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

COST Action TD1105

WGs and 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*)

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3S scientific context and Action objectives

Scientific Context

- Development of sensor modules and modular sensor systems for (A)QC
- Case studies and field test systems for specific scenarios with low-cost systems (total VOC vs. selective VOC detection)

  → WG2, WG4

Objectives:

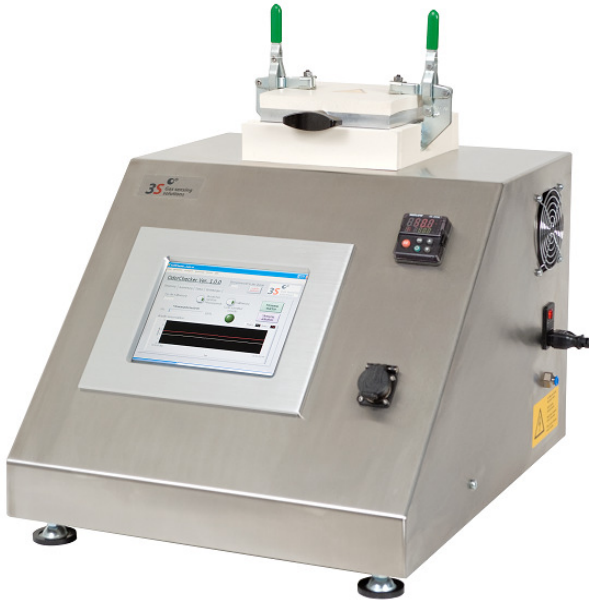
- Indoor/outdoor air quality control in residential buildings and urban, industrial, rural as well as remote sites
- Assessment of protocols and methods for low-cost gas sensors for AQC with definitions of guidelines for standards
- New sensors for odor assessment for quality control of products and materials
- Air-quality case-studies

3S activities

- 3S is a SME in the field of gas detection and quality control with a strong scientific and R&D-background (university spin-off)
- Current (research) topics:

leak detection

odor assessment



Current 3S research activities and facilities

- **Ongoing research topics:**
  - **sensor system modularity**
  - **calibration ability for (low cost) sensors in higher volume applications**
  - **Selective detection of hazardous VOCs**
- **Research Facilities:**
  - Electronics for temperature-controlled gas sensor operation
  - Modular field test systems for various applications
  - Climate cabinets and automated gas mixing systems for calibration and application-specific development
  - High-precision balances
  - In-house system prototyping

Suggested 3S-Priorities for future research

Research directions as PRIORITIES:

- Stability assessment of new sensors and sensor materials
- Calibration strategies when dealing with low-cost (broad-band) sensing devices