



AIVC 2017 Workshop on IAQ metrics

Brussels, 14-15 March 2017

Programme

Tuesday 14 March

09:15-11:00 Session 1: Opening Session

(chairmen : Peter Wouters and François Durier)

- Welcome on behalf of AIVC
- Considerations on IAQ metrics from regulatory and compliance point of view - Use of IAQ metrics in practice, Peter Wouters, BBRI, Belgium
- Defining the metrics to assess the IAQ in low-energy residential buildings: results from IEA EBC Annex 68 Subtask 1, Marc Abadie, U. La Rochelle, France
- The promise and problems of performance-based ventilation, William P. Bahnfleth, Pennsylvania State University, USA

11:00-11:30 Coffee break

11:30-13:00 Session 2: Indoor Air Quality metrics in practice

(chairmen: Max Sherman and Peter Wouters)

- What can('t) perceived air quality indices tell you about indoor air quality? Pawel Wargocki, DTU, Denmark
- Indoor carbon dioxide as metric of ventilation and IAQ: Yes or No or Maybe? Andrew Persily, NIST, USA
- IAQ assessment in high performing buildings, Kevin Teichman, Environmental Protection Agency, USA

Discussion: 30'

13:00-14:00 Lunch break

14:00-15:30 Session 3: From ventilation airflow rates to IAQ metrics

(chairmen: Pawel Wargocki and Andrew Persily)

- Rationale behind current ventilation airflow rates, Wouter Borsboom, the Netherlands
- Concentration versus m^3 air per hour – the battle of assessors, Marcel G.L.C. Loomans, Eindhoven University of Technology, the Netherlands
- Status and perspectives for the development of IAQ metrics in the US, Iain Walker, LBNL, USA

Discussion: 30'

15:30-16:00 Coffee break

16:00-17:30 Session 4: IAQ assessment - System submetrics - IAQ modelling

(chairmen: Willem de Gids and Gaëlle Guyot)

- Performance-based control of an adaptive hybrid IAQ system. The user as key performance indicator. Bert Belmans, VU Brussel, Belgium
- Can contaminant air quality indices be used to analyse the risk of airborne cross infections in hospital environments? Manuel Ruiz de Adana Santiago, University of Cordoba, Spain
- Balanced Ventilation Systems: Designed, Energy Efficient and Well Distributed Or Can We Live Healthy without Good Lungs? Kurt Johnson, Fresh Air Ventilation Systems, USA
- Suitable ventilation in schools – mechanical or natural? Christine Knaus, ITG Dresden, Germany
- Radon measurement for the assessment of IAQ, Tiberiu Catalina, Technical University of Civil Engineering, Romania

17:30-18:45 Reception

Wednesday 15 March 2017

09:00-10:30 Session 5: IAQ assessment and performance-based approaches

(chairmen: Paula Wahlgren and Jean Lebrun)

- A review of pollutants and sources of concern and performance-based approaches to residential smart ventilation, Gaëlle Guyot, Cerema, France
- Indoor Air Quality and thermal comfort in Irish retrofitted energy efficient homes, Marie Coggins, National University of Ireland, Ireland
- Modelling trade-offs between building energy and health, Catherine Noakes, University of Leeds, UK

Discussion: 30'

10:30-11:00 Coffee break

11:00-12:30 Session 6: IAQ assessment and Performance-based approaches

(chairmen: Arnold Janssens and Wouter Borsboom)

- Comparison of different performance-based approaches for the definition of ventilation requirements in dwellings, Samuel Caillou, BBRI, Belgium
- The influence of different ventilation strategies and demand control on the indoor air quality in dwellings, Romy Van Gaever, BBRI, Belgium
- Demand controlled ventilation in residential buildings, Caroline Markusson, SP, Sweden

Discussion: 30'

12:30-13:00 Session 7 Closing

(chairmen: Manfred Plagmann and Benjamin Jones)

- Questions and Answers, François Rémi Carrié, ICEE, France
- Highlights of the workshop, Benjamin Jones, University of Nottingham, UK
- Next steps and future events, François Rémi Carrié, ICEE, France