosković Institute, Zagreb (HR)	National Institute of Chemistry, Ljubljana (SI)
Joris Van den Bossche	Mobile monitoring for mapping real-time urban air quality	VITO Flemish Institute for Technological Research, Mol (BE)	NILU Norwegian Institute for Air Research, Kjeller (NO)
Dusan Topalovic	Training in data fusion and data assimilation techniques to monitor air	Vinca Institute of Nuclear Sciences, Belgrado (SER)	NILU Norwegian Institute for Air Research, Kjeller (NO)
Milos Davidovic	Training in observational platforms for monitoring air quality including	Vinca Institute of Nuclear Sciences, Belgrado (SER)	NILU Norwegian Institute for Air Research, Kjeller (NO)
Marius Rodner	Training on PLD techniques for WO3 processing to be applied as gas sensor material	Lab for Measurement Technology, Saarland University, Saarbrücken(DE)	Microelectronics and Materials Physics Laboratories, University of Oulu (FI)

Country of origin

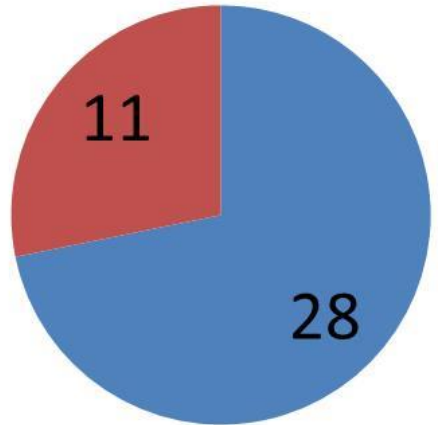


Country of destination





Gender Balance



Male Female

COURTESY: LYNN HORDSTROM MANNING



STSM – Year 4

Target : 13 STSMs estimated

Budget : 20 k€ estimated

**For next evaluation round : submit
application before 01/07/2015**

Call for year 4 to be launched soon

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 (> 13).

- 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 - Budget STSM: 25.8 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

13 STSMs approved/ongoing (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

13 STSMs approved/ongoing (TD1105-Year3) (2/2)

Fourth Approval - Batch 4							
7	Onur Alev Master-student onuralev@gmail.com	Fabrication of One-Dimensional TiO ₂ Nanostructures Modified with Organic Materials For Device Applications	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	1 February - 31 March 2015 2 Months	2500 €	Approved by STSM Committee 24/02/15
8	Ana Cvitesic PhD-student Ana.Cvitesic@urb.hr	Physical-chemical characterization of the water soluble fraction of the marine aerosols	Dr. Irena Ciglenecki-Jusic, Rudjer Boskovic Institute, Zagreb, Croatia Irena.Ciglenecki-Jusic@urb.hr	Dr. Irena Grgič Analytical Chemistry Laboratory, National Institute of Chemistry, Ljubljana, Slovenia, irena.grgic@ki.si	18 May 2015 - 12 June 2015 1 Month	1300 €	Approved by STSM Committee 20/02/15
9	Joris Van den Bossche PhD student joris.vandenbossche@vito.be	Mobile Monitoring for Mapping Urban Air Quality	Dr. Jan Theunis VITO, Mol, Belgium jan.theunis@vito.be bernard.debaets@ugent.be	Dr. Nuria Castell and Dr. Philipp Schneider, NILU, Kjeller, Norway Nuria.Castell@nilu.no Philipp.Schneider@nilu.no	27 April - 8 May 2015 2 Weeks	1340 €	Approved by STSM Committee 02/03/15
10	Paul Smith PostDoc p3683@cam.ac.uk	Investigation of SenseAir's LPL (Long Path Length) platform iBASS for precise gas measurements	Prof. Roderic Jones, Department of Chemistry, University of Cambridge, Cambridge (UK), rlj1001@cam.ac.uk	Prof. Ingrid Bryntse SenseAir AB, Delsbo, Sweden ingrid.bryntse@senseair.com	20 April - 1 May 2015 2 Weeks	660 €	Approved by STSM Committee 08/04/15
Fifth Approval - Batch 5							
11	Marius Rodner Master-student mrodner91@googlemail.com	PLD Techniques for WO ₃ Processing to be Applied as Gas Sensor Material	Prof. Andreas Schuetze, Saarland University, Saarbrucken (DE) schuetze@lmt.uni-saarland.de	Jyrki Lappalainen, Microelectronics and Material Physics Laboratories, Oulu University, Oulu (FI), jyla@ee.oulu.fi	1 - 31 May 2015 1 Month	2200 €	Approved by STSM Committee 08/04/15
12	Milos Davidovic PhD student davidovic@vinca.rs	Data Fusion and Data Assimilation for Sensor Data	Dr. Milena Jovasevic-Stojanovic, Institute Vinca, Belgrade, Serbia, mjovst@vin.bg.ac.rs	Dr. Alena Bartonova NILU, Kjeller, Norway Alena.Bartonova@nilu.no	18 - 29 April 2015 2 Weeks	1600 €	Approved by STSM Committee 15/04/15
13	Dusan Topalovic PhD student dusan.topalovic@vinca.rs	Data Fusion and Assimilation of Environmental Data	Dr. Milena Jovasevic-Stojanovic, Institute Vinca, Belgrade, Serbia mjovst@vin.bg.ac.rs	Dr. Alena Bartonova NILU, Kjeller, Norway Alena.Bartonova@nilu.no	18 - 29 April 2015 2 Weeks	1600 €	Approved by STSM Committee 15/04/15
TOTAL (€) - 1st Approval						5.430	
TOTAL (€) - 2nd Approval						3.300	
TOTAL (€) - 3rd Approval						2.500	
TOTAL (€) - 4th Approval						5.800	
TOTAL (€) - 5th Approval						5.400	
TOTAL (€) STSMs approved						22.430	25.800

Inputs from Action GB Committee (1/3)

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 (2/3)

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

WGs Meeting, Aveiro, 13-15 October 2014

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.

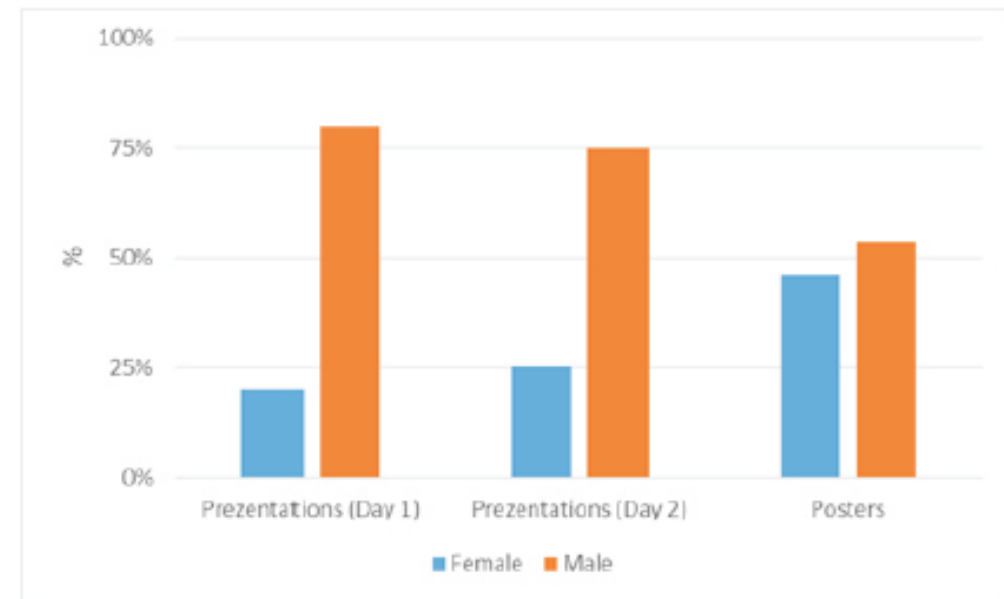
Inputs from Action GB Committee (3/3)

Workshop, Riga, 26-27 March 2015

Gender Balance

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

During the last (26 – 27 March 2015) international scientific workshop on New Trends and Challenges for Air Quality Control in Riga, 37 % of 55 participants were female, reflecting a positive tendency. Balance of female presenters varies from 20 % to 46 %. A detailed distribution of male and female speakers in the Riga meeting is shown in the figure.



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.

LinkedIn Account Type: Basic | Upgrade

Home Profile Contacts Groups Jobs Inbox Companies News More

Tax Free Profit & Income - Pay the amount of tax you wish...not what the tax-man demands - click here.

EuNetAir

Discussions Members Promotions Jobs Search Manage More... Share group

Search members

Search for names or keywords to find specific members of this group.

Search

Advanced Search

Group Statistics

CHECK OUT INSIGHTFUL STATISTICS ON THIS GROUP

MEMBERS 759

View Group Statistics

New Members: Last 7 Days

GROUP

Marco Alvisi, Ricercatore presso ENEA Italy

Members (9)

Sorted by: most relevant Showing 1 - 9 of 9

Maria del Mar Viana (YOU)
Atmospheric aerosol research, Barcelona Area, Spain
136 followers | See activity >

Michele Penza (1st)
Ricercatore presso ENEA, Taranto Area, Italy
34 followers | Unfollow | See activity >

Nuria Castell-Balaguer (1st)
Scientist at NILU-Norwegian Institute for Air Research, Oslo Area, Norway
51 followers | Unfollow | See activity >

Annamaria Demarinis (2nd)
Research Assistant in Environmental Chemistry at the Department of Chemistry - University of Bari (ITALY), Bari Area, Italy
72 followers | Follow Annamaria | See activity >

Thomas Kuhbusch (2nd)
Unithead bei IUTA, Essen Area, Germany
13 followers | Follow Thomas | See activity >

Gallium L.
ASSOC. Prof. at SICCAS, China
9 followers | Follow Gallium | See activity >

Marco A.
Ricercatore presso ENEA, Italy
48 followers | Follow Marco | See activity >

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

Action budget status third year (II)

Juliane Roßbach
Manager Grant Holder
Eurice GmbH, Germany

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**

COST Science Officer of Action TD1105

Live VideoChat Brussels-Linköping, 12:00 - 12:30 CET

Inputs from SO and Q&A Time

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

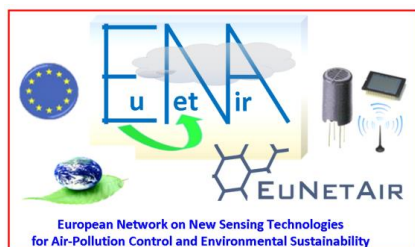
ESSEM Rapporteur: Not attending

MPNS Rapporteur: Not Attending

CMST Rapporteur: Not Attending

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

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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
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 Leitl
(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



3rd 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*

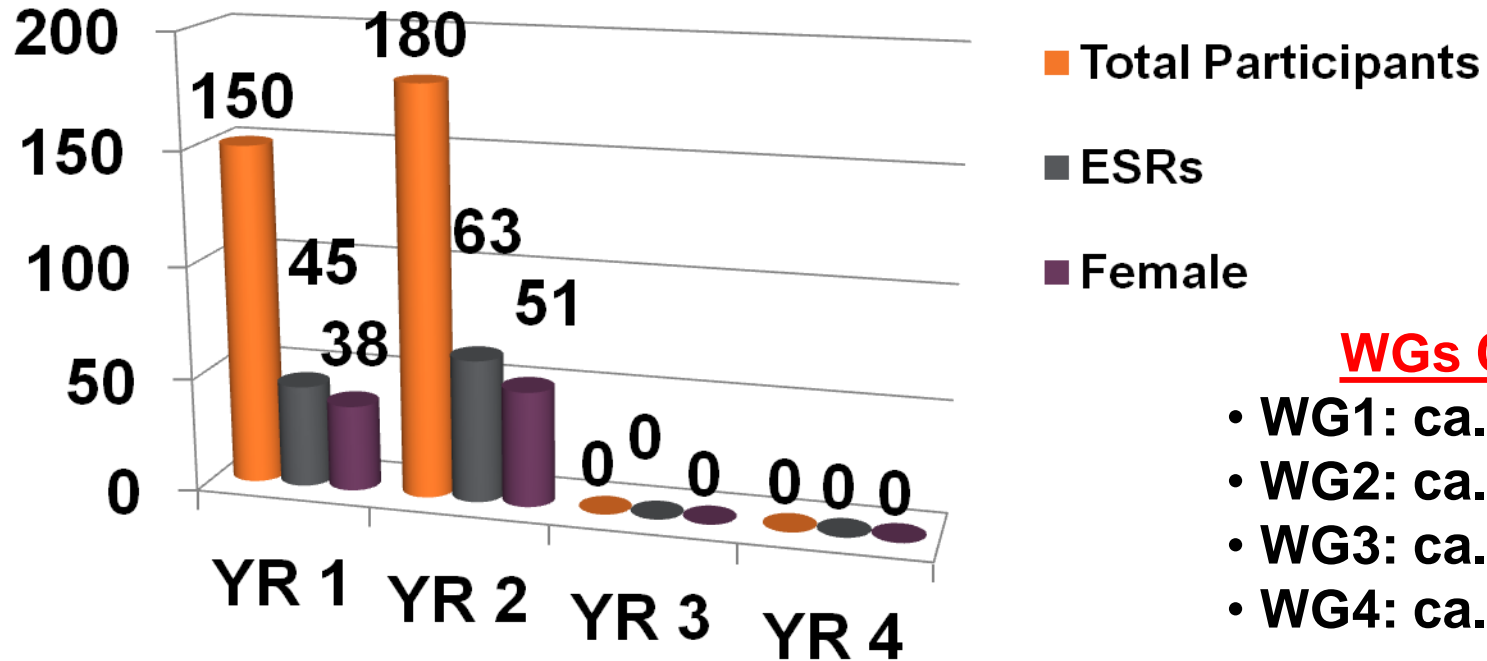
- **MCM (30 May 2014) joined to EMRS-2014 SYMPOSIUM B:** *Advanced Functional Materials for Environmental Monitoring and Applications*

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)**

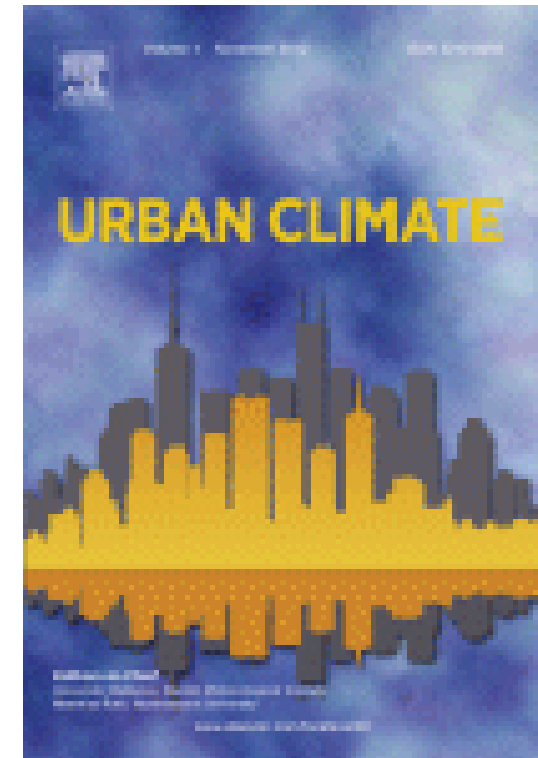
New Sensing Technologies and Methods for Air-Pollution Monitoring

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: *March 2015* (**online**)



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 Meeting 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*

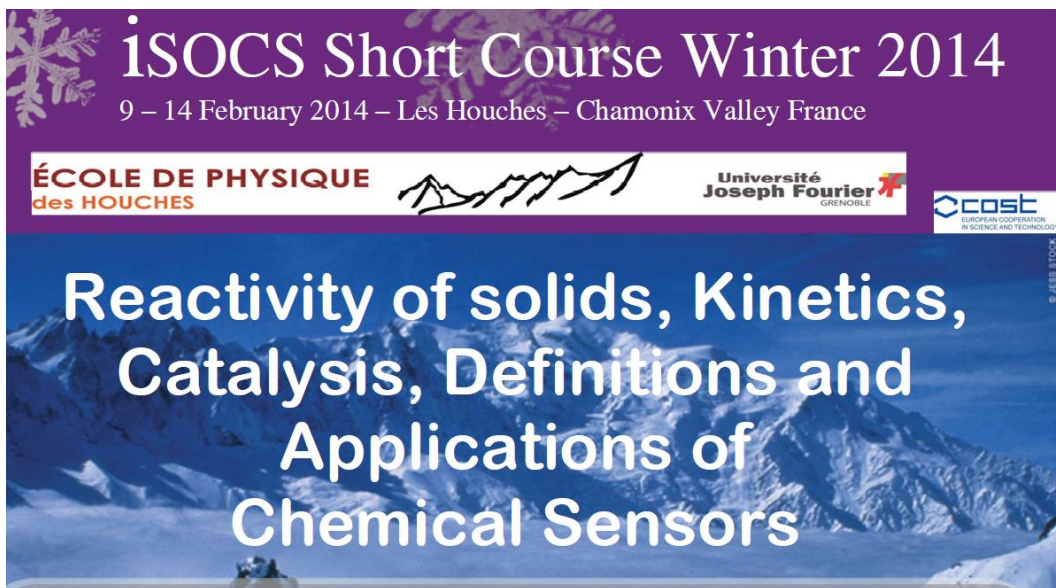
**Focus on
Clean Air for Smart Cities
*Local Municipality interested***

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 ET/COOK



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)**, Saarbrücken, 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, Saarbrücken, 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



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.

Symposium organizers:

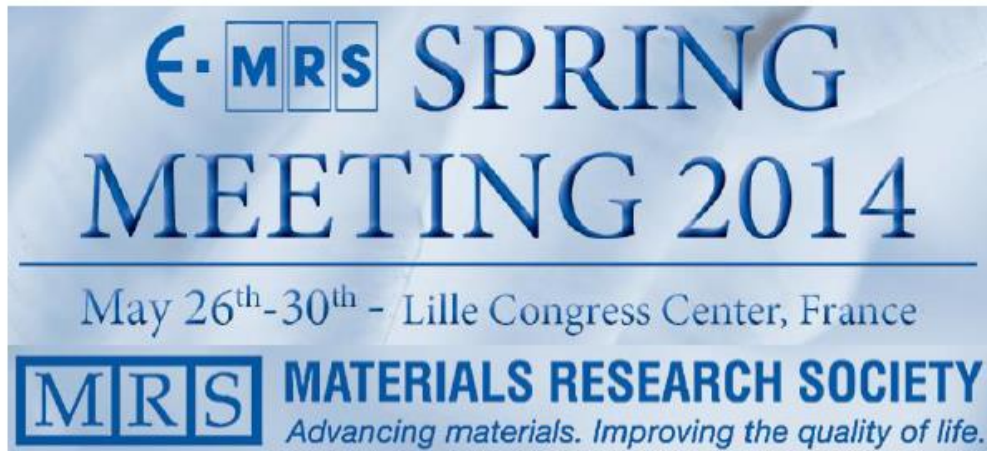
Michele Penza
ENEA Italian National Agency for New Sensing
Technologies
Energy and Sustainable Economic Development
PO BOX 51 Br-4
I-72100 Brindisi
Italy
Phone: +39 0831 201422
michele.penza@enea.it

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yxli@mail.sic.ac.cn

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



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
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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-F), MATERIALS AND LIGHT (J-K), HYBRID, ORGANIC AND BIO-MATERIALS (M-Q), 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'.



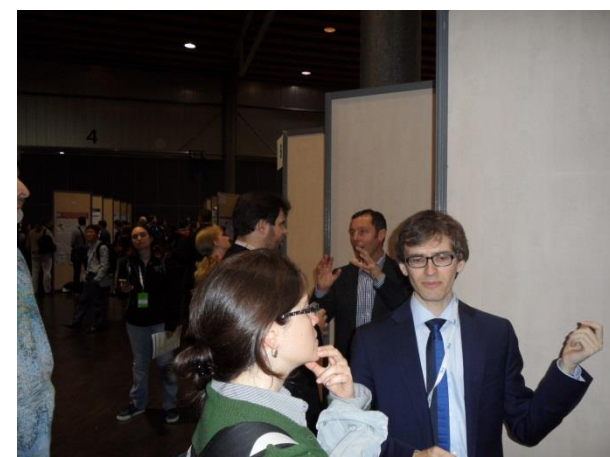
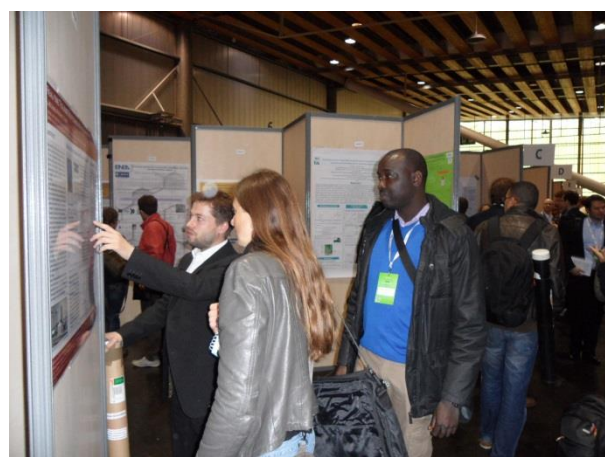
SPRING MEETING
May 26-30, 2014
Lille

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**, Linkoping, 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, Linkoping, Sweden, organized by Linkoping University
- **DISSEMINATION & OUTREACH ACTIVITIES**

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).

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 , Session Action, Brescia, Italy, 10 Sept. 2014	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 Mar 2015, Riga Latvia	20.000
3rd Training School of Action , 2 - 8 May 2015 (tbc), Hyytiala (Helsinki), Finland	19.000
ISOCS 2015 Short Course Winter School . Ponte di Legno (Brescia), Italy Grants: 3 Trainees	2.500
Focus Group Meeting Data Analysis Aveiro Joint-Exercise . WHO CC, Berlin (Germany), 17 Apr 2014	2.000
Focus Group Meeting Innovation on Environmental Sensor Technologies . Siemens, Munich, 29 Apr 2014	2.000
16th ISOEN 2015 International Symposium on Olfaction and Electronic Nose: 3-4 Speakers	2.500
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) LEAFLET/BROCHURE: Updating	2.000
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	166.800
Financial & Scientific Administration and Coordination (max 15%)	24.000
TOTAL EXPENDITURE	190.800

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

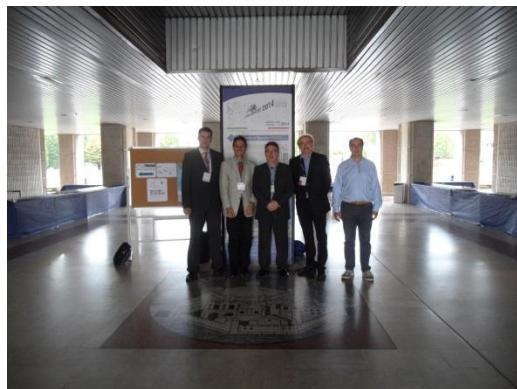
10:30 - 11:00 **Break**

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 Alexandre¹, 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



THIRD SCIENTIFIC MEETING: WG & 6th MC Meeting

New Sensing Technologies for Indoor Air-Pollution

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

Multidisciplinary Meeting:

International Experts and Coordinators of FP7 and H2020 research projects related to the IEQ Cluster



Local Organizers:
Prof. Zafer Ziya Ozturk,
GEBZE, Istanbul (Turkey)

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

Participation:

- **60+ Participants**
- **21 COST Countries**

3rd International WORKSHOP *EuNetAir*

New Trends and Challenges for Air Quality Control

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



Local Organizer:

Dr. Iveta Steinberga
University of Latvia
Riga (Latvia)

Local Co-Organizer:

Dr. Gita Sakale
Riga Technical University
Riga (Latvia)

Participation:

- 50+ Participants
- 18 COST Countries



Focus Group Meeting *EuNetAir*

Data Analysis of Aveiro Air Quality Sensors Intercomparison

hosted by WHO CC - Federal Environment Agency, **Berlin** (Germany), 17 April 2015



Local Organizer:

Dr. Hans-Guido Muecke
WHO CC - FEA
Berlin (Germany)

Participation:

- 9 Participants
- 8 COST Countries

Output:

Planned Joint-Publication
on AQ Sensors Aveiro Database



Focus Group Meeting *EuNetAir*

Innovation on Environmental Sensor Technologies

hosted by Siemens, **Munich** (Germany), 29 April 2015

SIEMENS

Local Organizer:

Dr. Olivier von Sicard
Siemens AG
Munich (Germany)



Participation:

- 15 Participants
- 10 COST Countries

Output:

Planned Report on
Innovation on Environmental Sensor Technologies



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

Local Organizer:

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



Participation:

- 13 COST Trainees
- 3 Trainers
- 1 COST Trainer



11. Scientific planning - approved event Year 3

ISOCS 2015 Short Course Winter Course

Electronic Noses and their Panorama of Sensors

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

Funding 3 Young Trainees to Training Course

EuNetAir would finance 3 Young Trainees and 1 Trainer

Type: Grant (Example: 750 euro x 3 trainees)

Granted Trainees: 3 ESRs from Italy, Spain, Germany. Trainer no funded.

Estimated/Approved Budget: 2250/2500 Euro

FOURTH SCIENTIFIC MEETING: WG & 7th MC Meeting

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

Local Organizer:

Prof. Anita Lloyd Spetz,
Action Vice-Chair,
Linköping University,
Linköping (Sweden)



FOCUS ON:

Outdoor Applications



- 4 June 2015: Roundtable on the *European Sensor-Systems Cluster (ESSC)*
- 5 June 2015: *World Environment Day 2015, 5 June* - Global Day by UNEP
- 22 June 2015: *AMA Science Proceedings* (max 4 pages Templated) with DOI
- 31 October 2015: *Special Issue JSSS (Copernicus)* - Peer Review Process

11. Scientific planning - approved event Year 3

16th ISOEN 2015

International Symposium on Olfaction and Electronic Nose

28 June - 1 July 2015, Dijon, France

Funding 3-4 Speakers to attend Symposium ISOEN

EuNetAir would finance:

Max 3-4 Speakers for Talks and 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 to avoid annual exceedance ! VERY IMPORTANT TERM)

Proposal: Action funds 3-4 *EuNetAir* speakers attending to ISOCS 2015 and listed in the Programme, including Chair to disseminate Action. Preliminary agreement with ISOEN organizers exists. Is MC agree ?

11. Scientific planning - Proposed Events Year 4

Year 4 (1 July 2015 - 30 June 2016)

PROPOSAL FOR A REQUEST OF THE ACTION EXTENSION TO BE SUBMITTED TO COST ASSOCIATION:

- **Start of Action (Kick-off Meeting): 16 May 2012**
- **End of Action: 15 May 2016**
- **End of Grant Period: 30 June 2016**
- **Request of Action Extension: 31 December 2016**
- ***Procedure for Action Extension discussed with Science Officer:***
 1. ***Action MC discusses and approves extension request***
 2. ***Action Chair submits to COST Association the official request (1-2 pages) with approved decision by MC and reported in the Minutes***
 3. ***COST Association approves/rejects EXTENSION***
 - ***COST Association usual approves extension, if properly justified, without extra-budget !***

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

Meetings/Workshops/Training Schools planned for upcoming year
(Year 4: 1 July 2015 - 30 June 2016):

- **WG1-WG4 Meeting** on *Air Quality Monitoring: Horizons in Sensing Technologies, Methods and Modelling* organized by VINCA Institute and Public Health Institute of Belgrade at VINCA Institute, Belgrade (Serbia), 13 - 14 October 2015.
- The **4th International Workshop of the COST Action TD1105** on *Innovations and Challenges for Air Quality Control Sensors* organized by MCL at Wien (Austria), 17 - 18 March 2016.
- The **Action 4th International Training School** on *Modelling, Methods and Technologies for Air Quality Control* at Emdrup Campus in Copenhagen, organized by Aarhus University (**Denmark**), 19 - 22 April 2016

MC/WG Meetings planned for the upcoming year

(Year 4: 1 July 2015 - 30 June 2016):

- **5th SCIENTIFIC MEETING: WGs Meeting and 8th MC Meeting on Indoor Air Quality Monitoring** organized by/at Bulgarian Academy of Sciences, Sofia (Bulgaria), 2 - 4 Dec. 2015.
- **6th SCIENTIFIC MEETING: WGs Meeting and 9th MC Meeting on Outdoor Air Quality Monitoring** organized by/at Czech Republic Academy of Sciences, Prague (Czech Republic), Option 1 (No Action Extension): 8 - 10 June 2016. Option 2 (Yes Action Extension): 5 - 7 October 2016.

WGs MEETING (1/2):

Air Quality Monitoring: Horizons in Sensing Technologies, Methods and Modelling

VINCA Institute & Public Institute of Health, **Belgrade** (Serbia), 13 - 14 Oct. 2015



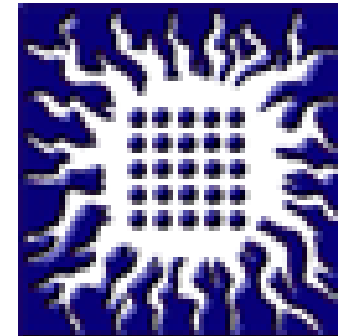
Local Co-Organizers:

Dr. Milena Jovasevic-Stojanovic, RS MC Member,

Dr. Anka Cvetkovic, RS MC Member,

VINCA Institute and Public Institute of Health

Belgrade - (Serbia)



WGs MEETING (2/2):

Air Quality Monitoring: Horizons in Sensing Technologies, Methods and Modelling

VINCA Institute & Public Health Institute, Belgrade (Serbia), 13 - 14 Oct. 2015

Re: Letter of commitment to host a COST Action TD1105 Meeting
at Belgrade, Serbia, 12 - 13 October 2015

It is my pleasure to offer VINCA (organizer) Institute of Nuclear Sciences, Belgrade (Serbia), as local Host Institution together with Public Health Institute of Belgrade (co-organizer) to organize a Working Group Meeting of the COST Action TD1105, presumably on 12 - 13 October 2015.

I intend that this offer to host a WG Meeting will be discussed in the next Action MC Meeting as planned in Linköping, Sweden, 3 - 5 June 2015.

I serve COST Action TD1105 as MC Member and will be the local organizer together with Dr. Anka Cvetković (MC RS Member) from Public Health Institute of Belgrade.

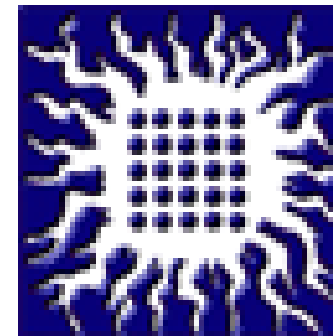
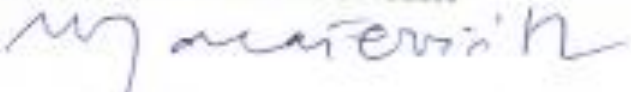
We will come back with details regarding to meeting room, food and accommodation as well as other related issues.

This invitation is based on the assumption that the main costs will be covered by the COST Action TD1105, under administrative management of the Action Grant Holder (Eurice GmbH, Saarbrücken, Germany), as ruled by COST Vademecum using Local Organizing Support (LOS) tool, if needed.

Belgrade, 17 March 2015

Best Regards

Milena Jovašević-Stojanović
Research Professor
MC RS Member of COST Action TD1105



Local Co-Organizers:

Dr. Milena Jovasevic-Stojanovic, RS MC Member,

Dr. Anka Cvetkovic, RS MC Member,

**VINCA Institute and Public Health Institute Belgrade
Belgrade (Serbia)**

FIFTH SCIENTIFIC MEETING (1/2): WG & 8th MC Meeting

New Sensing Technologies for Indoor Air-Pollution

Bulgarian Academy of Sciences, **Sofia** (Bulgaria), 2 - 4 Dec. 2015



Local Co-Organizers:

Prof. Ivan Nedkov, **BG MC Member,**

Prof. Dimiter Syrakov, **BG MC Member,**

Bulgarian Academy of Sciences - Sofia (Bulgaria)

FIFTH SCIENTIFIC MEETING (2/2): WG & 8th MC Meeting

New Sensing Technologies for Indoor Air-Pollution

Bulgarian Academy of Sciences, Sofia (Bulgaria), 2 - 4 Dec. 2015

Letter of invitation to host a COST Action TD1105 meeting at
Sofia, Bulgaria, in December 2015

Dear Dr. Penza,

It is our pleasure to offer Bulgarian Academy of Sciences, Sofia, Bulgaria as the venue for the COST Action TD1105 meeting (Working Group and the Management Committee) to be held in Sofia in December 2015.

The intention is that this meeting will be formally hosted by us, but local arrangements will be made through the specialized internal Organization.

This invitation is based on the assumption that the main costs will be covered by the COST Action TD1105 *EuNetAir*, with administrative management as ruled by COST Vademecum. We will come back with details regarding meeting room, food and accommodation.

We are looking forward to a very successful meeting in highly conducive surroundings.

Best wishes

Prof. DrSc D. Syrakov

Prof. DrSc I. Nedkov



Local Co-Organizers:

Prof. Ivan Nedkov, BG MC Member,
Prof. Dimiter Syrakov, BG MC Member,
Bulgarian Academy of Sciences - Sofia (Bulgaria)

11. Scientific planning

c3: **4th International WORKSHOP EuNetAir:**

Innovations and Challenges for Air Quality Control Sensors

organized by MCL, hosted at **Wien** (Austria), 17 - 18 March 2016

Local Organizer:

Dr. Anton Kock
MCL

Leoben (Austria)



Letter of intention to organize Workshop EuNetAir, Wien, 17-18 March 2016

by Anton Kock, MCL, Leoben, Austria - Action MC Member

Email received from Anton Kock on 1 June 2015

Dear Michele!

I cannot send an official letter of commitment for organizing the COST workshop in March 2016 in Vienna before June 4th, because I am on holidays.

However, I just talked with Prof. Ebner (boss of MCL) and he agreed that we will support the organization of the COST workshop in Vienna and we will do our best to keep the costs low.

Is this enough commitment from our side so that you can include the Vienna workshop in your timetable?

Best regards Anton

11. Scientific planning

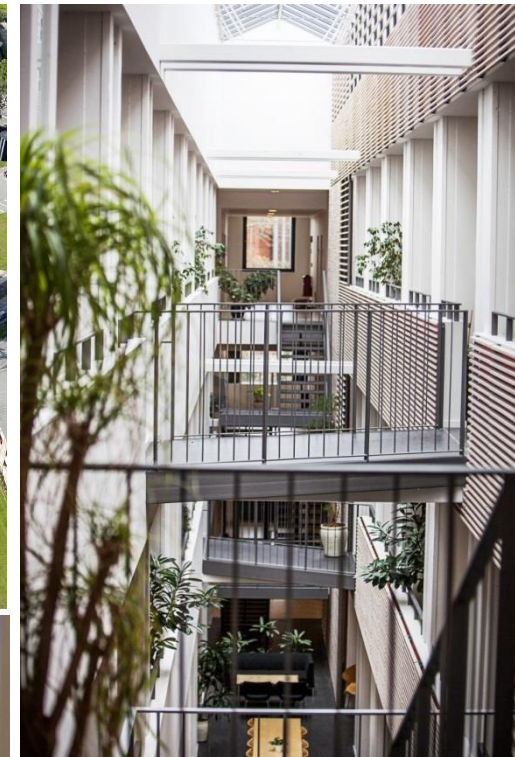
c4: **4th TRAINING SCHOOL *EuNetAir*** at Emdrup Campus - Copenhagen

Modelling, Methods and Technologies for Air Quality Control

organized by Aarhus University, **Copenhagen** (Denmark), 19 - 22 April 2016 (1/2)

Local Organizer:

Prof. Ole Hertel,
Aarhus University,
Aarhus (Denmark)



11. Scientific planning

c4: **4th TRAINING SCHOOL *EuNetAir*** at Emdrup Campus - Copenhagen

Modelling, Methods and Technologies for Air Quality Control

organized by Aarhus University, **Copenhagen** (Denmark), 19 - 22 April 2016 (2/2)

Host for PhD course in connection with COST Action TD1105 EuNetAir

Local Organizer:

**Prof. Ole Hertel,
Aarhus University,
Aarhus (Denmark)**



Dear Michele,

Our Department of Environmental Science will be delighted to host the COST Action TD1105 PhD course to be held in Copenhagen on 19-22 April 2016.

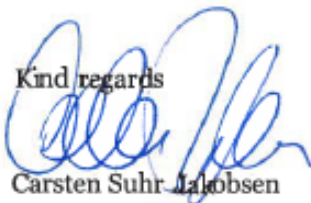
The course will be hosted by Professor Ole Hertel who is also steering group member of the COST Action. The course will take place in Copenhagen, which will allow the participants to experience the great cultural offerings, green areas and Scandinavian culture in the city that was Green Capital of Europe in 2014. The course will most likely take place at the AU Campus Emdrup in Copenhagen, but this will be settled before the announcement of the course.

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.

We are looking forward to a very successful course carried out in close cooperation with partners in the successful COST Action!

Best wishes

Kind regards

A handwritten signature in blue ink, appearing to read 'Carsten Suhr-Jakobsen'.

Carsten Suhr-Jakobsen

Head of Department of Environmental Science, Aarhus University

SIXTH SCIENTIFIC MEETING: WG & 9th MC Meeting

New Sensing Technologies for Outdoor Air-Pollution

Czech Republic Academy of Sciences, Prague (Czech Republic),

Option 1 (No Action Extension to 31 Dec. 2016): 8 - 10 June 2016.

Option 2 (Yes Action Extension to 31 Dec. 2016): 5 - 7 October 2016.

Local Organizers:

Dr. Vera Kurkova, MC Member

Dr. Zdenek Zelinger, MC Member

Dr. Roman Neruda, MC Substitute

CZ Academy of Sciences

Prague (CZ)



www.shutterstock.com · 166747631



SIXTH SCIENTIFIC MEETING: WG & 9th MC Meeting

New Sensing Technologies for Outdoor Air-Pollution

Czech Republic Academy of Sciences, **Prague** (Czech Republic)

Option 1 (No Action Extension to 31 Dec. 2016): 8 - 10 June 2016.

Option 2 (Yes Action Extension to 31 Dec. 2016): 5 - 7 October 2016.

Letter of invitation to host a COST Action TD1105 WG meeting and MC meeting in
Prague, Czech Republic, on 8-10 June, 2016

Local Organizers:

Dr. Vera Kurkova, MC Member
Dr. Zdenek Zelinger, MC Member
Dr. Roman Neruda, MC Substitute
CZ Academy of Sciences
Prague (CZ)



Dear Michele,

I am delighted to be able to offer the J. Heyrovský Institute of Physical Chemistry of the Czech Academy of Sciences, Prague as the host for a COST Action TD1105 WG and MC meeting to be held in Prague on 8-10, June 2016.

The intention is that this meeting will be formally hosted by me in collaboration with V. Kůrková and R. Neruda, but local arrangements will be made through the J. Heyrovský Institute of Physical Chemistry of the Czech Academy of Sciences, Prague.

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, matching those of Action EuNetAir last years.

Best wishes



Prof. Ing. Zdeněk Zelinger, CSc.
Czech Republic MC Member
J. Heyrovský Institute of Physical Chemistry
of the Czech Academy of Sciences,
Dolejškova 3
182 26 Prague
Czech Republic

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

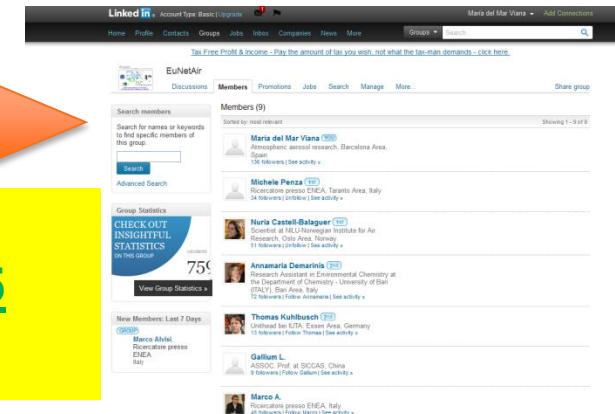
hosted by ENEA

Dr. Marco Alvisi, Webmaster Coordinator

Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli, Webmaster Team

Social Scientific ESRs Network (SSEN) by LinkedIn

Members: >50 - Moderators: M. Viana, M. Minguillon



3^o CALL for Short Exchange Visits launched on June 2014
Short Term Scientific Mission: **13 FUNDED** by 30 June 2015

Dr. Jan Theunis, STSM Coordinator EuNetAir



EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY



 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

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

- **Margurite Nyhan**, The Senseable City Lab, MIT, Boston, USA
- **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)



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 ✓

Brochure

Leaflet

Release 1:
published on January 2013

Release 2:
to be published Spring 2016
Final Edition



11. Scientific planning - d4: DISSEMINATION PLAN

Dr. Fabio Galatioto

Chair of Dissemination Committee

Upcoming Events

EuroNanoforum 2015, June 10-12, 2015, Riga, Latvia. <http://euronanoforum2015.eu/>

ICEPR'15, 5th International Conference on Environmental Pollution and Remediation, July 15-17, 2014, Barcelona, Spain. <http://icepr.org/>

IEEE NANO, 15th International Conference on Nanotechnology, July 27-30, 2015, Rome, Italy. <http://www.ieeenano15.org/>

EuroSensors 2015, 6-9 September 2015, Freiburg, Germany. <http://www.eurosensors2015.org/>

IEEE Sensors 2015, November 1-4, 2015, BEXCO, Busan, South Korea. <http://ieee-sensors2015.org/>

ICEPP 2015, 3rd International Conference on Environment Pollution and Prevention, December 5-6, 2015. Dubai, UAE. Abstract submission deadline: 25 July 2015. <http://www.icepp.org/>

9th International Conference on Sensing Technology (ICST 2015), December 8-10, 2015, Auckland, New Zealand. <http://seat.massey.ac.nz/conferences/icst2015/>

4th International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNNN 2015). December 6-8, 2015. Abu Dhabi Polytechnic, UAE. *Paper submission deadline: 01 August 2015.* <http://www.icnnn.org/>

E-MRS Spring Meeting and Exhibit 2016, May 2-6, 2016, Lille, France; *Symposium by Action: Functional Materials for Environmental Sensors and Energy Systems Applications.* <http://www.emrs-strasbourg.com/>

COST Action TD1105: Past Related 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

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

COST Action TD1105: Past Related 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: Past Related EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- **Eurosensors 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: Past Related 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)



The banner for the ECTP 2014 conference features the ECTP logo (European Construction Technology Platform) on the left. The main title is "Construction and Built Environment: Future Horizons" with the European Union flag. Below the title, it states "17-19 June 2014, Brussels". To the right, there are logos for "Energy Efficient Buildings" and "reFINE" (Research for Future Infrastructures in Europe). At the bottom, it lists organizers: ECTP, encord, and ENBRI; supporters: ECCREDI; and co-located event: BUILDING TEST EXPO. A URL is provided at the bottom right: <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.

Other Past 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

Upcoming Event: 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**

Symposium planned at EMRS Spring Meeting 2016

Lille (France), 2-6 May 2016

Advanced Functional Materials for Environmental Monitoring Sensors and Energy Systems Applications

*Proceedings of Symposium EMRS Spring Meeting 2016 to be published under peer-review process in **Beilstein Journal of Nanotechnologies** (IF 2014: 2.3)*

- **Peer-review process** Open Access journal without publication fee (<http://www.beilstein-journals.org/bjnano>).
- **Symposium Organizers**:
 - ✓ Michele Penza, ENEA, Italy
 - ✓ Anita Lloyd Spetz, Linkoping University, Sweden
 - ✓ Albert Romano-Rodriguez, Barcelona University, Spain
 - ✓ Meyya Meyyappan, NASA Ames Research Center, USA
- **Deadline for abstract submission: 11 January 2016**



<http://www.emrs-strasbourg.com>

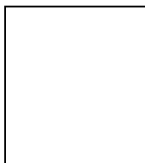
12. Requests for new members - List of New WGs Members (1/2)

COST ACTION TD1105 - 7th MCM in Linköping, 5 June 2015
8 NEW AFFILIATIONS from 4 Countries

Nr	NAME	ORGANIZATION	COUNTRY	EXPERTISE / KEYWORDS	WG INTERESTED	E-MAIL
1	J. Angel FERNANDEZ	University of Santiago de Compostela	ES	Passive Gas Sensors	WG3, SIG3, SIG2	jangel.fernandez@usc.es
2	Jesus R ABOAL	University of Santiago de Compostela	ES	Passive Gas Sensors	WG3, SIG3, SIG2	jesusramon.aboal@usc.es
3	Séverine MARGERIDON-THERMET	ETHERA	FR	Indoor Gas Sensors and Sensor-Systems	WG1, WG2, WG3, SIG2	severine.margeridon@ethera-labs.com
4	Camillo SILIBELLO	ARIANET srl	IT	Air Quality Modelling	WG3, SIG4, SIG2	c.silibello@aria-net.it
5	Olena YURCHENKO	University of Freiburg	DE	Sensitive Layers for Gas Sensing	WG1, WG2, SIG3	olena.yurchenko@fmf.uni-freiburg.de
6	María Piñeiro IGLESIAS	La Coruna University	ES	Environmental Measurements	WG3, SIG2	mariap@udc.es
7	López Mahía PURIFICACIÓN	La Coruna University	ES	Environmental Measurements	WG3, SIG2	purmahia@udc.es
8	Soledad MUNIATEGUI-LORENZO	La Coruna University	ES	Environmental Measurements	WG3, SIG2	smuniat@udc.es

New Affiliations: 8 from 4 Countries

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



CA - Canada

Prof. John YEOW



CN - China

Dr. Yongxiang LI

Dr. Zhifu LIU



RU - Russian Federation

Dr. Alexey VASILIEV



US - United States

Prof. Andrei KOLMAKOV

Dr. Meyya MEYYAPPAN



MA - Morocco

Dr. Radouane LEGHRIB

Dr. Houda LAHLOU



UA - Ukraine

Dr. Olena TUROS

Dr. Arina PETROSIAN

Dr. Oksana ANANYEVA

Dr. Liudmyla MYKHINA

Dr. Liliia PETRUK

Dr. Tetiana MAREMUKHA

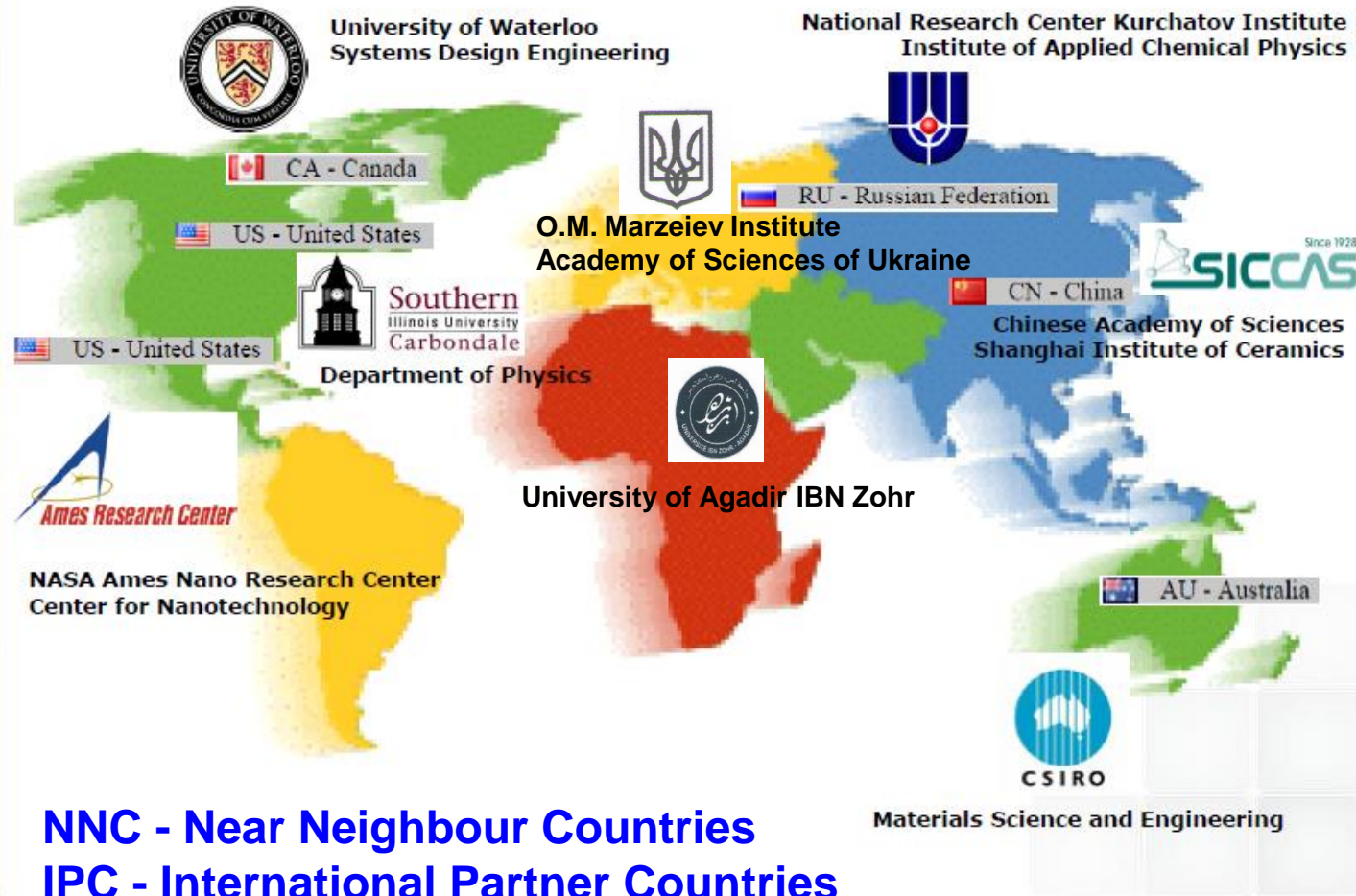
7 Non-COST Countries and 8 Non-COST Institutions

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**
 - A **List of Joint-Publications** (Year 3: 2014-15) from Action will be updated and downloaded in Action webpages
 - **Other JOINT-PUBLICATIONS are HIGHLY welcomed !**

Publications of EuNetAir participants

List of publications related to EuNetAir

A. Kumar, J. Brunet, C. Varenne, A. Ndiaye, A. Pauly, M. Penza, M. Alvisi
Tetra-tert-butyl copper phthalocyanine-based QCM sensor for toluene detection in air at room temperature
Sens. Act. B: Chem. 210 (2015) 398–407

C. Bur
Selectivity Enhancement of Gas Sensitive Field Effect Transistors by Dynamic Operation
Linköping University Electronic Press, 2015;
doi: 10.3384/diss.diva-114670;
ISBN (print): 978-91-7519-119-5

C. Bur, M. Bastuck, D. Puglisi, A. Schütze, A. Lloyd Spetz, M. Andersson
Discrimination and quantification of volatile organic compounds in the ppb-range with gas sensitive SiC-FETs using multivariate statistics
Sens. Act. B: Chem. 214 (2015) 225-233

D. Puglisi, J. Eriksson, C. Bur, A. Schuetze, A. Lloyd Spetz, M. Andersson
Catalytic metal-gate field effect transistors based on SiC for indoor air quality control
J. Sens. Sens. Syst. 4 (2015) 1-8

C. Bur, M. Bastuck, A. Schütze, J. Juuti, A. Lloyd Spetz, M. Andersson
Characterization of ash particles with a micro-heater and gas-sensitive SiC field-effect transistors
J. Sens. Sens. Syst. 3 (2014) 305-313

Z. Damastuti, C. Bur, N. Lindqvist, M. Andersson, A. Schütze, A. Lloyd Spetz
Hierarchical methods to improve the performance of the SiC-FET as SO₂ sensors in flue gas desulphurization systems
Sens. Act. B: Chem. 206 (2015) 609–616

J. Huotari, R. Bjorklund, J. Lappalainen, A. Lloyd Spetz
Nanostructured Mixed Phase Vanadium Oxide Thin Films as Highly Sensitive Ammonia Sensing Material
Procedia Engineering 87 (2014) 1035 – 1038

A. Cvetković, M. Jovašević-Stojanović, D.A. Marković, Z. Ristovski
Concentration and source identification of polycyclic aromatic hydrocarbons in the metropolitan area of Belgrade, Serbia
Atm. Environ. 2105, In Press, doi:10.1016/j.atmosenv.2015.04.034

Dynamic multivariate regression for on-field calibration of high speed air quality chemical multi-sensor systems
S. De Vito, P. Delli Veneri, E. Esposito, M. Salvato, O. Popoola, V. Bright, R.L. Jones
Proceedings of AISEM Annual Conference, 2015 XVIII, pp.1-3, doi: 10.1109/AISEM.2015.7066794

I. Marr, K. Neumann, M. Thelakkat, R. Moos
Undoped and Doped Poly(tetraphenylbenzidine) as Sensitive Material for an Impedimetric Nitrogen Dioxide Gas Dosimeter
Appl. Phys. Lett. 105 (2014) 133301

M. Voinova
Modelling of the response of acoustic piezoelectric resonators in biosensor applications – Part 1: The general theoretical analysis
J. Sens. Sens. Syst. 4 (2015) 137-142

A. M. Eriksson, M. V. Voinova and L. Y. Gorelik
Nonresonant high frequency excitation of mechanical vibrations in a graphene based nanoresonator.
New J. Phys. 17 (2015) 033016

5 Special Issues:
JSSS, Copernicus - 2014
Urban Climate, Elsevier
AMA Science Proceedings
JSSS, Copernicus - 2016
Beilstein Journal
of Nanotechnology - 2016



15. Location and Date of next MC Meeting

FIFTH SCIENTIFIC MEETING: WGs & 8th MC Meeting

hosted by Bulgarian Academy of Sciences, **Sofia** (Bulgaria), 2 - 4 Dec 2015

Letter of invitation to host a COST Action TD1105 meeting at
Sofia, Bulgaria, in December 2015



Dear Dr. Penza,

It is a pleasure to offer Bulgarian Academy of Sciences, Sofia, Bulgaria as the venue for the COST Action TD1105 meeting (Working Group and the Management Committee) to be held in Sofia in December 2015.

The intention is that this meeting will be formally hosted by us, but local arrangements will be made through the specialized internal Organization.

This invitation is based on the assumption that the main costs will be covered by the COST Action TD1105 *EuNetAir*, with administrative management as ruled by COST Vademeccum. We will come back with details regarding meeting room, food and accommodation.

We are looking forward to a very successful meeting in highly conducive surroundings.

Best wishes

Prof. DrSc D. Syrakov

Prof. DrSc I. Nedkov



Local Co-Organizers:

**Prof. Ivan Nedkov, BG MC Member,
Prof. Dimiter Syrakov, BG MC Member,
Bulgarian Academy of Sciences - Sofia (Bulgaria)**

16. Summary of MC decisions 7th MC Meeting, 5 June 2015, Linköping, SE

DESCRIPTION OF DECISIONS DISCUSSED BY ACTION TD1105 MC	APPROVED
MC7D01. Action EXTENSION till 31 December 2016	YES/NO
MC7D02. 13 STSMs : from 5 days to 90 days, or equivalently	YES/NO
MC7D03. WG1-WG4 Meeting , VINCA Institute and Public Health Institute, Belgrade, Serbia, 13 - 14 Oct. 2015	YES/NO
MC7D04. WG1-WG4 Meeting , Sofia, Bulgaria, 2 - 3 December 2015 (joined to 8 th MC Meeting)	YES/NO
MC7D05. 4th Action Workshop on <i>Innovations and Challenges for Air Quality Control Sensors</i> , 17 - 18 March 2016, Wien, Austria	YES/NO
MC7D06. 4th Training School of Action , 19 - 22 April 2016, Copenhagen, Denmark	YES/NO
MC7D07. WG1-WG4 Meeting , Prague, CZ. <u>Option 1</u> (No Extension): 8 - 9 June 2016. <u>Option 2</u> (Yes Extension): 5 - 6 October 2016 (joined to 9 th MC Meeting)	YES/NO
MC7D08. NEWSLETTER: Issue 7 (Nov-Dec. 2015); Issue 8 (May-June 2016) LEAFLET/BROCHURE : UPDATED Issues	YES/NO
MC7D09. 8th MC Meeting : 4 Dec. 2015, Sofia, Bulgaria, by BG Academy of Sciences	YES/NO
MC7D10. 9th MC Meeting : <u>Option 1</u> (No Extension): 10 June 2016. <u>Option 2</u> (Yes Extension): 7 October 2016, Prague, CZ, by CZ Academy of Sciences	YES/NO
MC7D11. DISSEMINATION & OUTREACH ACTIVITIES :	YES/NO
<u>Budget Year 4</u>: 175 k€ (estimated by COST): 152 k€ (Science) + 23 k€ (max 15% FSAC)	

17. Closing

7th MC Meeting, 5 June 2015, Linköping, Sweden, hosted at Linköping University

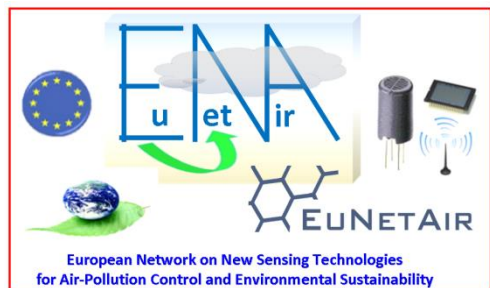
WELCOME from Chair addressing the 7th MC Meeting, Linköping

SEE YOU in SOFIA, 2 - 4 December 2015

Bulgarian Academy of Sciences



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

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

ACKNOWLEDGEMENTS

Linköping, Sweden, 3 - 5 June 2015



THANK YOU VERY MUCH FOR YOUR KIND ATTENTION !

