



COST

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

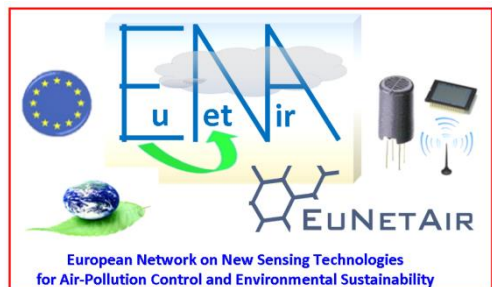
COST Action TD1105

3rd MC Meeting at **IREC**, **Barcelona**, **21 June 2013**

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

Year 1: 1 July 2012 - 30 June 2013 (*Ongoing Action*)

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



Michele PENZA

**Function in the Action: Chair
ENEA / Italy**



1. Welcome to Participants

3rd MANAGEMENT COMMITTEE MEETING Invited Talks and Management Committee Barcelona, 21 June 2013

IREC, Institut de Recerca en Energia de Catalunya

Address: Jardins de les Dones de Negre, 1, 2nd floor

08930 Sant Adrià de Besòs - Barcelona (Spain)

- **Participating Parties: 27**
- MC Meeting Participants:
40+ (TBC)

MEETING AGENDA

AGENDA	
9:00 - 14:00	REGISTRATION
9:30 - 10:00	WELCOME ADDRESS
	Juan Ramon Morante , IREC Representative, Barcelona, Spain General Chair of <i>Transducers 2013 - Eurosenors XXVII</i>
	Michele Penza , Action Chair, ENEA, Brindisi, Italy
10:00 - 11:00	INVITED TALKS
10:00 - 10:30	Invited Talk 1: Automotive Air Quality Sensors Nicolas Moser , MC Member and WG4 Vice-Chair, SGX-Sensortech, Corcelles, Switzerland
10:30 - 11:00	Invited Talk 2: Challenges for a New Air Quality Directive: The Role of Monitoring and Modelling Techniques Carlos Borrego , MC Member, Institute of Environment and Development, Aveiro, Portugal
11:00 - 11:30	<i>Coffee-Break</i>
11:30 - 13:30	3rd MANAGEMENT COMMITTEE MEETING
13:30 - 14:30	<i>Light Lunch offered by Action meeting organization</i>
14:30	Meeting Closing

2. Adoption of Agenda

Draft Agenda
3rd Management Committee Meeting
COST Action TD1105

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

IREC, Institut de Recerca en Energia de Catalunya,

Address: Jardins de les Dones de Negre, 1, 2nd floor

08930 Sant Adrià de Besòs - Barcelona (Spain) - Tel. +34 933 562 615

21 June 2013, 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 Coffe-break after discussion of the issue 8. APC (from DC)

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

3. Approval of minutes and matters arising of last meeting

DOODLE Survey to

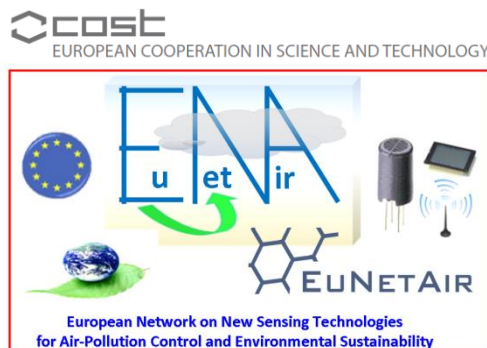
- **Minutes of 2° MC Meeting (Rome, 6 Dec. 2013)**
launched on Febr. 2013. Hardpaper file circulated in MC.
- **Work & Budget Plan Year 2 (1 July 2013 - 30 June 14)**
launched on April 2013. Hardpaper file circulated in MC.

MC needs to approve:

- **2° MCM Minutes (Rome)**
- **2° Year W&B Plan**

4. Update from the Action Chair

a. Status of Action, including participating Countries



- **CSO Approval:** 01 Dec. 2011
- **Kick-off Meeting:** 16 May 2012
- **Start of Grant:** 01 July 2012
- **End of Grant:** 30 June 2016

www.cost.eunetair.it

MC Chair:

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

MC Vice Chair:

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

Grant Holder:

University of Bari, IT
gianluigi.degennaro@uniba.it

Scientific Secretary:

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

Science Officer:

Dr. Deniz Karaca
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Administrative Officer:

Dr. Kent Hung
kent.hung@cost.eu

Rapporteur ESSEM:

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

Rapporteur MPNS:

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

Rapporteur CMST:

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

4. Update from the Action Chair

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



PARTIES

Already accepted MoU: 27 Countries

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

Non-COST Countries

Australia, Canada, China, Russia, USA

MC needs to approve the new 2 Parties: RS, MK
New procedure e-COST introduced by coming COST Vademecum

Country

MC Members (48): Male (73%) - Female (27%)

Belgium	Dr Jan THEUNIS; Dr Anne-Claude ROMAIN
Bulgaria	Dr Dimiter SYRAKOV; Dr Ivan NEDKOV
Czech Republic	Dr. Vera KURKOVA; Dr. Zdenek ZELINGER
Denmark	Prof. Ole HERTEL
Finland	Prof. Kaarle HAMERI; Prof. Jyrki LAPPALAINEN
France	Prof. Marcel BOUVET; Prof. Jerome BRUNET
Germany	Prof. Andreas SCHUETZE; Dr Thorsten CONRAD
Greece	Prof. George PAPAPOULOS; Prof. Kostas KARATZAS
Hungary	Ms Krisztina LABANCZ; Dr Zita FERENCZI
Iceland	Dr Arngrimur THORLACIUS
Ireland	Dr. Francesco PILLA
Israel	Dr. Liad ORTAR
Italy	Dr Michele PENZA; Prof. G. SBERVEGLIERI; Dr. G. DE GENNARO
Latvia	Dr Iveta STEINBERGA
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
Slovenia	Dr Grisa MOCNIK; Dr Rahela ZABKAR
Spain	Prof. Juan Ramon MORANTE; Prof. Eduard LLOBET VALERO
Sweden	Prof. Anita LLOYD SPETZ; Prof. Ingrid BRYNTSE
Switzerland	Dr Danick BRIAND; Dr. Nicolas MOSER
United Kingdom	Dr John SAFFELL; Prof. Roderic JONES
Turkey	Prof. Zafer ZIYA OZTURK; Prof. Mehmet Fatih DANISMAN

MC Chair: Michele Penza, ENEA, IT

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

Grant Holder: University of Bari, IT

Kick-off Meeting at Brussels on 16 May 2012

<u>Country</u>	<u>MC Substitutes (26)</u>
Belgium	Dr Julien DELVA
Czech Republic	Dr. Roman NERUDA
Denmark	Dr. Lise Lotte SORENSEN
Finland	Prof. Jarmo PESKINEN
France	Dr Jean SOUSSE Prof. Alain PAULY
Germany	Dr. Daniela SCHONAUER-KAMIN Dr. Thomas KUHLBUSCH
Greece	Prof. George KIRIKIADIS Dr. Roberto SIMMARANO
Italy	Dr. Marco ALVISI Dr. Saverio DE VITO
Poland	Prof. Jacek SZUBER
Portugal	Dr. Joao Paulo TEIXEIRA
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
UK	Prof. Julian GARDNER Dr Robin NORTH Prof. Florin UDREA

MANAGEMENT COMMITTEE

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:

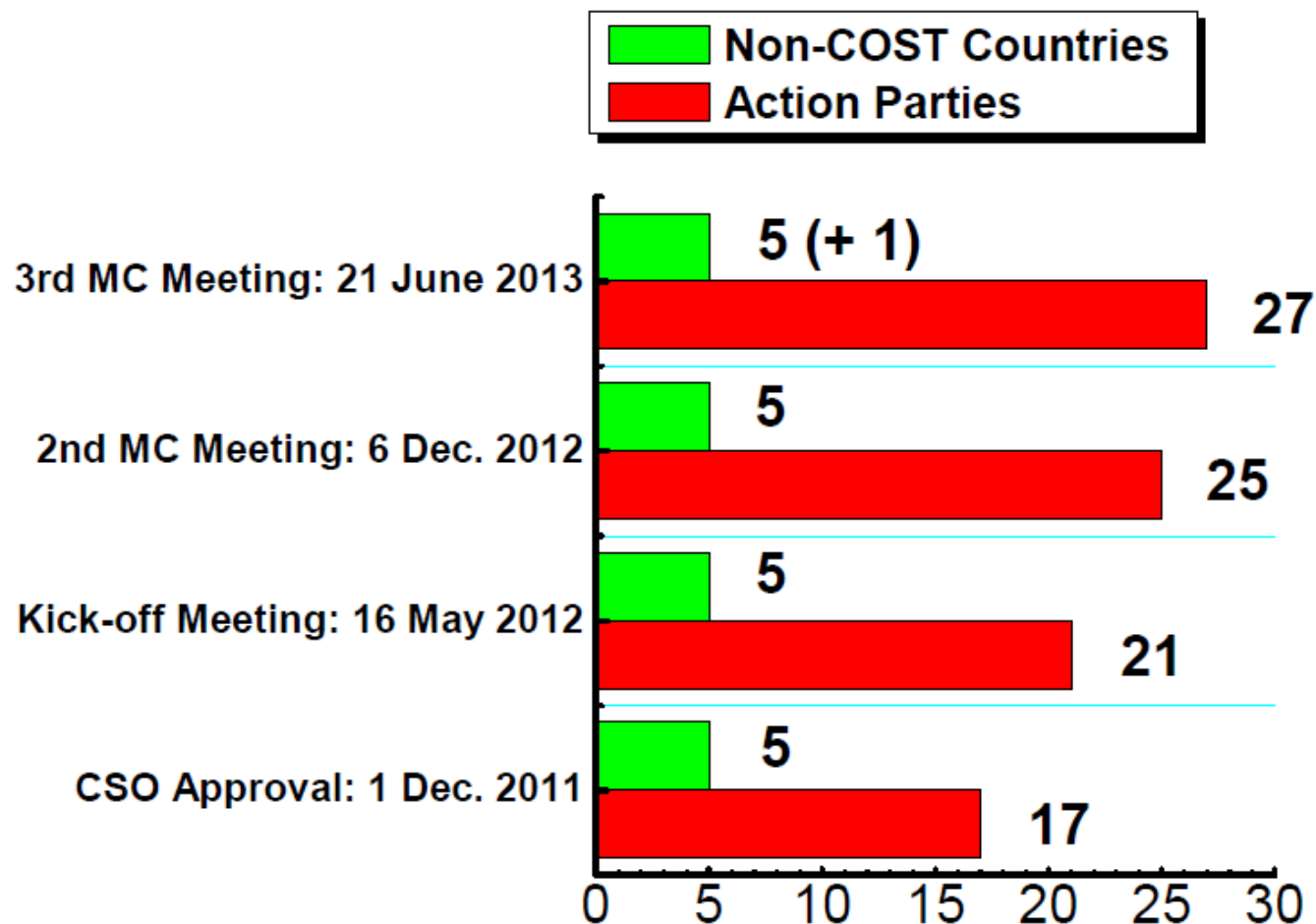
CORE-GROUP & STEERING COMMITTEE

- *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

COST Action TD1105 EuNetAir is growing up



4. Update from the Action Chair

c. **STSM status** and new applications

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

- **Call launched 20/11/12**
- First Period (1 July 2012 - 30 June 2013):
 - **4 STSMs of 5 days and 2 STSMs of 1 month (30 days) - **First Step****
- 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.*

From 8400 increased to 17125 EUR (W&B Plan)

**Additional resources from Action Budget
to fund more STSMs (from 6 to 11).**

- Travelling costs and subsistence:
- Travel: 300 EUR recommended
- Subsistence: 60 to 90 EUR / day
- max. 2500 EUR
- 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

c. **STSM status** and new applications

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

- **When ?**
 - Open call
 - Periodic decision every 2 - 3 months
 - 31/12/2012
 - 28/02/2013
 - 30/04/2013
 - 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

- 11 STSMs approved and ongoing in the Action TD1105 (Year 1) (1/2)

STSMs (Action 1st year: 2012-2013):

Nr	ESR Applicant	Topic of STSM	Tutor of Home Institution	Tutor of Host Institution	Period/Duration of STSM	Grant requested	NOTE
1	Victor Epitropou PhD-student vepitrop@isag.meng.auth.gr	Spatial processing of AQ monitoring data for the support of chemical weather modelling	Prof. Kostas Karatzas, Aristotle University of Thessaloniki, Greece	Prof. Jaakko Kukkonen, Finnish Meteorological Institute, Helsinki, FI	12 - 18 May 2013 5 Days	1200 €	Approved
2	Ana Sofia Godinho da Fonseca PhD-student ana.godinho@idaea.csic.es	Environmental measurements and air-pollution modelling	Dr. Mar Viana, Institute of Environmental Assessment and Water Research, CSIC, Barcelona, ES	Prof. Kaarle Hämeri, University of Helsinki, Division of Atmospheric Sciences Helsinki, Finland	2 May - 2 June 2013 1 Month	2000 €	Approved
3	Vânia Martins PhD-student vania.ferreira@idaea.csic.es	<u>Short Course:</u> Measurements of atmospheric aerosols: Aerosol physics, sampling and measurement techniques, 4-10 May 2013, Hyytiälä, Finland	Dr. Mar Viana, Institute of Environmental Assessment and Water Research, CSIC, Barcelona, Spain	Prof. Kaarle Hämeri, University of Helsinki, Division of Atmospheric Sciences Helsinki, Finland	4 - 10 May 2013 5 Days	750 €	Approved
4	Martin Kunz PhD-student mkunz@bgc-jena.mpg.de	Building and calibration of high resolution carbon dioxide sensors for UAV	Dr. Jošt Valentin Lavrič, Max-Planck-Institute for Biogeochemistry Jena, Germany	Dr. Hans Martin, CEO, PhD Henrik Rödjegård, Supervisor, SenseAir, Delsbo, Sweden	17 April - 14 May 2013 1 Month	2300 €	Approved
5	Arngrímur Thorlacius Associate Professor amgrimur@lbhi.is	Air Quality Modelling on Particulate Matter	Dr. Hlynur Óskarsson, Faculty of Environmental Sciences, Agricultural University of Iceland, Hvanneyri, Iceland	Prof. Olav M. Kvalheim, Department of Chemistry, University of Bergen, Norway	12 May – 2 June 2013 3 Weeks	1775 €	Approved

Potential Expressions of STSMs Applicants already received for Year 2

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

• 11 STSMs approved and ongoing in the Action TD1105 (Year 1) (2/2)

Potential Expressions of STSMs Applicants already received for Year 2

6	Mariola Brines Perez PhD-student mariola.brines@idaea.csic.es	<u>Short Course:</u> Measurements of atmospheric aerosols: Aerosol physics, sampling and measurement techniques, 4-10 May 2013, Hyytiälä, Finland	Prof. Xavier Querol, Institute of Environmental Assessment and Water Research, CSIC, Barcelona, Spain	Prof. Kaarle Hämeri, University of Helsinki, Division of Atmospheric Sciences Helsinki, Finland	3 - 10 May 2013 5 Days	850 €	Approved
7	Simona Catino M. Sc. Doctor catino.simona@gmail.com	Application of lichens as ecological indicators of atmospheric nitrogen deposition	Dr. Lucrezia DeGennaro Lenviros Ltd, Bari, Italy	Prof. Cristina Mágua, Center for Environmental Biology, University of Lisbon, Portugal	15 April - 15 May 2013 1 Month	2100 €	Approved
8	Jens Eriksson Post-Doc Researcher jenser@ifm.liu.se	Graphene sensors for environmental gas detection	Prof. Anita Lloyd Spetz, Department of Physics, Chemistry and Biology, Linköping University, Sweden	Prof. Andreas Schütze, Saarland University, Germany	20 May - 4 June 2013 2 Weeks	1750 €	Approved
9	Donatella Puglisi Post-Doc Researcher donpu@ifm.liu.se	SiC-FET sensors for environmental gas detection	Prof. Anita Lloyd Spetz, Department of Physics, Chemistry and Biology, Linköping University, Sweden	Prof. Andreas Schütze, Saarland University, Germany	20 May - 4 June 2013 2 Weeks	1750 €	Approved
10	Mehmet Fatih Daşman Associate Professor (ESR) danisman@metu.edu.tr	Microstructured optical fibers (MOFs) as sensors for chemical trace detection	Prof. Ilker Ozkan Department of Chemistry, Middle East Technical University, Ankara, Turkey	Dr. Pier Sazio, Optoelectronics Research Centre (ORC) of University of Southampton, UK	27 - 31 May 2013 5 Days	950 €	Approved
11	Magda Brattoli Post-Doc Researcher magda.brattoli@uniba.it	Evaluation of odour impact, caused by industrial sources, through an integrated approach	Dr. Gianluigi De Gennaro Department of Chemistry, University of Bari, Italy	Prof. Anne-Claude Romain, Faculté des Sciences, Université de Liège, Arlon, Belgium	26 May 2013 - 8 June 2013 15 Days	1700 €	Approved

Inputs from Action GB Committee

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.

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.
- **>40 Participants** to date.

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

MORE ESRs TO BE LINKED !

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

4. Update from the Action Chair

b. Action budget status

Status of the First Year

- **First instalment from COST Office to GH: 90935 euro** (65% of 139900 euro - Action Budget for First Year: 1 July 2012 - 30 June 2013)
- **Amendment n°1 to COST Action Grant Agreement (2 April 2013):** COST has decided to allocate a grant of up to a maximum of **EUR 161600** to carry out the Operation from 01/07/2012 to 30/06/2013
- **Second instalment from COST Office to GH (23 April 2013):** **70665 euro (35%)**



Updating from the Grant Holder (UNIVERSITY OF BARI - ITALY)



	PLANNED	PAID
Meetings	109765	64664
Training School	16000	0
Short Term Scientific Missions	10000	0
Dissemination	4000	2000
Other Expenses Related To Scientific Activities	835	0
<i>TOTAL SCIENCE EXPENDITURE</i>	<i>140600</i>	<i>66664</i>
Financial and Scientific Administration and Coordination (max 15%)	21000	
<i>TOTAL EXPENDITURE</i>	<i>161600</i>	

Dr. Gianluigi De Gennaro
GH Action MC Member

% used: 48%

Updating from the Grant Holder

Status of payments and First-Year budget

SGS 2012	PAID (€)
Dr Radu Ionescu	447.38
Prof. Jyrki Lappalainen	785.61
Prof. Eduard Llobet Valero	275.70
Dr Amadou Ndiaye	501.99
Prof. Zafer Ziya Ozturk	654.08
Dr Michele Penza	536.91
Dr Juan Daniel Prades Garcia	493.43
TOTAL	3 884.10

Σ three events: 10592.02 euro

ISQL 2012	PAID (€)
Prof. Ingrid Bryntse	730.00
Dr Christoph Hueglin	555.90
Dr Michele Penza	480.83
Prof. Jan Theunis	805.70
TOTAL	2 572.42

CM 2012	PAID (€)
Dr Andrea Goldoni	499.59
Prof Juan Ramon Morante	670.63
Dr Michele Penza	657.99
Prof. Albert Romano-Rodriguez	709.58
Ms Cristina Rusti	620.31
Dr John Saffell	977.40
TOTAL	4135.50

Participant	Costs
Dr Marco Alvisi	€ 563,84
Ms Fatima Ezahra Annanouch	€ 443,48
Prof. Marcel Bouvet	€ 861,72
Dr Marco Brini	
Dr Jerome Brunet	€ 585,72
Prof. Ingrid Bryntse	€ 946,01
Dr Nuria Castell-Balaguer	€ 716,05
Dr Lucrezia De Gennaro	€ 291,29
Dr Annamaria Demarinis Loiotile	€ 623,23
Dr Jens Eriksson	€ 615,00
Dr Fabio Galatioto	€ 705,41
Mr Radu Adrian Ionica	€ 691,00
Prof. Roderic Jones	€ 792,14
Dr Christos Koulamas	€ 665,14
Dr Thomas Kuhlbusch*	€ 530,18
Dr Monika Kwoka	€ 649,99
Ms Krisztina Labancz	€ 572,12
Prof. Antonio Lagana	€ 355,80
Prof. Jyrki Lappalainen	€ 848,42
Prof. Eduard Llobet Valero	€ 455,78
Prof. Anita Lloyd Spetz	€ 854,97
Dr Mariacruz Minguillon	€ 505,48
Dr Hans Guido Mucke	€ 521,48
Dr Amadou Ndiaye	€ 467,47
Prof. Ivan Nedkov	€ 618,63
Prof. Zafer Ziya Ozturk	€ 543,26
Dr Michele Penza	€ 628,50
Dr Juan Daniel Prades Garcia	€ 542,58
Dr Donatella Puglisi	
Dr Ulrich Quass	€ 671,11
Dr Anne-Claude Romain	€ 316,21
Prof. Albert Romano-Rodriguez	
Ms Cristina Rusti	€ 195,60
Dr John Saffell	€ 736,55
Ms Daniela Schonauer-Kamin	€ 671,11
Prof. Andreas Schuetze	€ 563,60
Mr Roberto Simmarano	€ 110,00
Dr Iveta Steinberga	€ 866,51
Dr Dario Zappa	€ 361,00
Prof. Dimiter Syrakov	€ 571,12
Mr Jan Theunis	€ 733,17
Dr Arngrimur Thorlacius	€ 1.211,26
Prof. Joaquim Manuel Vieira	€ 682,59
Dr Ernie Weijers	€ 852,31
Dr Magda Brattoli	€ 405,06
Prof. Ole Hertel	€ 1.045,24
Dr Christoph Hueglin	€ 667,00
Prof. Konstantinos Kourtidis	€ 759,58
Mr Nicolas Moser	€ 824,30
Dr Marina Voinova	€ 830,23
Mr Thorsten Conrad	€ 756,60

**WG3-WG4 MEETING, AIRMONTECH Workshop
4-6 MARZO 2013, DUISBURG, GERMANY**

Participant	Costs
Dr Igor Atanasov	€ 594,10
Dr Nuria Castell-Balaguer	€ 895,35
Dr Simona Catino	€ 804,66
Dr Sergey Chicherin	€ 816,95
Dr Miguel Garcia	€ 954,84
Dr Annamaria Demarinis Loiotile	€ 736,49
Dr Zita Ferenczi	€ 560,56
Dr Helena G	€ 764,85
Dr Christoph	€ 425,08
Dr Philipp	€ 729,40
Olga Kislova	€ 766,12
Krisztina Labancz	€ 540,56
Magda Brattoli	€ 785,94
Minguillon	€ 751,56
	€ 1.089,27
Chicherin	€ 28,36
Romain	€ 316,21



Payments to be finalized (Accrued):



Barcelona, 20-21 June 2013:

- FIRST INTERNATIONAL WORKSHOP on
New Sensing Technologies and Transducers for Air-Quality Monitoring
- 3° MANAGEMENT COMMITTEE MEETING

36000 euro for about 60 Participants planned

- 11 Short-Term Scientific Missions  about 17000 euro
(they are completing in a few days time)

- 1° TRAINING SCHOOL on Environmental Technologies and Air-Quality
Monitoring, Barcelona, 13 - 15 June 2013, UNIVERSITAT de Barcelona (UB)

18000 euro for 5 trainers and 20 trainees

Grant Holder role_COST Action TD1105

4 giugno 2013 0:49

Da: Gianluigi De Gennaro

A: Michele Penza

Cc: gianfranco berardi Annamaria Demarinis Loiotile

Dear Michele

I am reading with great regret of the complaints of some participants towards the reimbursement procedures we are doing. The issue concerning the taxation of flat-rate expenses provided for by Italian Fiscal Law, which we must and want to respect, is affecting the climate of great understanding necessary to the success of the Action. Unfortunately, our and your initial evaluation about the economic importance of this taxation, was optimistic.

Some participants, and I think the officers too, are giving much weight to this issue. This situation is determining a pressure on our Administrative Offices and my staff that we are not able to bear anymore and which is burdening the large and unsuspected efforts we are bending with a spirit of service. To prevent this discontent can further weaken the climate and the high scientific level of the Action, I consider it appropriate to withdraw the availability that I had given to act as Grant Holder of this COST Action.

Therefore I would ask you to verify in the short term (considering the next closure of the first year of project) the availability of other partners to replace us. I have taken such a decision after hearing the Finance Officer and my staff that believe that this activity, in these conditions, is no longer sustainable.

If you believe, please forward this message to the other members of the Management Committee and/or all the partners of the Action.

Moreover I would like to inform you that I can't attend the next Management Committee Meeting in Barcelona due to scheduling conflicts. Please convey my best wishes to the other members of the committee, which will surely understand the reasons for this our step back.

king regards
Gianluigi de Gennaro

Dr. Gianluigi de Gennaro , Ph.D.
Dipartimento di Chimica
Università degli Studi di Bari 'Aldo Moro'
Via Grottole, 4 - 70126 Bari

The great difficulties encountered during this year...



- Italian Tax Legislation unfortunately considers the flat rate expenses not as a simple reimbursement for a participant but **as an income** for the researcher and for this reason it is **subject to taxation**.
- According to Italian Fiscal Law, on each flat rate reimbursement (just because it is seen as an income) we have to apply a withholding tax of 20% for individuals residing in Italy and **30% for foreign residents** (in accordance with **DPR 917/86**).
- It would be possible (it's discretion of the Italian Buyer) to apply the **Conventions**, if they exist, for the avoidance of dual taxation, signed by the countries of non-residents, which allow them to be exonerated from taxation in Italy, it being understood that they are obliged to pay the taxes anyway in their Country.
- In order that the not-resident Participant can take advantage of the conventions against double taxation, two basic conditions are required:
 - 1) The not resident-researchers have to verify and communicate to the GH the existence of the Agreement signed between Italy and the researcher's Country of residence in order to avoid dual taxation;
 - 2) The Participant have to submit, in addition to the statement of tax liability, the proof of the veracity of the data declared by the Tax Authority of their Country of residence.

TESTO UNICO DELLE IMPOSTE SUI REDDITI

(Decreto del Presidente della Repubblica 22 dicembre 1986 n. 917 e successive modificazioni ed integrazioni)

TITOLO I

IMPOSTA SUL REDDITO DELLE PERSONE FISICHE

Capo I
DISPOSIZIONI GENERALI

Articolo 1
Presupposto dell'imposta

1. Presupposto dell'imposta sul reddito delle persone fisiche è il possesso di redditi in denaro o in natura rientranti nelle categorie indicate nell'articolo 6.

Articolo 2
Soggetti passivi

1. Soggetti passivi dell'imposta sono le persone fisiche, residenti e non residenti nel territorio dello Stato.
2. Ai fini delle imposte sui redditi si considerano residenti le persone che per la maggior parte del periodo di imposta sono iscritte nelle anagrafi della popolazione residente o hanno nel territorio dello Stato il domicilio o la residenza ai sensi del codice civile.
2-bis. Si considerano altresì residenti, salvo prova contraria, i cittadini italiani cancellati dalle anagrafi della popolazione residente ed emigrati in Stati o territori aventi un regime fiscale privilegiato, individuati con decreto del Ministro delle finanze da pubblicare nella Gazzetta Ufficiale.

Articolo 3
Base imponibile



And so...the Italian tax Law makes it impossible for us to apply the COST rules...

UNIBA has decided to leave the role of GH to make the reimbursement procedures easier to apply and thus create a happy and peaceful climate among the participants of the action, which is necessary for the success of this important project...

Updating from the Grant Holder

Step back of Mandate of GH from UNIBA due to contradicting IT Fiscal Laws

COST rules contradict Italian Reimbursement Fiscal Laws and new GH is expected at 3rd MC meeting (21 June 2013):

- **Flat Rate is considered an Income in IT Fiscal Laws.**
- **National Taxation Scheme must be applied by IT GH such as 20% for IT Participants and 30% for Non-IT Participants.**
- **Fiscal Statement of Taxation will be sent to Participants from GH UNIBA for Income 2013 in the next period February-April 2014.**
- **This was the cause of delay in reimbursements and the main reason to step back of IT GH in order to create future better relationships in the Action TD1105.**

Candidature from **Eurice GmbH** (Germany) as new Grant Holder

Status of nomination as DE MC Member as pre-requisite for GH

History of Action TD1105 GH

- IT GH (UNIBA) **step back** due to contradiction of **IT Fiscal Law** versus **COST Rules**
- Chair informed MC by email (06/2013)
- Chair informed COST Office & IT CNC
- New Candidate appears as **EURICE** (Germany)
- Action Chair informed DE CNC in Hannover during Annual Progress Conference (12-13 June 2013) on new GH from Germany.
- A DE MC Member (T. Conrad) step back from MC for nomination of **ONLY 2 MC Members per Country** (1 nomination must be for EURICE as Member to satisfy the rule that GH must be represented in Action MC.



EURICE GMBH - Science Park 1 - 66123 Saarbrücken - Germany

Dr. Michele Penza

ENEA

Italian National Agency for New Technologies, Energy and Sustainable Economic Development

Technical Unit for Materials Technologies -

Brindisi Research Center

SS- 7, Appia, km 713,7

I-72100 Brindisi - ITALY

ANSPRECHARTNER Corinna Hahn

DURCHWAHL 0681/95923-362

DATUM 12.06.2013

Letter of Availability to serve as Grant Holder in COST Action TD1105 (EUNETAIR) in the period between July 1, 2013 until June 30, 2016

Dear Dr. Penza, dear Prof. Schütze,

In my function as Managing Director of European Research and Project Office GmbH (EURICE) I herewith confirm our commitment to take over the role of Grant Holder in the COST Action TD1105 entitled "EUROPEAN NETWORK ON NEW SENSING TECHNOLOGIES FOR AIR-POLLUTION CONTROL AND ENVIRONMENTAL SUSTAINABILITY - EUNETAIR" as of July 1, 2013.

We are willing to take over the rights and obligations of Grant Holder in accordance with the terms and conditions for financing COST activities under the COST Grant System and based on a discussion with Dr. Penza, which took place on June 7, 2013.

EURICE has been going to contact the German COST National Coordinator (CNC) to inform on this availability and make adapt the nomination in the Management Committee as additional DE Member for achieving the eligibility conditions as GH through election by Action MC.

Thanks to our extensive experience in managing European projects from different programmes since the year 2000, we can guarantee that all economic and practical aspects concerning managing all financial aspects of the Grant (i.e. local taxation schemes, potential currency exchange expenses etc.) will be handled in a professional and efficient manner.

Moreover, I confirm that we possess the required administrative capacities and financial stability to qualify as Grant Holder Institution; we will be glad to provide the necessary supporting documentation as necessary.

In addition, I herewith confirm that there is no potential conflict of interest which might impact our involvement in EUNETAIR.

With kind regards,

Eurice GmbH

Jörg Schärer
Managing Director

Cc: Prof. Dr. Andreas Schütze, EUNETAIR DE MC member

**Election by MC of EURICE as
New GH for Action TD1105**

Updating from the Grant Holder

Timing of Passing from Old GH to New GH

Old GH UNIBA will complete ALL EXPENDITURES related to Year 1 (1 July 2012 - 30 June 2013).

New GH Eurice will assume the role starting from Year 2 (1 July 2013 - 30 June 2016) by the signature of the Grant Agreement between COST Office and Eurice Legal Representative, after MC election and registration in the Minutes of 3° MC meeting at Barcelona.

6. Update from the COST Office

Science Officer: Deniz Karaka, ESSEM

Administrative Officer: Kent Hung, ESSEM

- **Deniz Karaca**

New Science Officer of Action TD1105

Inputs from SO

7. Update from the DC Rapporteur(s)

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

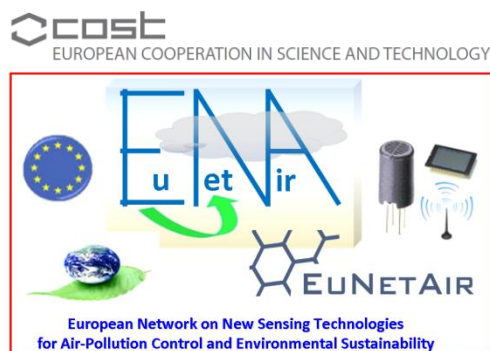
MPNS Rapporteur: Joaquim Manuel Vieira, PT - University of Aveiro

CMST Rapporteur: Antonio Laganà, IT - Università di Perugia

ESSEM Rapporteur: Not attending

MPNS Rapporteur: Attending

CMST Rapporteur: Not attending



www.cost.eunetair.it



MC Chair:	Dr. Michele Penza, ENEA, IT michele.penza@enea.it
MC Vice Chair:	Prof. Anita Lloyd Spetz Linköping University, SE spetz@ifm.liu.se
Grant Holder:	University of Bari, IT gianluigi.degennaro@uniba.it
Scientific Secretary:	Dr. Annamaria Demarinis Loiotile annamaria.demarinis@uniba.it
Science Officer:	Dr. Deniz Karaca deniz.karaca@cost.eu
Administrative Officer:	Dr. Kent Hung kent.hung@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

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

Earth System Science and Environmental Management

Annual Progress Conference 2013

“Bundesanstalt für Geowissenschaften und Rohstoffe (BGR)”
Federal Institute for Geosciences and Natural Resources

2, Stilleweg - 30419 Hannover, Germany

12th and 13th June 2013

13th June 2013

Moderator: Ulrike Pechinger

09:00 – 09:30 TD0803 | Detecting evolutionary hot spots of antibiotic resistances in Europe (DARE) | Despo Fatta-Kassinou (Vice-Chair) | Ertan Durmusoglu (Rapporteur)

09:30 – 10:00 ES1106 | Assessment of EUROpean AGRiculture WATER use and trade under climate change (EURO-AGRIWAT) | Anna Dalla Marta (Chair) | Ipek Erzi (Rapporteur)

10:00 – 10:30 ES1105 | Cyanobacterial blooms and toxins in water resources: Occurrence, impacts and management | Triantafyllos Kaloudis (Chair) | Dick Blaauboer (Rapporteur)

10:30-11:00 Coffee (including poster review)

Moderator: Dick Blaauboer

15:45 – 16:00 Keynote – EUMETNET Programme phase 2013-2017 | Dick Blaauboer

16:00 – 16:30 ES1005 | Towards a more complete assessment of the impact of solar variability on the Earth's climate | Katje Matthes (Vice-Chair) | Hugo De Backer (Rapporteur)

16:30 – 17:00 ES1004 | European framework for online integrated air quality and meteorology modelling | Alexander Baklanov (Chair) | Teresa Abrantes (Rapporteur)

17:00 – 17:30 TD1105 | European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability - EuNetAir | Michele Penza (Chair) | Konstantinos Kourtidis (Rapporteur)

17:30 – 18:00 ES0804 | Advancing the integrated monitoring of trace gas exchange between biosphere and atmosphere | Lutz Merbold (Chair) | Ulrike Pechinger (Rapporteur)

18:00 – 18:10 Closing remarks – Ipek Erzi

**Monitoring Progress Report
submitted to COST Office
by 30 April 2013 (Year 1)**

**TD1105 APC 2013:
Hannover, Germany
12-13 June 2013**

12th June 2013

09:00 – 09:20 Opening by ESSEM Domain Committee C
Welcome by the local organiser, Michael I

Moderator: Dick Blaauboer

09:20 – 09:50 ES0901 | European procedures for flood f
Kjeldsen (Chair) | Stelios Pashiardis (Rapporteur)

09:50 – 10:20 ES1006 | Evaluation, improvement and g
prediction and response tools for airborne
(Chair) | Vidmantas Ulevicius (Rapporteur)

10:20 – 10:50 ES0806 | Stable Isotopes in Biosphere-At
Nina Buchmann (Chair) | Maris Klavins (Rapporteur)

10:50 – 11:10 Coffee (including posters review)

9. 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

a1. Progress report of working groups

**Definition of composition of WGs, SIGs, Ad-Hoc Groups
is going towards consolidation.....**

Expression of Commitment !!!

WGs Composition:

- WG1: ca. 25 participants
- WG2: ca. 40 participants
- WG3: ca. 35 participants
- WG4: ca. 25 participants

SIGs Composition:

- SIG1: ca. 15 participants
- SIG2: ca. 30 participants
- SIG3: ca. 15 participants
- SIG4: ca. 25 participants

- Total Number of Participants: 150 (80% active)
- Early Stage Researchers (ESRs) involved: 45 (30%)
- Females involved: 38 (25%)
- MC Members: 48 - Male: 35 (73%); Female: 13 (27%)
- MC Substitutes: 26 - Male: 22 (84%); Female: 4 (16%)

9. Follow-up of MoU Objectives

a2. Progress report of working groups

Rome Workshop addressing this issue.

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

- 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

9. Follow-up of MoU Objectives

a3. Progress report of working groups

Rome, Italy

1st Scientific Meeting

Working Groups and Management Committee of Action TD1105:

Co-Chairs: M. Penza, ENEA, Italy and All WGs and SIGs Leaders or Vice-Leaders

50+ Speakers involved from 21 COST Countries and 1 Non-COST Countries

100+ Participants attending to WGs, SIGs and 2° MC Meeting

Meeting Programme and Workplan Updating at Action webpages:

www.cost.eunetair.it



IN SCIENCE AND TECHNOLOGY

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Avenue Louise 149
1050 Brussels, Belgium
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f: +32 (0)2 533 3890
office@cost.eu

www.cost.eu

COST Action TD1105

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

FIRST SCIENTIFIC MEETING

Working Groups and Management Committee
Rome, 4 - 6 December 2012

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

GENERAL PROGRAMME

COST Action TD1105 Scientific Workplan

Action Core-Group: Working Groups and Sub-Working Groups Leaders		
ROLE - TASK	NAME	COUNTRY
<i>MC Chair</i>	Dr. Michele Penza ENEA	Italy
<i>MC Vice-Chair</i>	Prof. Anita Lloyd Spetz Linköping University	Sweden
<i>WG1-Leader (Coordinator)</i> Sensor Materials and Nanotechnology	Prof. Juan Ramon Morante IREC	Spain
<i>WG2-Leader (Coordinator)</i> Sensors, Devices and Systems for AQC	Prof. Andreas Schuetze Saarland University	Germany
<i>WG3-Leader (Coordinator)</i> Environmental Measurements and Air-Pollution Modelling	Prof. Ole Hertel Aarhus University	Denmark
<i>WG4-Leader (Coordinator)</i> Protocols and Standardisation Methods	Prof. Ingrid Bryntse SenseAir SA	Sweden
<i>STSM Coordinator</i>	Dr. Jan Theunis VITO	Belgium
<i>WebMaster Coordinator</i>	Dr. Marco Alvisi ENEA	Italy
<i>Scientific Secretary</i>	Dr. Annamaria Demarinis Loiotile, University of Bari	Italy

SCIENTIFIC WORKPLAN of COST Action TD1105 updated at Rome Meeting:

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.**

9. Follow-up of MoU Objectives – a4. Progress report of working groups

Tuesday, 5 March 2013

COST Action TD1105 EuNetAir SESSION

FRAUNHOFER INHAUS Zentrum, on Campus Duisburg of University of Duisburg-Essen
Forsthausweg 1, D-47057 Duisburg, Germany

4-6 March 2013, Duisburg, Germany Special Session Action TD1105: *Environmental Case Studies from Mediterranean, Central and Eastern Europe*

Co-Chairs: M. Penza, ENEA, Italy and Hans-Guido Muecke, CC WHO Europe, Germany

12 Speakers involved from 10 COST Countries
80+ Participants attending to Special Session



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Avenue Louise 149
1050 Brussels, Belgium
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f: +32 (0)2 533 3690
office@cost.eu
www.cost.eu

COST Action TD1105

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

AirMonTech FP7 Project

Air Pollution Monitoring Technologies for Urban Areas

JOINT SCIENTIFIC MEETING

COST Working Groups WG3-WG4 Meeting and AirMonTech Project Workshop
Duisburg, 4 - 6 March 2013

FRAUNHOFER INHAUS CENTER, Forsthausweg 1, 47057 Duisburg, Germany



12:00 - 18:00	
COST Event Registration	
14:00 - 18:30	Environmental Case Studies from Mediterranean, Central and Eastern Europe Chairpersons: <u>Michele Penza</u> , Action Chair - ENEA, Brindisi, Italy. <u>Hans-Guido Muecke</u> , WHO Collaborating Centre for Air Quality Management and Air Pollution Control - Federal Environment Agency, Berlin, Germany
14:00 - 14:20	COST Action TD1105: European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability. Overview and Plans of COST Action TD1105 Michele Penza, Action Chair, ENEA, Italy
14:20 - 14:40	The AQUILA Network for Air Quality Assurance and Quality Control Programmes In Europe Annette Borowiak, JRC, Institute for Environment and Sustainability, Ispra, Italy
14:40 - 15:00	Air Quality In Ukraine: Measurement Methods and Applied Technologies Olena Turcs, Marzeyev Institute for Hygiene and Medical Ecology, Kiev, Ukraine
15:00 - 15:20	Measurement of PM Pollutants Accumulated on Plants Leaves In Poland Helena Gawronska, Warsaw University of Life Science, Warsaw, Poland
15:20 - 15:40	Air Quality Measurements and Modelling In Hungary Zita Ferenczi, Hungarian Meteorological Service, Budapest, Hungary
15:40 - 16:00	Air Quality Modelling In Slovenia Rahela Zabkar, University of Ljubljana, Ljubljana, Slovenia
16:00 - 16:30	
Coffee Break	
16:30 - 16:50	Assessment of Air Quality In Cities of Russian Federation: Monitoring, Modeling, Health Aspects Sergey Chicherin, Main Geophysical Observatory / MGO - St. Petersburg, Russia
16:50 - 17:10	Air Quality Monitoring System In the Moscow Region: Measurement Methods and Techniques Olga Kislova, SEPI Mosecomonitoring, Department for Nature Resources Management and Environmental Protection, Moscow, Russia
17:10 - 17:30	Emergency Response and Chemical Weather Forecast Systems In NIMH, Bulgaria Dimitar Syrakov, Bulgarian Academy of Sciences, Sofia, Bulgaria
17:30 - 17:50	Air Quality Modelling In Latvia: Challenges and Failures Iveta Steinberga, University of Latvia, Riga, Latvia
17:50 - 18:10	Source Apportionment of Carbonaceous Aerosols and Other Pollutants In Central Europe Grisa Mocnik, Aerosol dooo, Ljubljana, Slovenia
18:10 - 18:30	Air Quality Monitoring In the Republic of Macedonia Igor Atanasov, Ministry of Environment and Physical Planning, Skopje, Republic of Macedonia
18:30	
Closure of COST Action TD1105 EuNetAir Session	

9. Follow-up of MoU Objectives – a5. 1ST Training School of Action

Green Week 2013
satellite event



Training school on Environmental
Technologies and Air-Quality Monitoring

Green Week 2013
satellite event



Training school on Environmental Technologies and Air-Quality Monitoring

13-15 June 2013
08:30 - 18:30

Barcelona
Spain



ec.europa.eu/environment/greenweek



In collaboration with the



UNIVERSITAT de BARCELONA
MIND-IN2UB, Dept d'Electronica
c/ Marti I Franques, 1 - E-08028
Barcelona, Spain



CSIC-IDAEA
c/ Jordi Girona, 18 - E-08034
Barcelona, Spain

PROGRAMME

13 June 2013 Thursday

08:30-17:00 REGISTRATION
09:00-09:45 Welcome Address

A. Romano-Rodriguez (*U. Barcelona, Spain*)

ACTIVE MATERIALS FOR SENSOR FABRICATION

09:45-11:00 Metal Oxides

J.R. Morales (*IREC and U. Barcelona, Spain*)

11:00-11:30 Break

11:30-13:00 Carbon-based materials

E. Habet (*U. Rovira i Virgili, Spain*)

13:00-15:00 Lunch

SENSORS AND TRANSDUCERS - PART 1

15:00-17:30 Conductometric Sensors, Capacitive Sensors and Other Sensing Platforms

P. Hernández-Ramírez (*IREC and U. Barcelona, Spain*);
O. Casals, J.D. Prades and A. Romano-Rodriguez (*U. Barcelona, Spain*)

14 June 2013 Friday

SENSORS AND TRANSDUCERS - PART 2

09:30-11:00 Optical Detection Methods

J. Wöllenstein (*U. Freiburg and Fraunhofer Gesellschaft, Germany*)

11:00-11:30 Break

11:30-13:00 Sensors for indoor air quality and health

T. Tran-Thi (*CEA-Saclay, France*)

13:00-15:00 Lunch

15:00-16:00 Electrochemical Sensors

J. Wöllenstein (*U. Freiburg and Fraunhofer Gesellschaft, Germany*)

16:00-16:30 Break

SMART SENSING TECHNOLOGIES AND ALGORITHMS

16:30-17:30 Signal Processing

A. Pardo (*U. Barcelona, Spain*)

17:30-18:30 Computational Intelligence for Smart Sensors and Sensor Network

S. De Vito (*ENEA, Italy*)

20:30 School dinner (place to be announced)

15 June 2013 Saturday

ENVIRONMENTAL MONITORING

09:30-10:30 Overview of environmental measurements

M. Viana (*CSIC, Spain*)

10:30-11:30 Black carbon measurements

G. Mocnik (*Aerosol doo, Slovenia*)

11:30-12:00 Break and walk to the air quality monitoring station

12:00-13:00 Visit to the air quality monitoring station at CSIC

M. Viana and M.C. Minguillón (*CSIC, Spain*)

13:00-15:00 Lunch

15:00-15:30 Gas sensors: Principle of Operations and Sensor Parameters

M. Penza (*ENEA, Italy*)

15:30-18:00 Presentation of own research activities by trainees

18:00-18:30 Certificate of Attendance Ceremony and Farewell

Received Trainees Applications: 39
Participating Trainees: 36
Assigned Trainees Grants: 20
Involved Trainers: 14
COST Countries involved: 15

COOPERATION IN SCIENCE AND TECHNOLOGY

1ST TRAINING SCHOOL OF COST ACTION TD1105: 13-15 June 2013

9. Follow-up of MoU Objectives – a6. International Workshop

1st INTERNATIONAL WORKSHOP of COST Action TD1105:

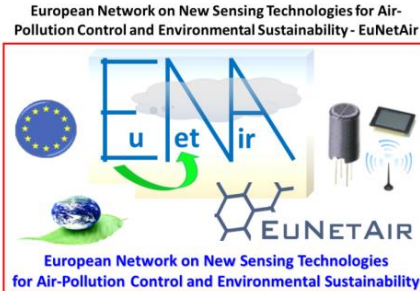
New Sensing Technologies and Transducers for Air-Quality Monitoring

Barcelona. 20 June 2013

FIRST INTERNATIONAL WORKSHOP on New Sensing Technologies and Transducers for Air-Quality Monitoring

Barcelona, 20 June 2013

Barcelona International Convention Centre (CCIB)
Plaça de Willy Brandt, 11-14, E- 08019 Barcelona, Spain



AGENDA	
20 June 2013 - Thursday	
16:00 - 20:00	REGISTRATION to COST Action Satellite WORKSHOP
16:30 - 18:30	COST Action Session 1
18:30 - 19:00	Break
18:30 - 19:00	COST Action Poster Session
19:00 - 20:00	COST Action Session 2
20:00 - 20:10	Workshop Adjourns and Farewell

Co-Chairs: M. Penza, ENEA, Italy and Eduard Llobet,
Universitat Rovira I Virgili, Spain

10 Speakers from 10 COST and 2 Non-COST Countries

30+ Participants attending to Open Satellite Workshop

COST Action TD1105 EuNetAir

OPEN SATELLITE WORKSHOP to
Transducers 2013 - Eurosensors XXVII

9. Follow-up of MoU Objectives – a7. 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. Scientific planning - a. Scientific strategy

Main Activities planned in the Year 2 (1 July 2013 -30 June 2014):

- **15 STSMs:** 9 STSMs of 5 days and 6 STSMs of 1 month (30 days), **or equivalently.**
- **WG1-WG4 Meeting**, European Environment Agency (EEA), Copenhagen, Denmark, 3 - 4 October 2013
- **WG1-WG4 Meeting**, Cambridge, UK, 18 - 19 Dec. 2013 (joined to 4th MC Meeting)
- **2nd Action Workshop** on New Sensing Technologies for Indoor and Outdoor Air Quality Control, 25 - 26 March 2014 (to be confirmed), Brindisi, Italy
- **2nd Training School of Action**, 09 - 11 April 2014 (tbc), Saarbrücken, Germany
- **EMRS-2014 Symposium**, 26 - 30 May 2014, Lille, France - **1st Action TD1105 International Conference** as planned in MoU (joined to 5th MC Meeting)
- **STATE-OF-THE-ART** *on Air Quality Monitoring: Models, Methods, Standards and Technologies*, June 2014 (To be defined). Release 1.
- **NEWSLETTER: Issue 3** (Nov-Dec. 2013); **Issue 4** (April-May 2014)
- **LEAFLET/BROCHURE:** UPDATED Issues
- **4th MC Meeting:** 20 Dec. 2013, Cambridge, UK, organized at Queens' College
- **5th MC Meeting:** 30 May 2014 (tbc), Lille, France, at EMRS-2014 Spring Meeting
- **DISSEMINATION & OUTREACH ACTIVITIES**

10. Scientific planning - b. Action Budget Planning for Year 2

DESCRIPTION OF ACTIVITIES	BUDGET (€)
15 STSMs: 9 STSMs (5 days) and 6 STSMs (30 days), <i>or equivalently</i> .	25.800
WG1-WG4 Meeting , European Environment Agency, Copenhagen, DK, 3 - 4 Oct. 2013	18.000
WG1-WG4 Meeting , Cambridge, UK, 18 - 19 Dec. 2013 (joined to 4 th MCM)	12.000
2nd Action Workshop on <i>New Sensing Technologies for Indoor and Outdoor Air Quality Control</i> , 25 - 26 March 2014 (to be confirmed), Brindisi, Italy	12.000
2nd Training School , 09 - 11 April 2014 (tbc), Saarbrucken, Germany	18.500
EMRS-2014 Symposium , 26 - 30 May 2014, Lille, France - 1st Action TD1105 International Conference as planned in MoU (joined to 5 th MCM)	19.000
STATE-OF-THE-ART on <i>Air Quality Monitoring: Models, Methods, Standards and Technologies</i> , June 2014 (To be defined). Release 1.	1.000
NEWSLETTER: Issue 3 (Nov-Dec. 2013); Issue 4 (April-May 2014)	1.500
LEAFLET/BROCHURE: UPDATED Issues	
4th MC Meeting: 20 Dec. 2013, Cambridge, UK, organized at Queens' College	19.700
5th MC Meeting: 30 May 2014 (tbc), Lille, France, EMRS-2014 Spring Meeting	12.000
DISSEMINATION & OUTREACH ACTIVITIES	2.000
TOTAL SCIENCE EXPENDITURE	141.000
Financial & Scientific Administration and Coordination (max 15%)	21.000
TOTAL EXPENDITURE	162.000

10. Scientific planning

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

c1: WG1-WG4 Meeting at European Environment Agency, 3-4 October 2013, Copenhagen, DK, (1/2)

**Valentin Foltescu, EEA,
Copenhagen, Denmark
as Host-Supervisor**

**Project Manager
Air Quality Reporting and
Assessment**

- **WG1-WG4 Meeting on *New Sensing Technologies and Methods for Air-Pollution Monitoring* at the European Environment Agency (EEA), Copenhagen (Denmark), 3 - 4 October 2013:** The WG1-WG4 Meeting (WGM) will be held at EEA, Copenhagen (Denmark). The core-issues of the COST Action TD1105 will be surveyed and presented as current results and scientific and technological breakthrough. WG1-WG4 Meeting will discuss on *New Sensing Technologies and Methods for Air-Pollution Monitoring* in a multidisciplinary and interdisciplinary approach aiming to provide harmonization of the environmental measurements, exchange of best practices, quality assurance, quality control, data quality, methods and protocols. A plenary session will be organized and open to external participants and stakeholders for S&T discussions on the real critical cases of environmental situations across Europe with emphasis at COST Countries involved in the Action (27 Parties on May 2013). Speakers, experts and other specialists from environmental agencies, academy and industry across Europe will be encouraged to participate and give a Talk on environmental critical hot-spots existing in the Europe zone. Fruitful discussions between Action TD1105 participants, international experts, speakers and international institutional organizations delegates (e.g., WHO Europe, DG ENV, DG RTD, European Environment Agency) are strongly expected. At the open WG1-WG4 Meeting of the Action TD1105, a strong impact on focusing of the critical environmental issues would be mutual benefit.

10. Scientific planning

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

c1: WG1-WG4 Meeting at European Environment Agency, 3-4 October 2013, Copenhagen, DK, (2/2)

**Valentin Foltescu, EEA,
Copenhagen, Denmark
as Host-Supervisor**

**Project Manager
Air Quality Reporting and
Assessment**

European Environment Agency



Dr Michele Penza
Action TD1105 EuNetAir Chair
ENEA – Technical Unit of Brindisi
PO BOX 51 Br-4
Strada Statale 7 Appia km 706
72100 Brindisi
Italy

19 March 2013
ACC/VFO/sto

Reg. EEA 31993

Subject: COST Action TD1105 European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability – EuNetAir (16 May 2012 – 15 May 2016). Action Workshop/Meeting hosted at European Environment Agency (EEA), Copenhagen, Denmark, 3-4 October 2013

Dear Dr. Penza,

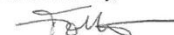
It is a great pleasure to offer hosting at the European Environment Agency (EEA), Copenhagen (Denmark) on 3 - 4 October 2013 an Event of the Action TD1105 to support the planned workshop/meeting with a wide attendance of international experts, researchers, scientists, practitioners and stakeholders from COST Countries and Non-COST Countries at worldwide level.

Here, I confirm the availability of a free-of-charge conference-room with internet Wi-Fi connection (50+ expected participants) for the Action TD1105 meeting on 3-4 October 2013. EEA will not be responsible for other local organization expenditures such as coffee or catering. Such expenditures would be subject to separate agreement between the Action TD1105 and the operator of the canteen which does not involve the EEA.

Therefore, I declare my availability /willingness to:

Host the COST Action TD1105 *EuNetAir* meeting at EEA (Copenhagen) in a suitable conference-room.

Yours Sincerely,



Valentin Foltescu
Project manager
Air quality reporting and assessment

10. Scientific planning

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

c2: **WG1-WG4 Meeting** jointly **4th MCM**, 18-20 Dec. 2013, **Cambridge**, UK

- **MC Meeting 1 (4th MCM of Action) jointly to WG1-WG4 Meetings University of Cambridge (UK), 18 - 20 December 2013:** The fourth MC Meeting (MCM) jointly with WG1-4 Meeting (WGM) will be held at Queens' College, University of Cambridge (Action partner), tentatively organized with a Plenary Session (*first day afternoon*), four parallel sessions (one per WG) and a common session of the WG1-4 and the four Special Interest Groups (SIGs) (*full second day*), and finally, a MC Meeting (*third day morning*). At the Plenary Session and/or WGs and SIGs Meetings and/or MC Meeting, it will be involved and invited as external experts at least 1 Keynote Speaker from Non-COST partnership and at least 2 Invited Speakers from COST Area to give Talks on current state-of-the-art of the Action core-issues. Participation from research, academy, university, industry, environmental agencies, international stakeholders, policy-makers and institutional managers is widely planned with large outreach and dissemination activities, at high expected impact.

10. Scientific planning

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

c3: **2nd Action Workshop**, 25-26 March 2014, **Brindisi**, Italy

- **The 2nd International Workshop of the COST Action TD1105 on New Sensing Technologies for Indoor and Outdoor Air Quality Control at ENEA, Brindisi (Italy), 25 - 26 March 2014:** The 2nd International Workshop on *New Sensing Technologies for Indoor and Outdoor Air Quality Control* will be held at ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), Brindisi Research Center (Italy). This second workshop of the Action TD1105 *EuNetAir* follows the first organized at Barcelona (20 June 2013) as Satellite Event inside *Transducers 2013 - Eurosenors XXVII*, as planned in the MoU roadmap. The core-issues of the COST Action TD1105 on the new sensing technologies for indoor and outdoor monitoring and air quality control will be surveyed by Action partners with emphasis at sensor materials, functional materials, nanotechnologies for gas sensors, low-cost and low-power chemical sensors, portable systems, sensor-instrumentations, air-pollution modelling, methods, measurements and protocols for air quality control and environmental monitoring. Speakers, experts, practitioners, stakeholders and other specialists from environmental agencies, academy and industry from Europe will be encouraged to participate and give a Talk on current state-of-art on the environmental research and existing critical issues in the ongoing Revision of the Air Quality Directive 2008/50/EC and EU Thematic Strategy on Air Pollution. Fruitful discussions between Action TD1105 participants, international experts, regional managers, speakers, including international institutional organizations delegates and policy-makers are strongly expected. A strong impact on focusing of the critical environmental issues related to the new sensing technologies for indoor and outdoor monitoring and air quality control would be mutual benefit.

10. Scientific planning

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

**c4: EMRS-2014
Symposium, 26-30 May
2014, Lille, France -
1st Action TD1105
International Conference
as planned in MoU
(joined to 5th MCM) (1/5)**

- **MC Meeting 2 (5th MCM of Action) connected to the 1st International Conference as International Symposium at European Materials Research Society - EMRS-2014, Spring Meeting 2014, Lille (France), 26 - 30 May 2014:** The fifth MC Meeting (MCM) will be held at Lille (France), connected to the *EMRS-2014 International Symposium on Advanced Functional Materials for Environmental Monitoring and Applications*, extension from EMRS-2014 and substitution at Strasbourg, presumably to be held on 30 May 2014, at the end of the EMRS-2014 Symposium. This Symposium was approved on a competitive basis by the Board of Direction of the European Materials Research Society (EMRS) as event in the Spring Meeting 2014 and embedded in the big international conference EMRS-2014 (over 2000 delegates expected). The *International Symposium as International Conference of the Action* was proposed by the Action organizers: Michele Penza (Action Chair), ENEA, Italy; Anita Lloyd-Spetz (Action Vice-Chair), University of Linköping, Sweden; Albert Romano-Rodriguez (MC Substitute), Universitat de Barcelona, Spain; Yongxiang Li (Non-COST partner), Chinese Academy of Sciences, Shanghai, China; Meyya Meyyappan (Non-COST partner), NASA Ames Research Center, USA). The program of the *Action International Conference 1* is planned tentatively for 4 full-day (26-29 May 2014), followed by the 5th MCM (compatibly on 30 May 2014). At the *Action International Conference 1*, at least 8 well-established Invited Speakers and excellent Keynote Speakers from Non-COST partnership and International Experts will be involved to give a Talk on current state-of-the-art of the Action S&T core-issues. A Steering Committee of the International Symposium (Conference) will be setup with most participation from the Action, including external membership. Outstanding participation from worldwide S&T community is highly expected with strong dissemination of the Action activities towards an international and specialized target audience.

Very good visibility for the COST Action TD1105 should be provided by the EMRS-2014 Conference Committee such as the logo of COST and/or Action TD1105 in the conference website, WGs/SIGs Action special sessions embedded, Action presenters included in conference program, and other expenditures for dissemination of achieved Action results.

- **Title:** Advanced Functional Materials for Environmental Monitoring and Applications
- **Suggested journal for publication of manuscripts:** Journal of Sensors and Sensor Systems (JSSS), Copernicus
- **Suggested symposium organizers:**
- **Michele PENZA**, ENEA, Brindisi, Italy
- **Anita LLOYD SPETZ**, Linköping Univ/ Univ of Oulu, Sweden/ Fínland
- **Albert ROMANO-RODRIGUEZ**, University of Barcelona, Spain
- **Yongxiang LI**, Shanghai Institute of Ceramics - Chinese Academy of Sciences
- **Meyya MEYYAPPAN**, NASA Ames Research Center, USA

- **Hot topics to be covered by the symposium (600 characters):**
 - Advanced gas sensing nanomaterials
 - New (nano)sensors for monitoring gaseous pollutants.
 - New sensors for monitoring fine and ultrafine particles
 - Single-chip devices and portable gas-sensor systems.
 - Modeling of materials, sensors and sensor systems, air quality
 - Computational intelligence for sensor devices and modules
 - Air quality mapping using traditional instruments
 - Protocols and standardization methods for air quality monitoring by gas and particle sensors and systems
- **Other events taking place in 2014 focusing on the same or similar topics**
- **IMCS** (International Meeting on Chemical Sensors) 2014 will take place in Argentina in March. However, the proposed conference session will include more technologies like mapping of environment to produce reference data. Also, new protocols and standardization methods will have a strong focus.
- **Eurosensors** normally takes place in September, same discussion as above.



The poster features a green background with a stylized DNA double helix and a diffraction pattern. The text is in white and green. At the top right, it says 'www.european-mrs.com' and 'E-MRS'. The main title is 'SPRING MEETING 2014' in large white letters, with 'Lille Congress Center France' and 'May 26th-30th' below it. The central text is 'CALL FOR PAPERS'. Below this, it lists conference chairs: Ian BOYD, Gilles DENNLER, Roberto FARIA, Roberto FORNARI, and Elvira FORTUNATO. It also mentions a Bilateral Energy conference with Hans RICHTER and William TUMAS.

SPRING MEETING

May 26-30, 2014

Lille

Deadline for
abstract submission:

January 16, 2014

SCIENTIFIC PROGRAMME

MATERIALS FOR ENERGY AND ENVIRONMENT

- A. Thin film chalcogenide photovoltaic materials
- B. Advanced functional materials for environmental monitoring and applications
- C. Solid state ionics: thin films for energy and information applications
- D. Phonons and fluctuations in low dimensional structures

NANOMATERIALS

- E. Defect-induced effects in nanomaterials
- F. Established and emerging nanocolloids: from synthesis & characterization to applications
- G. Carbon- or nitrogen-containing nanostructured thin films
- H. ALTECH 2014 - Analytical techniques for precise characterization of nano-materials
- I. Solution processing and properties of functional oxide thin films and nanostructures

MATERIALS AND LIGHT

- J. Laser interaction with advanced materials: fundamentals and applications
- K. Challenges for group III nitride semiconductors for solid state lighting and beyond
- L. Chromogenic materials and devices

HYBRID, ORGANIC AND BIO-MATERIALS

- M. Molecular materials - Towards quantum properties
- N. Converging technology for nanobioapplications
- O. Computational modelling of organic semiconductors: from the quantum world to actual devices
- P. Carbon materials: surface chemistry and biomedical applications
- Q. Hybrid materials engineering in biology, chemistry and physics
- R. Towards lightweight and flexible electrochemical devices
- S. Memristor materials, mechanisms and devices for unconventional computing

CRYSTAL GROWTH IN MATERIALS SCIENCE

- T. Non-classical nucleation and crystallization*
- U. Crystal growth related twins and point defects in semiconductors and dielectrics*
- V. Effect of natural and forced convection in materials crystallization*

BILATERAL ENERGY CONFERENCE

- W. Materials research for group IV semiconductors: growth, characterization and technological developments
- X. Advanced materials and characterization techniques for solar cells II
- Y. Crystals for energy conversion and storage*
- Z. Materials and complex interface architectures for solar thermal and solar fuel devices
- AA. Organic photovoltaics / polymer solar cells

WORKSHOP: grand challenges in materials

Deadline for abstract submission: 16 Jan 2014

As-Received from EMRS-2014 Conference Chairs

B. Advanced Functional Materials for Environmental Monitoring and Applications

Summary:

About three quarters of the European population lives in urban areas. The urban environment has a profound effect on people's health and well-being. Environmental sustainability of the urban society is a key issue in the era of smart cities and information services for the quality of life. Solid state sensors based on functional materials have been developed for several decades and recent improvements in nanotechnology and multifunctional materials have open up the possibility to develop a new generation of sensitive, selective and stable sensors, with largely improved capacity to give relevant information both on a personal level and system levels.

Hot topics to be covered by the symposium:

- 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

Tentative list of invited speakers:

- S. Christiansen, Max-Planck Institute, Erlangen, Germany.
- M. Eickhoff, University of Giessen, Germany.
- H. Haick, Technion, Israel Institute of Technology, Haifa, Israel.
- J. Li, NASA, Ames Research Center, USA.
- J. R. Morante, IREC, Barcelona, Spain.
- R. Pearce, National Physics Laboratory, London, UK.
- R. Penner, University of California Irvine, USA.
- P. Wang, Zhejiang University, China.

Principal organizer:

Dr. Michele Penza

Italian National Agency for New Sensing Technologies, Energy and Sustainable Economic Development

PO BOX 51 Br-4, I-72100 Brindisi (Italy)

Phone number: +39 0831 201422

Fax number: +39 0831 201423

michele.penza@enea.it

Potential overlaps with: No overlap identified.

10. Scientific planning

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

c5: Training School, 09-11 April 2014, Saarbrücken, Germany

- 2nd **TRAINING SCHOOL** COST Action TD1105, Saarbrücken, April 2014, and hosted by Prof. Andreas Schuetze, Saarland University, Germany.
- Prof. Albert Romano-Rodriguez, University of Barcelona, Spain, in collaboration with *Action Training Schools Coordinator*
- **Training School**
Action TD1105 2nd Training School - Saarland University, Saarbrücken (Germany), 09 - 11 April 2014: The *three-day* Training School from Wednesday to Friday will be tentatively organized towards at least 20 reimbursed trainees and at least 5 reimbursed trainers, mainly from COST partnership. This 2nd Training School of the COST Action TD1105 *EuNetAir* follows the first Training School, already planned at Barcelona (University of Barcelona) on June 2013 in the first Year (2012-13). This Open 2nd Training School will be devoted to specific core-issues of the Action TD1105 such as nanostructures, sensor materials, gas sensors, devices, sensing technologies, portable sensor systems, sensor nodes, sensor networks, environmental measurements, models, standards and protocols. Graduated students, PhD students, Post-Doc, Early Stage Researchers will be involved from COST partnership and a fruitful exchange of knowledge and research experiences from senior teachers to young trainees is highly expected. The Training School will be organized under supervision of Prof. Andreas Schuetze (Saarland University, Department of Mechatronics, Lab for Measurement Technology), DE MC Member. The Training School Committee of the Action TD1105, chaired by Prof. Albert Romano-Rodriguez (University of Barcelona), will be involved in the organization of school with help to define program, to contact renowned trainers, to select motivated trainees, to support general affairs. This 2nd Training School will pursue a multidisciplinary approach and high education with theoretical and experimental lessons from several domains and complementary disciplines as well.
In the case of remaining budget at the end of the Second Period due to saving management, this will be preferably used to increase the amount of trainees to be reimbursed from the Action partners. The scheduled dates of the 2nd Training School at Saarbrücken could be modified and revised to match and adapt the needs of the Action TD1105 planning.

10. Scientific planning

- c. Long-term Planning including anticipated locations and dates of future activities.
- c6: STATE-OF-THE-ART on Air Quality Monitoring: Models, Methods, Standards and Technologies, June 2014. Release 1.

Proposal from Action Chair **for STATE-OF-THE-ART on AQC Tech** as described in MoU and as output of Action EuNetAir in the med-term

10. 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

10. Scientific planning

d. Dissemination Planning (Publications and outreach activities).

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



Issue 1: published on Dec. 2012 ✓

Issue 2: published on June 2013 ✓

Issue 3: planned on Dec. 2013 ✓

Issue 4: planned on May 2014 ✓



Brochure

Leaflet

Release 1:
published on January 2013

OUTREACH ACTIVITIES from Action TD1105 (2/2)

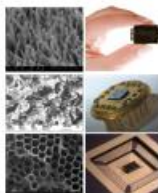


The main objective of the Action is to develop new sensing technologies for Air Quality Control (AQC) at integrated and multidisciplinary scale by coordinated research on nanomaterials, sensor-systems, air-quality modelling and standardised methods for supporting environmental sustainability with a special focus on small and medium enterprises.

Abstract

This Action will focus on a new detection paradigm based on sensing technologies at low cost for Air Quality Control and set up an interdisciplinary top-level coordinated network to define innovative approaches in sensor nanomaterials, gas sensors and devices, wireless sensor-systems, distributed computing, methods, models, standards and protocols for environmental sustainability within the European Research Area (ERA). State-of-the-art research on innovative sensing technologies for AQC based on advanced chemical sensors and sensor-systems at low-cost, including functional materials and nanotechnologies for air-quality applications, the outdoor/indoor environment control, meteorology, air-quality modelling, chemical weather forecasting, and related standardisation methods is performed already at the international level, but still needs intensive coordination efforts to boost new sensing paradigms for research and innovation.

Only a close multidisciplinary cooperation will ensure cleaner air in Europe as well as reduced negative effects on human health for future generations in smart cities, efficient management of green buildings at low CO₂ emissions, and sustainable economic development. The objective of the Action is to create a cooperative network to analyse new sensing technologies for low-cost air-pollution control through field studies and laboratory experiments, to transfer the results into preventive real-time control practices and to move towards global sustainability via monitoring climate change and outdoor/indoor energy efficiency. Establishment of such a network, involving COST country participants as well as non-COST key-experts, will enable Europe to develop world capabilities in urban sensor technology based on cost-effective nanomaterials, to form a critical mass of researchers suitable for cooperation in science and technology, to give training and education, to coordinate outstanding R&D, to promote innovation towards industry, and to support policy-makers.



Keywords:

- Sensor functional materials
- Nanomaterials and sensing nanostructures
- Gas sensors and wireless sensor-systems with distributed computing
- Air quality control/modelling and environmental measurements/modelling
- Protocols and standardisation methods for environmental sustainability and chemical weather forecasting

Working Groups

- WG1: Sensor materials & nanotechnology
- WG2: Sensors, devices & systems for AQC
- WG3: Environmental measurements & air-pollution modelling
- WG4: Protocols & standardisation methods

Participating COST countries and institutions:

- | | |
|--|--|
| <ul style="list-style-type: none"> BE: University of Liege, UTC, Université de BE: Belgian Academy of Sciences DE: Fraunhofer Institute for Environmental, Safety and Health Technology, Fraunhofer IPT, Fraunhofer ILT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT, Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT | <ul style="list-style-type: none"> BE: University of Liege, UTC, Université de BE: Belgian Academy of Sciences DE: Fraunhofer Institute for Environmental, Safety and Health Technology, Fraunhofer IPT, Fraunhofer ILT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT DE: Fraunhofer IPT, Fraunhofer IPA, Fraunhofer IZM, Fraunhofer IZIG, Fraunhofer IZIT |
|--|--|



Non-COST participants:

- Australia: CSIRO
- Canada: University of Waterloo
- China: Chinese Academy of Sciences
- France: National Research Center (CNRS)
- USA: NASA Ames Research Center

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

Prof. Ralf Moos, Editor-in-Chief
Dr. Daniela Schonauer-Kamin, Editorial Board Manager
University of Bayreuth, Germany

BROCHURE

Issue 1: published on Jan. 2013 ✓

LEAFLET

Issue 1: published on Jan. 2013 ✓

INTERVIEW on Nanotechnologies and Nanosensors for Air Quality Monitoring has been recorded (www.cost.eunetair.it)

INTERVIEW by Action Chair (Dr. Michele Penza, ENEA, Italy) with Dr. Meyya Meyyappan, NASA Ames Research Center, CA, USA.

Rome, 4-6 Dec. 2012 at the 2nd MC meeting



10. Scientific planning

d. Dissemination Planning (Publications and outreach activities).

d3: INTERNATIONAL INNOVATION, September-December 2013

..... Details and definitions are in progress

Euro 2000 per 3 printed pages of Interview on Action activities
Including hardpaper issue (50 copies per MC Members)
and pdf file for dissemination

Upcoming Events

1st Iberian Meeting on Aerosol Science and Technology (RICTA2013)
1-3 July 2013, Évora, Portugal
<http://www.ricta2013.cge.uevora.pt/>

Environment and Health – Bridging South, North, East and West Conference of ISEE, ISES and ISIAQ
20-23 August 2013, Basel, Switzerland
<http://www.ehbasel13.org/>

Euroanalysis XVII
25-29 August 2013, Warsaw, Poland
<http://www.euroanalysis2013.pl/>

European Aerosol Conference (EAC 2013)
1-6 September 2013, Prague, Czech Republic
<http://eac2013.cz/>

The 13th International Conference on Environmental Science and Technology
5-7 September 2013, Athens, Greece
<http://cest2013.gnest.org/>

16th IUAPPA World Clean Air Congress,
29 September - 4 October 2013, Cape Town, South Africa
<http://www.iuappa.org/>

224th ECS Meeting
27 October - 1st November 2013, Hilton San Francisco, CA, USA
http://www.electrochem.org/images/pdf/sf_call_papers.pdf

The IEEE Sensors 2013 Conference (IEEE-Sensors'13)
3-6 November 2013, Baltimore, MD, USA
<http://ieee-sensors2013.org/>

The 10th Asian Conference on Chemical Sensors (ACCS 2013)
11-14 November 2013, Chiang Mai, Thailand
<https://www.accs2013.org/>

11. Dresdner Sensor-Symposium
9-11 December 2013, Dresden, Germany
http://www.fms-dresden.de/Veranstaltungen/Sensor_Symposien/11_+Dresdner+Sensor_Symposium.html

E-MRS 2014, including EuNetAir Action Symposium
26-30 May 2014, Lille (France)
<http://www.emrs-strasbourg.com/index.php>

10. Scientific planning

d4: DISSEMINATION PLAN

Dr. Fabio Galatioto
Chair of Dissemination Committee

11. Requests for new members - List of New WGs Members (1/3)

List of New Affiliations: 6 of 9

COST ACTION TD1105 - 3rd MCM in Barcelona, 21 June 2013 - 9 NEW AFFILIATIONS from 6 Countries

Nr	NAME	ORGANIZATION	COUNTRY	EXPERTISE / KEYWORDS	WG INTERESTED	E-MAIL
1	Christofer Hierold	Micro and Nanosystems, Swiss Federal Institute of Technology Zurich, DMAVT ETH Zurich	SWITZERLAND	New materials for MEMS, advanced microsystems and nanotransducers	WG1, WG2	christofer.hierold@micro.mavt.ethz.ch
2	Miroslav Haluska	Micro and Nanosystems, Swiss Federal Institute of Technology Zurich, DMAVT ETH Zurich	SWITZERLAND	New materials for MEMS, advanced microsystems and nanotransducers	WG1, WG2	haluska@micro.mavt.ethz.ch
3	Wei Liu	Micro and Nanosystems, Swiss Federal Institute of Technology Zurich, DMAVT ETH Zurich	SWITZERLAND	New materials for MEMS, advanced microsystems and nanotransducers	WG1, WG2	wei.liu@micro.mavt.ethz.ch
4	Kiran Chikkadi	Micro and Nanosystems, Swiss Federal Institute of Technology Zurich, DMAVT ETH Zurich	SWITZERLAND	New materials for MEMS, advanced microsystems and nanotransducers	WG1, WG2	kiran.chikkadi@micro.mavt.ethz.ch
5	Barbara Malic	Jožef Stefan Institute, Electronic Ceramics Department	SLOVENIA	Synthesis, properties and applications of materials for electronics and energetics, multifunctional materials and structures.	WG1	Barbara.malic@ijs.si
6	Milena Jovasevic-Stojanovic	Vinca Institute of Nuclear Sciences	SERBIA	air-quality modelling; experimental campaigns; standards, methods and protocols for AQC based on low-cost sensors; harmonisation of environmental measurements.	WG3, WG4	mjovst@vinca.rs, mjovst@vin.bg.ac.rs

11. Requests for new members - List of New WGs Members (2/3)

List of New Affiliations: additional 3 of 9

7	Wojciech Kuznik	Technical University of Czestochowa	POLAND	Optical sensors and lidar technique.	WG1, WG2	wojtek.kuznik@gmail.com
8	Roman Yatskiv	Institute of Photonics and Electronics, Academy of Sciences CR	CZECH REPUBLIC	Semiconductor gas sensors; synthesis of materials for gas sensors.	WG1	yatskiv@ufe.cz
9	Hossam Haick	Technion - Israel Institute of Technology	ISRAEL	Nanotechnology and non-invasive detection.	WG1, WG2, SIG3	hhossam@technion.ac.il

11. Requests for new members - List of New WGs Members (3/3)



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.**

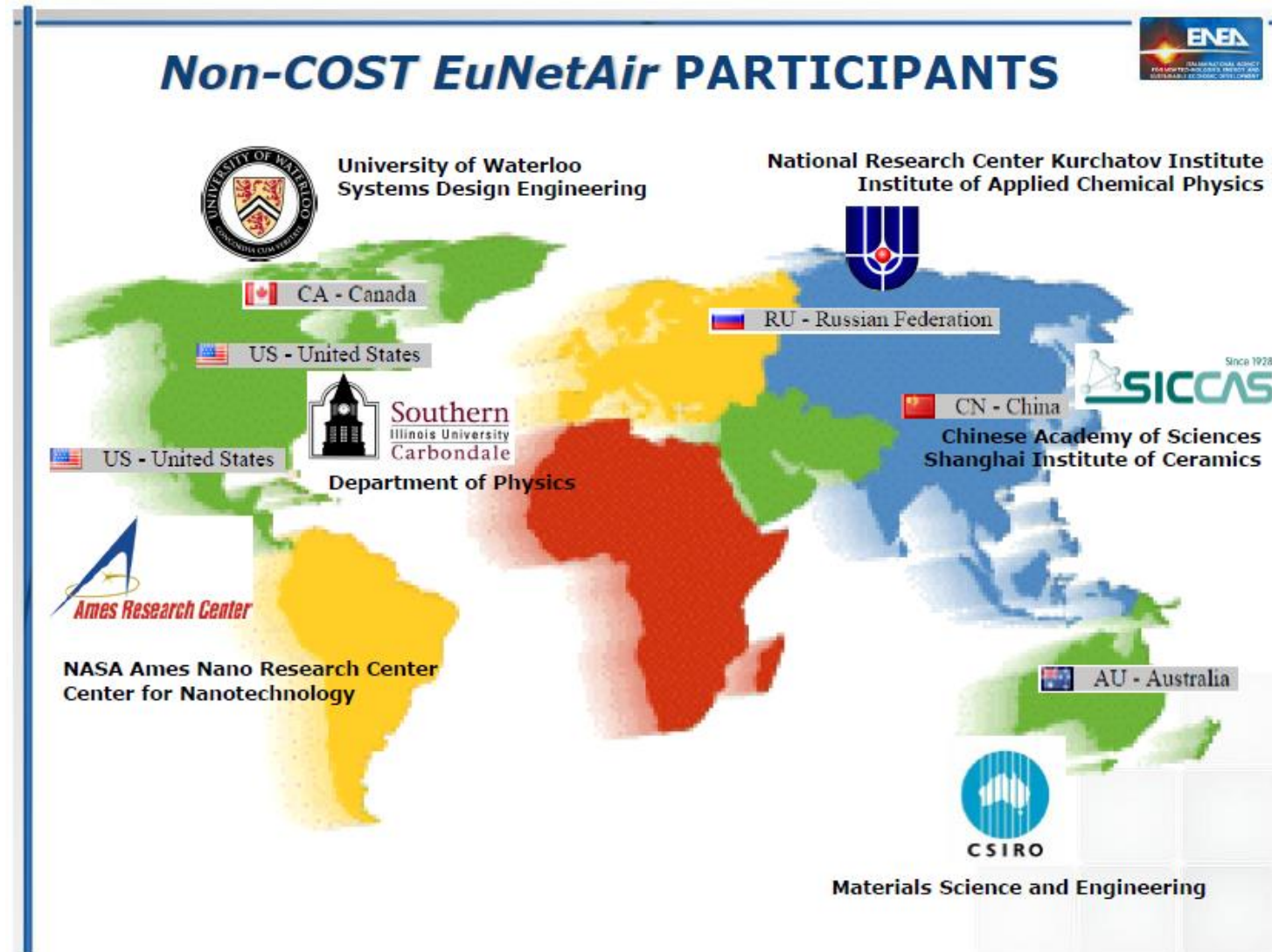
Please, New WG Member and/or Action Participant should provide own CV (max 1 page)

12. Non-COST applications to the Action

List of Non-COST Members and New NCM ??

Preliminary exchange by email from **Prof. Kostantinos Kakosimos**, Texas A&M University at **Quatar**.

Waiting for Application Form from Quatar !



13. AOB of the Action - List of AOB

- **Spin-offs activities** from *Action TD1105*: **at least 4 FP7 NMP research proposals** have been submitted for funding on October 2013 at the **first-stage level**. Results of these Applications were released on December 2012 !
- **It is a pleasure to announce that SensIndoor has been granted:**
- GERMANY (Andreas Schuetze, Saarland University, Coordinator): **SensIndoor**, FP7-NMP-2013.SMALL-7, “*Nanotechnology-based intelligent multi-SENsor System with selective pre-concentration for Indoor air quality control*”. Project Partners: USAAR-LMT (Germany), NanoSense (France), Fraunhofer Institute for Chemical Technology (Germany), UO-FETF (Finland), Linkoping University (Sweden), SenSiC (Sweden), SGX (Switzerland), 3S (Germany), Picodeon (Finland), Eurice (Germany), under negotiation. **6 Partners of winner project are from Action TD1105.**

13. AOB of the Action - List of AOB

- **Joint-Publications** should be encouraged more. **Some examples:**
 - **BOOKS**
 - *M. Penza, P. Martin, J. Yeow, Gas Sensing Fundamentals*, Book Chapter: *Carbon Nanotube Gas Sensors*, edited by Springer, 2012.
 - *M. Penza, Anita Lloyd Spetz, Jing Li, Meyya Meyyappan, Juan Ramon Morante, Nanomaterials for Environmental Protection*, Book Chapter: *Nanomaterial-Enabled Sensors for Air Quality Control*, J. Wiley & Sons 2013 (planned).
 - **PAPERS**
 - A **List of Joint-Publications** (Year 1: 2012-13) from Action is downloadable at Action webpages (www.cost.eunetair.it) in the Section **LIBRARY - Publications**
- **Other JOINT-PUBLICATIONS are HIGHLY welcomed !**

14. Location and date of next MC Meeting

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

- **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 December, 2013, Cambridge, UK



Professor Roderic L. Jones
Department of Chemistry
Lensfield Road
Cambridge
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University of Cambridge
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Monday, May 27, 2013

Dr. Michele Penza (Chair)
COST Action TD1105 Eu Net Air,
ENEA,
Italian National Agency for New Technologies, Energy and Sustainable Economic Development,
Brindisi Research Centre,
PO BOX 51 Br-4 (Postal correspondence)
SS7, Appia, km 706,13 (Location address)
I-72100 Brindisi, Italy
E-mail: michele.penza@enea.it

Letter of invitation to host a COST Action TD1105 meeting at
Cambridge on 18-20 December 2013

Dear Michele,
I am delighted to be able to offer Queens' College, Cambridge as the venue for a COST Action TD1105 meeting to be held in Cambridge on 18-20, December 2013. The intention is that this meeting will be formally hosted by me, but local arrangements will be made through the Queens' College Catering Department, with whom I understand you have had discussions.
This invitation is based on the assumption that all costs will be covered by the COST Action TD1105, with no costs falling to either the University of Cambridge or Queens' College Cambridge.

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

Best wishes,

Roderic L. Jones
Professor of Atmospheric Science
Department of Chemistry
Cambridge

cc Tim Shorey,
Queens' College Catering Manager

15. Summary of MC decisions 3rd MC Meeting, 21 June 2013, Barcelona, Spain

DESCRIPTION OF DECISIONS DISCUSSED BY ACTION TD1105 MC	APPROVED
MC3D01. 15 STSMs : 9 STSMs (5 days) and 6 STSMs (30 days), <i>or equivalently</i> .	YES/NO
MC3D02. WG1-WG4 Meeting , European Environment Agency, Copenhagen, DK, 3 - 4 Oct. 2013	YES/NO
MC3D03. WG1-WG4 Meeting , Cambridge, UK, 18 - 19 Dec. 2013 (joined to 4 th MCM)	YES/NO
MC3D04. 2nd Action Workshop on <i>New Sensing Technologies for Indoor and Outdoor Air Quality Control</i> , 25 - 26 March 2014 (to be confirmed), Brindisi, Italy	YES/NO
MC3D05. 2nd Training School , 09 - 11 April 2014 (tbc), Saarbrucken, Germany	YES/NO
MC3D06. EMRS-2014 Symposium , 26 - 30 May 2014, Lille, France - 1st Action TD1105 International Conference as planned in MoU (joined to 5 th MCM)	YES/NO
MC3D07. STATE-OF-THE-ART on <i>Air Quality Monitoring: Models, Methods, Standards and Technologies</i> , June 2014 (To be defined). Release 1.	YES/NO
MC3D08. NEWSLETTER: Issue 3 (Nov-Dec. 2013); Issue 4 (April-May 2014) LEAFLET/BROCHURE : UPDATED Issues	YES/NO
MC3D09. 4th MC Meeting : 20 Dec. 2013, Cambridge, UK, organized at Queens' College	YES/NO
MC3D10. 5th MC Meeting : 30 May 2014 (tbc), Lille, France, EMRS-2014 Spring Meeting	YES/NO
MC3D11. DISSEMINATION & OUTREACH ACTIVITIES	YES/NO
MC2D12. NEW 2 PARTIES: Serbia, The Former Yugoslav Republic of Macedonia	YES/NO
MC2D13. NEW GRANT HOLDER: EURICE (Germany)	YES/NO

16. Closing

3rd MC Meeting, 21 June 2013, Barcelona, Spain, hosted by IREC

WELCOME from Chair addressing the 3rd MC Meeting, Barcelona

SEE YOU IN CAMBRIDGE, 18-20 Dec. 2013

**4th ACTION MC Meeting & WG1-WG4 Meeting
at Queens' College, CAMBRIDGE, UK**

CAMBRIDGE, 18-20 December 2013