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

COST Action TD1105

2nd International Workshop *EuNetAir* on New Sensing Technologies for Indoor and Outdoor Air Quality Control

Palazzo Nervegna-Granafei, Brindisi Municipality Headquarters ENEA - Brindisi Research Center, Brindisi, Italy, 25 - 26 March 2014

Action Start date: 01/07/2012 - Action End date: 30/06/2016 - Year 2: 1 July 2013 - 30 June 2014

CONCLUSIONS and UPCOMING EVENTS



by the EU Framework Programme

COST is supported

Michele Penza

Function in the Action: Action Chair ENEA - Brindisi, Italy



SECOND INTERNATIONAL WORKSHOP on New Sensing Technologies for Indoor and Outdoor Air Quality Control

Brindisi (Italy), 25 - 26 March 2014

Palazzo Nervegna-Granafei (City Mayor Headquarters) Via Duomo, 20 - 72100 Brindisi, Italy













AGENDA	
25 March 2014 - Tuesday	
08:30 - 18:00	REGISTRATION
09:00 - 09:30	Welcome Address
09:30 - 11:00	Session 1: Plenary Session
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 2: Oral Presentation
13:00 - 14:30	Lunch
14:30 - 16:00	Session 3: Oral Presentation
16:00 - 16:30	Coffee Break
16:30 - 18:30	Session 4: Oral Presentation
20:30 - 23:00	Social Dinner
26 March 2014 - Wednesday	
08:30 - 16:00	REGISTRATION
09:00 - 11:00	Session 5: Oral Presentation
11:00 - 11:30	Coffee Break
11:30 - 13:00	Session 6: Oral Presentation
13:00 - 14:30	Lunch
14:30 - 15:30	Session 7: Poster Presentation
15:30 - 16:00	Discussion and Coffee Farewell
16:00	Closure of Meeting



Summary of Work and Budget Plan - Year 2: 1 July 2013 - 30 June 2014

DECISIONS APPROVED BY COST ACTION TD1105 MC	APPROVED
MC3D01. 18 STSMs: 11 STSMs (5 days) and 7 STSMs (30 days), or equivalently.	YES
MC3D02. WG1-WG4 Meeting, European Environment Agency, Copenhagen, DK, 3 - 4 Oct. 2013 - DONE	YES
MC3D03. WG1-WG4 Meeting, Cambridge, UK, 18 - 19 Dec. 2013, (joined to 4 th MCM). DONE	YES
MC3D04. 2 nd Action Workshop on New Sensing Technologies for Indoor and Outdoor Air Quality Control, 25 - 26 March 2014, Brindisi, Italy. DONE	YES
MC3D05. 2 nd Training School, 31 March - 2 April 2014, Saarland University, Saarbrucken, Germany. PLANNED	YES
MC3D06. EMRS-2014 Symposium, 26 - 30 May 2014, Lille, France - 1 st Action TD1105 International Conference as planned in MoU (joined to 5 th MCM). PLANNED	YES
MC3D07. STATE-OF-THE-ART on Air Quality Monitoring: Models, Methods, Standards and Technologies, June 2014 (To be defined). Release 1.	YES
MC3D08. NEWSLETTER: Issue 3 (Nov-Dec. 2013). DONE; Issue 4 (April-May 2014). PLANNED. LEAFLET/BROCHURE: UPDATED Issues	YES
MC3D09. 4th MC Meeting: 20 Dec. 2013, Cambridge, UK, at Queens' College. DONE	YES
MC3D10. 5 th MC Meeting: 30 May 2014 (tbc), Lille, France, EMRS-2014 Spring Meeting. PLANNED	YES
MC3D11. DISSEMINATION & OUTREACH ACTIVITIES	YES

COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

COST Domain-Specific CMST Strategic Event

COST Actions: A Great Opportunity as Incubators for Molecular Science and Technology Brussels (Belgium), 27-28 March 2014

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

COST Domain ESSEM, ISCH, ICT Strategic Event

Cities of Tomorrow

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

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





COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

• Air Sensors 2014: A New Frontier

Workshop Series US EPA: Workshop in the Next Generation Air Monitoring (NGAM) EPA Campus in Research Triangle Park, North Carolina (USA), 9-10 June 2014 Action TD1105 represented as Invited Speaker by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy.

NATO Advanced Research Workshop

NATO ARW on Nanotechnology to Aid Chemical and Biological Defense

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

Antalya (Turkey), 22-26 September 2014

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





COST Action TD1105: Related Upcoming EVENTS

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

Eurosensors 2014

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

- Brescia, (Italy), 7-10 September 2014
- General Conference Chair: Prof. G. Sberveglieri

Action TD1105 represented as **Technical Program Committee (TPC) Member** by Dr. Michele Penza, Action Chair, ENEA, Brindisi, Italy

• IEEE SENSORS 2014

- 2014 Edition of Conference Series: Worldwide Forum
- Valencia (Spain), 2-5 November 2014
- **Technical Program Chair: Prof. Ignacio R. Matias**

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







Call for Abstracts and Papers

Symposium B: Advanced Functional Materials for Environmental Monitoring and Applications

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

Symposium Organizers and Guest Editors

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

Yongxiang Li Shanghai Institute of Ceramics Chinese Academy of Sciences 1295 Shanghai, China <u>yxli@mail.sic.ac.cn</u> Anita Lloyd Spetz Dept. of Physics, Chemistry & Biology Linkoping / Oulu University SE-581 83 Linkoping, Sweden spetz@ifm.liu.se

Meyya Meyyappan Ames Research Center NASA 94035 Moffett Field, CA, USA <u>m.meyyappan@nasa.gov</u> Albert Romano-Rodriguez Department of Electronics University of Barcelona 08028 Barcelona, Spain aromano@el.ub.es

EMRS-2014 Symposium B Proceedings In Special Issue JSSS Journal of Sensors and Sensor Systems USA Number of EMRS Submissions:

202 Abstracts

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability



URL: (<u>http://www.journal-of-sensors-and-sensor-systems.net/submission/manuscript_submission.html</u>)

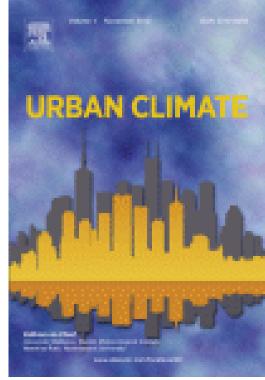
SECOND INTERNATIONAL WORKSHOP *EuNetAir*:

New Sensing Technologies for Air-Pollution Control and Environmental Sustainability

- Special Issue Urban Climate (Elsevier)
- New Sensing Technologies and Methods for Air-Pollution Monitoring
- Proceedings of the Action EEA Meeting open to external contributors. Peer-review process (http://ees.elsevier.com/uclim/)
- Guest Editors:
- ✓ Michele Penza, ENEA, Italy
- ✓ Anita Lloyd Spetz, Linkoping University, Sweden
- ✓ Ole Hertel, Aarhus University, Denmark
- ✓ Ulrich Quass, IUTA eV, Germany
- Deadline for submission: 28 February 2014 (Close)

COOPERATION IN SCIENCE AND TECHNOLOGY

- Number of Submissions: 20 Manuscripts
- Expected Publication: Fall 2014 (Nov-Dec 2014)



UPDATING AND BREAKING NEWS from Action TD1105



Social Scientific ESRs Network (SSEN) by LinkedIn Moderator(s): Mar Viana, Mariacruz Minguillon

2° CALL for Short Exchange Visits <u>launched on Sept. 2013</u> (STSM - Short Term Scientific Mission)

Dr. Jan Theunis, STSM Coordinator EuNetAir



Action website: www.cost.eunetair.it

hosted by ENEA

Dr. Marco Alvisi, Webmaster Coordinator

Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli, Webmaster Team

Issue 1: published on Dec. 2012

Issue 2: published on June 2013 ✓

Issue 3: published on December 2013

Issue 4: planned on May-June 2014 🥒

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

Video/Interview at Action Webpages: www.cost.eunetair.it Section VIDEO

Tim Watkins

Deputy Director US EPA Air, Climate and Energy Programme

• Andrea C. Ferrari

Chairman of Executive Board of Graphene Flagship

Cristina Guerreiro

Coordinator of EEAAQ Report 2012 and 2013

Meyya Meyyappan

Chief Scientist at NASA Ames Research Center



COST Action TD1105 EuNetAir:

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

Open Call for Participation of the Trainees Deadline for Application of Grants: 14 February 2014 (Close)

More info at Action webpages - Section Training Schools



Aveiro Joint-Exercise Intercomparison

Joint-Exercise IDAD with SGX Sensortech

Evaluation of micro-sensors against standard methods for air quality control during field campaigns





- The application of new sensors side by side with standardised equipment in field studies will allow assessing the reliability and uncertainty of these lowcost sensors, especially regarding an accurate detection of pollutant concentration peaks.
- The measurement campaigns of O₃, NO₂, CO/VOC are being conducted in two major Portuguese airports, Lisbon and Oporto, in 6 monitoring sites, from October 2013 to February 2014.

Aveiro Joint-Exercise Intercomparison

EuNetAir Air Quality Joint-Exercise Intercomparison 2014 Air quality campaign at Aveiro city centre 2014





Continuous measurements CO, benzene, NOx, SO2, PM10, VOC Temperature, humidity, wind velocity, wind direction, solar radiation, precipitation

All COST partners are invited to install their micro-sensors side by side with our air quality standardised equipment.



COST Action TD1105 EuNetAir:

1st EuNetAir Air Quality Joint-Exercise Intercomparison

Aveiro, Portugal, 14 - 28 April 2014

organized by

IDAD - Institute of Environment & Development, Campus Unversitario, Aveiro, Portugal

Contact Persons: Prof. Carlos Borrego, IDAD, (cborrego@ua.pt)

Dr. Anna Margarida Costa, IDAD, (amcosta@ua.pt)

Dr. Michele Penza, ENEA, (michele.penza@enea.it)

Open Call for Participation of the Interested Teams Deadline for Applications: 31 March 2014 NO FUNDING IS AVAILABLE from COST Action TD1105 (!!!)

More info at Action webpages - Section Meetings





Contact Details



www.cost.eunetair.it

- CSO Approval:
- Kick-off Meeting:
- Start of Grant:
- End of Grant:

01	Dec. 2011
16	May 2012
01	July 2012
30	June 2016

Dr. Michele Penza, ENEA, IT **MC Chair:** michele.penza@enea.it **Prof. Anita Lloyd Spetz** MC Vice Chair: Linkoping University, SE spetz@ifm.liu.se Dr. Corinna Hahn **Grant Holder: Eurice GmbH, DE** c.hahn@eurice.eu Dr. Annamaria Demarinis Loiotile **Scientific Secretary:** annamaria.demarinis@uniba.it Dr. Deniz Karaca **Science Officer:** deniz.karaca@cost.eu **Administrative** Dr. Andrea Tortajada **Officer:** andrea.tortajada@cost.eu **Prof. Kostantinos Kourtidis (GR) Rapporteur ESSEM:** kourtidi@env.duth.gr **Prof. Joaquim Manuel Vieira (PT) Rapporteur MPNS:** jvieira@cv.ua.pt Prof. Antonio Lagana (IT) **Rapporteur CMST:** lagana05@gmail.com

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

WELCOME from Chair addressing the 2nd International Workshop, Brindisi (Italy), 25 - 26 March 2014

SEE YOU IN LILLE, 26-30 May 2014 5th ACTION MC Meeting (30 May 2014) & Symposium B (26-29 May 2014) at EMRS-2014, Spring Meeting 2014, LILLE, FRANCE LILLE, 26-30 MAY 2014





COST Action TD1105 EuNetAir Workshop at Palazzo Nervegna-

Granafei (Municipality of Brindisi) in Brindisi, Italy

Brindisi (Italy), 25 - 26 March 2014





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



Municipality of Brindisi