



COST

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

MC Meeting at Rome, 4-6 December 2012

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

Year: 2012-2013 (*Starting Action*)



Linköping University
INSTITUTE OF TECHNOLOGY



FunMat

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



UNIVERSITY of OULU
OULUN YLIOPISTO



EMRS 2014 proposal

- **Suggested title:** Advanced Functional Materials for Environmental Monitoring and Applications
- **Suggested journal for publication of manuscripts:**
JSSS
- **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

EMRS 2014 proposal

- **Introduction:** ...The urban environment has a profound effect on people's health and well-being...**tools to collect more detailed information on the urban environment**...decisions on personal actions and lifestyle...
- Nanotechnologies ... create a new generation of **nanosensors** for air quality control. **Functional nanomaterials** ...with new sensing properties (detection at ppb-level, high sensitivity), **self-heating** and durable operations for **low powered** ... devices ... for indoor and outdoor air quality monitoring...geo-tagged data ... collected by networked stationary or mobile smart devices... novel **air quality monitoring and mapping techniques** of gas molecules and particulate matter...complementary to the existing official high-cost high-quality air quality monitoring stations...**used by public authorities, scientists or community groups**...
- **Tentative list of plenary and invited speakers** and, if possible, the title of the presentations (The Cost network is large and competent, many possible speakers)
Prof Martin Eickhoff, University of Giessen, Germany, **also plenary**
Prof Reginald Penner, University of California Irvine, USA
Prof Ping Wang, Zhejiang University, China
Prof Shinji Nakagomi, Ishinomaki Shenshu University, Japan
Prof Silke Christiansen, Max-Planck Institute, Erlangen. Germany

- Tentative list of scientific committee members:

Professor Giovanni Cuniberti, Technical University Dresden, Germany,
g.cuniberti@tu-dresden.de (DE)

Professor Morante, Barcelona (ES)

Professor Giorgio Sberveglieri, Brescia (IT)

Professor Jyrki Lappalainen, Oulu (FI)

Professor Eduard Llobet, Tarragona (ES)

Professor George Kiriakidis, Crete (GR)

Professor Marcel Bouvet, Dijon (FR)

Professor Jerome Brunet, Aubiere (FR)

Professor Daniela Schonauer, Bayreuth (DE)

Professor Ingrid Bryntse, Hudiksvall (SE)

Professor Roxanna Piticescu, Bucharest (RO)

Dr. Monika Kwoka, Gliwice (PL)

Professor Kengo Shimano, Kyoto (JP)


Professor Ruby Ghosh, Lansing (US)

Professor Xinxin Li, Shanghai (CN)

Professor Phil Martin, Csiro (AU)

Professor John Lee , Seoul (KR)

Professor Rod Jones, Cambridge (UK)

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- Procedure for selecting the winners of the Graduate Student awards (GSA). (Suggestion: Sign up at abstract submission, nomination by the scientific committee (3 reviewers from the scientific committee), special session with talks by nominated students (committee of 5 persons, 2 organizers and 3 external (one of the invited speakers))
 - Tentative budget:
 - Tentative list of major sponsors (to be solicited), COST and SME partners of the action
 - Anticipated income (800 Euro if > 100 abstracts (if organized as a spring meeting as planned in COST Action Time Table)
 - Anticipated Expenditure.
(COST meeting run in connection with the conference)

EMRS 2014 proposal

- **Hot topics to be covered by the symposium (600 characters):**
 - Advanced gas sensing semiconducting materials
 - Hybrid materials and nanocomposites for gas sensing
 - Catalytic sensing materials
 - Device fabrication, packaging and testing, aging
 - New (nano)sensors for monitoring gaseous and liquid pollutants.
 - Ab initio Modeling of gas/ surface interaction
 - Modeling of materials, devices and sensor systems
- **Other events taking place in 2013 focusing on the same or similar topics**
- **IMCS** (International Meeting on Chemical Sensors) 2014 will take place in Argentine in March. However, IMCS is a very broad conference, while the proposed conference session will focus on materials for sensors
- **Euroensors** normally takes place in September, Euroensors is very broad also including physical sensors, while the proposed conference session will focus on materials for chemical sensors