



COST
EUROPEAN COOPERATION
IN SCIENCE AND TECHNOLOGY

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

**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	<i>Break</i>
18:30 - 19:00	COST Action Poster Session
19:00 - 20:00	COST Action Session 2
20:00 - 20:10	<i>Workshop Adjourns and Farewell</i>

COST Action TD1105 EuNetAir

**OPEN SATELLITE WORKSHOP to
Transducers 2013 - Eurosenors XXVII**

The 17th International Conference
on Solid-State Sensors,
Actuators and Microsystems



**The 17th International Conference
on Solid-State Sensors,
Actuators and Microsystems
June 16-20, 2013, Barcelona, Spain**



Background and goals

About COST Action TD1105 EuNetAir

COST Action TD 1105 EuNetAir (www.cost.eunetair.it), a Concerted Action on *New Sensing Technologies for Air-Pollution Control and Environmental Sustainability*, is a running Networking funded in the framework *European Cooperation in the field of Scientific and Technical Research (COST)* during 2012-2016.

The main objective of the Concerted Action is to develop new sensing technologies for Air Quality Control 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.

This international Networking, coordinated by ENEA (Italy), includes over 75 big institutions from 27 COST Countries (EU-zone: *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*) and 5 Non-COST Countries (extra-Europe: *Australia, Canada, China, Russia, USA*) to create a S&T critical mass in the environmental issues.

About the First International Workshop of COST Action TD1105 at Barcelona, 20 June 2013

The **Action Workshop** - *1st International Workshop of COST Action TD1105 on New Sensing Technologies and Transducers for Air Quality Monitoring* - will be organized one-day before 3rd MC Committee at Barcelona, as **Open Satellite Event** linked to *Transducers 2013*, chaired by the General Chair as Prof. Juan Ramon Morante (IREC), that is Action MC Member.

This **Workshop** will benefit from the presence of many involved Action MC members invited to participate at 3rd MC Committee at Barcelona on 21 June 2013, after closing of the international conference *Transducers 2013* (16 - 20 June 2013), edition jointly organized with *EuroSensors 2013* (European Conference on Sensors held annually in Europe). Very good visibility for the COST Action TD1105 *EuNetAir* should be provided by the *Transducers 2013* Conference Committee such as the logo of COST and/or Action TD1105 in the conference webpages, Action Satellite Workshop programme, and other expenditures for dissemination of achieved Action results.

The **Open Satellite Workshop** is composed by two Oral Sessions and one Poster Session. The accepted contributions (Oral/Poster) will be collected in a **Booklet** to be electronically distributed to the participants. In addition, a **Training School** (13-15 June 2013) of the COST Action TD1105 will be organized by Universitat de Barcelona (UB) and CSIC-IDAEA, Barcelona towards at least 20 reimbursed trainees and at least 4 reimbursed trainers, mainly from COST partnership. The Training School will be devoted to specific core-issues of COST Action TD1105 such as nanostructures, sensor materials, sensing technologies, environmental modeling of air-pollution, models, standards and protocols. Graduated students, PhD students, Post-Doc, Early Stage Researchers will be involved from COST partnership and COST Countries signing Memorandum of Understanding (MoU) in open way.

More Information

- Michele Penza, MC Chair/Proposer of *COST Action TD1105 EuNetAir*
ENEA - PO BOX 51 Br-4, I-72100 Brindisi – ITALY - michele.penza@enea.it
- Juan Ramon Morante, Action WG1 Leader and General Chair of *Transducers 2013 - EuroSensors XXVII*
IREC and UNIVERSITAT DE BARCELONA (UB), c/ Marti I Franques, 1 - E-08028 Barcelona - SPAIN - jrmorante@irec.cat



Thursday, 20 June 2013

COST Action TD1105 EuNetAir WORKSHOP

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16:00 - 20:00 COST Event Registration

16:30 - 18:30 *Session 1 - Sensors, Transducers and Signal Processing for Air-Quality Monitoring*

Chairperson: Eduard Llobet, Universitat Rovira I Virgili (URV), Tarragona, Spain

16:30 - 16:50 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, Brindisi, Italy

16:50 - 17:10 Performance Analysis of Low-cost Gas Sensors for Air Quality Control: Overview in Europe and New Trends
Michel Gerboles, JRC, EC DG ENV, Institute for Environment and Sustainability, Ispra, Italy

17:10 - 17:30 Printed Environmental Sensors on Polymeric Foil: Status and Perspectives for Air-Quality Monitoring
Danick Briand, EPFL, Institute of Microengineering, Neuchâtel, Switzerland

17:30 - 17:50 Gas Sensor-Systems based on Hybrid Materials Dedicated to Air-Pollutants Monitoring
Jerome Brunet, Université Blaise Pascal, LASMEA-CNRS, Aubiere, France

17:50 - 18:10 Development of a Low-cost Mobile Sensor-System for Participatory Measurements of Urban Air Quality
Jan Theunis, VITO, Mol, Belgium

18:10 - 18:30 Computational Approaches to Wireless Chemical Sensing Challenges
Saverio De Vito, ENEA, Portici (Naples), Italy

18:30 - 19:00 Break

18:30 - 19:00 Poster Session

Chairperson: Eduard Llobet, Universitat Rovira I Virgili (URV), Tarragona, Spain

19:00 - 20:00 *Session 2 - Materials for Chemical Sensors and Transducers*

Chairperson: Michele Penza, Action Chair - ENEA, Brindisi, Italy

19:00 - 19:20 Carbon-based Nanomaterials for Gas Sensors of Environmental Interest
Phil Martin, Non-COST Partner, CSIRO, Materials Science and Engineering, Lindfield, Australia

19:20 - 19:40 Emerging Hybrid Materials for Air-Pollution Microsensors
Marcel Bouvet, Action Sub-WG1.3 Leader, Université de Bourgogne, Dijon, France

19:40 - 20:00 Conducting Polymer Sensor Arrays for Air-Quality Monitoring Applications
Krishna Persaud, The University of Manchester, School of Chemical Engineering and Analytical Science, Manchester, United Kingdom

20:00 - 20:10 Workshop Adjourns and Farewell

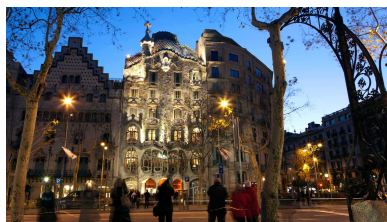
20:10 Closure of COST Action TD1105 EuNetAir Satellite WORKSHOP



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Barcelona, 20 June 2013

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Action First Workshop Programme Committee

Michele Penza, ENEA, Brindisi, Italy
Juan Ramon Morante, IREC and Universitat de Barcelona, Spain
Albert Romano-Rodriguez, Universitat de Barcelona (UB), Spain
Juan Daniel Prades, Universitat de Barcelona (UB), Spain
Francisco Hernandez-Ramirez, IREC, Barcelona, Spain
Eduard Llobet, Universitat Roviri I Virgili, Tarragona, Spain
Annamaria Demarinis Loiotile, University of Bari, Italy

URL: www.cost.eunetair.it

URL: <http://transducers-euroensors2013.org/>

COST Action TD1105 EuNetAir Steering Committee

Michele Penza, ENEA, Brindisi, Italy - *Action Chair*
Anita Lloyd Spetz, Linkoping University, Sweden - *Action Vice-Chair*
Juan Ramon Morante, IREC, Spain
Andreas Schuetze, Saarland University, Germany
Ole Hertel, Aarhus University, Denmark
Ingrid Bryntse, SenseAir AB, Sweden
Jan Theunis, VITO, Belgium
Marco Alvisi, ENEA, Brindisi, Italy
Gianluigi De Gennaro, University of Bari, Italy - *Grant Holder*
Fabio Galatioto, Newcastle University, UK
Ralf Moos, University of Bayreuth, Germany
Mar Viana, CSIC-IDAEA, Barcelona, Spain
Iveta Steinberga, University of Latvia, Riga, Latvia
Roberto Simmarano, Sensichips, Aprilia (Rome), Italy
Julian Gardner, University of Warwick, UK
Rod Jones, University of Cambridge, UK
Giorgio Sberveglieri, University of Brescia, Italy
Eduard Llobet, Universitat Roviri I Virgili, Tarragona, Spain
Thomas Kuhlbusch, IUTA eV, Duisburg, Germany
Albert Romano-Rodriguez, Universitat de Barcelona (UB), Spain
Annamaria Demarinis Loiotile, University of Bari, Italy - *Secretary*