



**Conference 2014: Session on Indoor Environment Quality  
Brussels 19<sup>th</sup> June 2014, 09:00 – 10:30**

**Agenda**

- 1.) J. Frick, MPA University of Stuttgart: **IEQ Session introduction**
- 2.) M. Levy on behalf of M. Yeroyanni, EC DG Research and Innovation: European Conference **"Renaturing Cities: Addressing Environmental Challenges and the Effects of the Economic Crisis through Nature-based Solutions"**
- 3.) M. Levy, EC DG Research and Innovation: **Materials & technologies for improved Indoor Air Quality**
- 4.) A. Lloyd Spetz, Linköping University: **European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability - EuNetAir - TD1105**
- 5.) S. Kirchner, CSTB: **Indoor Air Quality: a Health Challenge for Occupants**
- 6.) L. Miccoli, BAM: **EeB Cluster | Technologies and materials for a healthier indoor environment**
- 7.) J. Bartzis, University of Western Macedonia: **OFFICAIR: On the reduction of health effects from combined exposure to indoor air pollutants in modern office buildings (Nov 2010 – Jan 2014)**
- 8.) C. Iroulart, EFFICIENCE Marketing: **IAQSense – Real Time Monitoring of Indoor Pollution**
- 9.) A. Lloyd Spetz, Linköping University: **SENSIndoor Nanotechnology based intelligent multi-SENSOR System with selective pre-concentration for Indoor air quality control**
- 10.) G. Vaes, HydroScan: **SIPE - An environmental Standards Information Portal for Europe**

Presentations prepared, but not given:

- 11.) G. Garcíá Mandayo, ceit: **INTASENSE – Integrated Air Quality Sensor for Energy Efficient Environment Control – An EEB Success Story**
- 12.) J. Frick, MPA University of Stuttgart: **CETIEB – Cost-Effective Tools for Better Indoor Environment in Retrofitted Energy Efficient Buildings**
- 13.) U. Weimar, Eberhard Karls University of Tübingen: **clear-up – clean and resource efficient buildings for real life**

The session presentations are available for download at the CETIEB homepage: [www.cetieb.eu](http://www.cetieb.eu), under "Download" in the folder "ECTP-conference 2014 - Indoor Environment Quality Session".

**Summary of session**

**Introduction (see presentation 1):** The session on Indoor Environment Quality was based on the idea to connect the existing EeB cluster "Technologies and materials for a healthier indoor environment" with other ongoing European and national activities for Indoor Environment Quality and possibly to enlarge the cluster. A next session could be hosted by the Cost action EuNetAir TD1105. Michele Penza (ENEA, chair of EuNetAir) invited the interested participants for the meeting of Action TD1105 EuNetAir in Istanbul, at 3<sup>rd</sup> – 5<sup>th</sup> December 2014. The focus is "Indoor Environment Applications". The meeting details will be given later.



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**EC DG Research and Innovation (see presentations 2 and 3):** The two presentations of EC DG Research and Innovation given by the Monique Levy gave an overview on two fields within HORIZON 2020:

- 1.) **Renaturing Cities: Addressing Environmental Challenges and the Effects of the Economic Crisis through Nature-based Solutions** (Presentation given on behalf of Maria Yeroyanni, EC DG Research and Innovation): The theme will be important for the upcoming calls 2016/2017 in Horizon 2020 for WP “Climate action, environment, resource efficiency and raw materials”. The IEQ cluster could contribute with research ideas to this theme. See document “Ideas for research for IEQ”.

There will be installed very soon a homepage for this theme. The address will be distributed through the distribution list.

Please note that urban development issues are addressed under H2020, WP 2014-2015, WASTE6-2015: Promoting eco-innovative waste management and prevention as part of sustainable urban development. In particular, under b) Eco-innovative strategies it is stressed that proposals should highlight how urban patterns, drivers, consumer behaviour, lifestyles, culture, architecture and socio-economic issues can influence the metabolism of cities.

Link to WP:

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014\\_2015/main/h2020-wp1415-climate\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-climate_en.pdf)

- 2.) **Materials & technologies for improved Indoor Air Quality:** Indoor Air Quality in buildings has become a major concern for several reasons:
  - a. The trend towards energy efficiency leads to more tightly sealed buildings (passive houses).
  - b. Increasing use of synthetic building materials and furnishings or natural products formulated with chemicals accentuates the issue.
  - c. Materials play a key role in indoor air quality.

The theme comes from WP Industrial leadership: leadership in enabling and industrial technologies. A roadmap on Materials for Construction is presently under preparation. It will be issued in 2015. A questionnaire in July – September 2014 will identify research needs in Materials for Construction. The cluster IEQ is invited to contribute to this questionnaire. The questionnaire will be distributed through the distribution list. See as well the document “Ideas for research for IEQ”.

The contribution to the request of the EC is an urgent issue, because the calls for 2016 and 2017 are now in preparation. Therefore I suggest to react within this and next week.

**Cost Action TD1105 EuNetAir (see presentation 4):** Anita Lloyd Spetz (Linköping University) gave an overview of the activities of the Cost action TD1105 European Network on New Sensing Technologies for Air-Pollution Control and Environmental Sustainability – EuNetAir. The action covers Indoor and



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Outdoor Air issues. 28 countries have signed a MoU. 7 Non-cost countries with 8 institutions participate in the network. A lot of SMEs take part in the network.

**Indoor Air Quality (see presentation 5):** Séverine (CSTB) presentation addresses research and policies on the national level in France and beyond. Main focus was health issues. Remark: One task of the IEQ cluster could be to collect activities and best practice examples on national level.

**EeB Cluster – Technologies and materials for a healthier indoor environment (see presentation 6):** Lorenzo Miccoli (BAM) presented the activities of the existing EeB IEQ cluster and gave an overview on the 6 involved projects: BRIMEE, ECO-SEE, H-House, Osirys, CETIEB and INTASENSE. The cluster strategy includes scientific and non-technical priorities. Remark: The session on IEQ was one result of this cluster activity.

**Project overviews:**

**OFFICAIR (see presentation 7):** John Bartzis, University of Western Macedonia presented the project OFFICAIR. It was funded within the call ENV.2010.1.2.2-1: Indoor air pollution and health risks of modern office buildings. The project performed a general survey of 167 office buildings in 8 countries, a detailed study with IAQ measurements in 37 buildings in 8 countries, and an intervention study in 6 countries and 20 buildings. The IAQ data set produced by OFFICAIR can now be considered as a reference on indoor concentrations in recently built or recently refurbished office buildings in Europe.

**IAQSense (see presentation 8):** Claude Iroulart (EFFICIENCE Marketing) gave an overview of the objectives of the new started (2013) project IAQSense. Additionally he presented the aims of two Eureka/Euripides projects: PAMIAQ and STRUCTURAL SENSING.

**SENSIndoor (see presentation 9):** Anita Lloyd Spetz (Linköping University) presented the project SENSIndoor started in January 2014. The project originates from the project VOC-IDS (MNT-ERA.net collaborative project) and the Cost action EuNetAir.

**SIPE (see presentation 10):** Guido Vaes (HydroScan) presented the SIPE project, which is a Coordination and Support Action. Therefore the focus is not research but rather the provision of information about environmental standards and research. The project generated knowledge base in form of a Web-Portal to:

- Bridging the gap between Standards and Research
- Web Portal acting as knowledge brokerage system
- Interlinking information of different Stakeholder groups

The Web-Portal [www.SIPE-RTD.info](http://www.SIPE-RTD.info) provides intelligent search on Policies, Standards and Research. The IEQ cluster is invited to upload projects information on the Portal to broaden the knowledge base.

**CETIEB, INTASENSE and clear-up (see presentations 11, 12 and 13):** A short overview on CETIEB and INTASENSE was given in the EeB-cluster presentation by Lorenzo Miccoli (BAM). Udo Weimar



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(Eberhard Karls University of Tübingen) the coordinator of the clear-up project was not able to attend the session. He stated his clear interest to be partner in the IEQ cluster. The presentations of these three projects are included in the presentation-download.

**Conclusions and remarks:**

Indoor Environment Quality should cover health and comfort aspects of indoor environments. It includes Indoor Air Quality but covers as well thermal comfort, lighting, noise, etc. A living IEQ cluster needs a base of preparation. At the moment we could share the experience of the EeB cluster, but there is a need to have a common platform. ECTP could provide this platform. I will check with the ECTP general secretary the possibilities. For the preparation we need a consistent mailing list. Therefore an Excel sheet is included to provide for each project and activity the interested persons. Please fill for your project and activity the corresponding sheet. Please include new sheets, if yours is missing.

**Next steps:** Very urgent is the contribution to research ideas for the calls 2016 and 2017. A first draft "Ideas for research for IEQ" is included. Please provide not more than 5 ideas and prioritize them, at best within the next days. We have not more time than this and the next week. The file includes the questions of the consultation for the social challenge 5 (finished 16<sup>th</sup> of June 2014), which might be useful.

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Jürgen Frick

Materials Testing Institute University of Stuttgart

Pfaffenwaldring 32

D-70569 Stuttgart

Email: [juergen.frick@mpa.uni-stuttgart.de](mailto:juergen.frick@mpa.uni-stuttgart.de)

Tel.: +49/ 711/ 685-63381