

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

COST Action TD1105

WGs & MC Meeting at SOFIA (BG), 16-18 December 2015

New Sensing Technologies for Indoor Air Quality Monitoring: Trends and Challenges

Action Start date: 01/07/2012 - Action End date: 30/04/2016 - Year 4: 1 July 2015 - 30 April 2016

Summary of Res. & Innovation Needs from WG3 Session: Environmental Measurements & Air-Pollution Modelling

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Suggested **R&I Needs** for future research

- **Several papers on regional to local scale modelling air quality in and around Bulgaria. Studies aim for providing tools in environmental regulation – among these traffic control systems.**
- **A general request concerned access to more measurements regarding AQ and metadata from this region.**
- **Bulgaria is a hot spot in Europe regarding PM10: Modelling the organic carbon fraction seems to be a challenge.**
- **Comparisons of different types of PM monitors for indoor environment based on both visible light and gravitational methods and data from these correlate nicely but may differ in absolute measure. Important that health studies are based on same instruments to ensure homogeneous datasets.**

Suggested **R&I Needs** for future research

- **Studies on AQ exposure in schools. A series of studies based on portable instruments and the most recent of these based on electrochemical sensors. These studies demonstrate that there is still much work to be done in order to reduce exposure of our school children to harmful air pollution.**
- **Studies based on grants from UK research council on allergenic grass pollen dispersion using state-of-the-art DNA sequencing techniques and modelling based on WRF-CHEM in combination with local scale dispersion model tools. Plans to follow up on the granted studies within Horizon2020 calls i.e. looking on co-exposures with air pollution. The group is looking for PhD and post doc students to join their project.**

Suggested **R&I Needs** for future research

- **Studies on water soluble marine aerosols with focus on trace metal contents that e.g. are essential for phytoplankton growth. The studies included comparisons of simultaneous measurements performed on Teflon and Glass fibre filters. Focus on trace metal distribution on different aerosols, and studies include comparisons between aerosols sampled at sea site and fresh water lakes.**