

# Smart materials for energy efficient IAQ management

# Tuesday October 12th, 2021

14:00-15:45 (Brussels, BE)

13:00-14:45 (London, UK)

20:00-21:45 (Beijing, CN)

21:00-22:45 (Tokyo, JP)

23:00-00:45 (Sydney, AU)

08:00-09:45 (Toronto, CA)



In this webinar, we will address the opportunities to use novel materials (from advanced functional nanomaterials to bio-based building materials) as building components to actively/passively manage the IAQ, for example, through active paint, wallboards, and textiles coated with advanced sorbents or catalysts and quantify their potential based on the assessment framework developed in the annex.

This webinar is organized by the Air Infiltration and Ventilation Centre (<a href="https://www.aivc.org/">https://www.aivc.org/</a>)¹ & the IEA EBC Annex 86 "Energy Efficient Indoor Air Quality Management in Residential Buildings" (<a href="https://annex86.iea-ebc.org/">https://annex86.iea-ebc.org/</a>). The webinar is facilitated by INIVE (<a href="https://www.inive.org/">https://annex86.iea-ebc.org/</a>).

# Programme (Brussels time)

- 14:00 | Introduction, Menghao Qin, Leader of ST3, IEA EBC Annex 86 Technical University of Denmark (DTU), Denmark
- 14:10 | Metal-organic Frameworks for indoor environment control, Menghao Qin DTU, Denmark
- 4 14:30 | Evaluating and Modeling of Indoor Passive Panel Technologies at National Research Council Canada, *Doyun Won – NRC, Canada*
- 4 14:50 | Electrospun fibers for Supply Air Filtration in residential buildings, Alireza Afshari Aalborg University, Denmark
- 15:10 | Impact of VOC and moisture buffering capacities of bio-based building materials on IAQ and thermal comfort, Anh Dung TRAN LE – UPJV, France
- 4 15:30 | Questions and Answers, Jensen Zhang, Co-Leader of ST3, IEA EBC Annex 86 Syracuse University, USA
- 15:45 | Closing & End of webinar

<sup>1</sup> Note: The recordings of previous webinars can be found at: https://www.aivc.org/events/webinars







## Cost and registration

Participation to the webinar is free but requires you to register for the event. The webinar will be limited to a maximum of 1000 persons. To register, please click on the "Register now" button above.

### What is a webinar?

A webinar is a conference broadcasted on internet. To follow a webinar you must have a computer with a sound card and speakers or headphones. Once logged in the "conference room", you will be able to see the slides of the presentation and to hear the panellists' comments. You will also be able to ask written questions to the speakers, and to answer on-line surveys.

### Hardware, software

Our webinars are powered by WebEx Event Center. The only thing you need is a computer with a sound card and speakers. Before you can log in the "conference room", WebEx will install the required application. If you are not a WebEx user, please visit <a href="www.webex.com/login/join-meeting-tips">www.webex.com/login/join-meeting-tips</a> to check the system requirements and join a test meeting. Please also join the event at least 15 minutes in advance.

#### About AIVC

Created in 1979, the Air Infiltration and Ventilation Centre (<a href="www.aivc.org">www.aivc.org</a>) is one of the projects/annexes running under the International Energy Agency's Energy in Buildings and Communities (IEA-EBC) Programme. With the support of its member countries as well as key experts and two associations (REHVA, IBPSA, ISIAQ), the AIVC offers industry and research organisations technical support aimed at better understanding the ventilation challenges and optimising energy efficient ventilation.

The AIVC activities are supported by the following countries: Australia, Belgium, Brazil, China, Denmark, France, Greece, Italy, Ireland, Japan, Netherlands, New Zealand, Norway, Republic of Korea, Spain, Sweden, UK and USA.

# About EBC Annex 86 - Energy Efficient Indoor Air Quality Management in Residential Buildings

Annex 86 Energy Efficient Indoor Air Quality Management in Residential Buildings (<a href="https://annex86.iea-ebc.org/">https://annex86.iea-ebc.org/</a>) is an international research project of the IEA Energy in Buildings and Communities (EBC) programme. The goal of this annex is to work in an international collaboration to create an integrated general assessment method to operationalize the air quality approach suggested by IEA EBC Annex 9 to support the development, rating and implementation of innovative and highly energy efficient IAQ management strategies. An IAQ management strategy is understood to be any coherent set of measures by a stakeholder in the building that aims to improve IAQ. Annex 86 aims to improve the energy efficiency of the IAQ management strategies in operation and to improve their acceptability, control, installation quality and long-term reliability.

#### **About INIVE**

INIVE EEIG (International **N**etwork for Information on **V**entilation and **E**nergy **P**erformance) was created in 2001 as a so-called European Economic Interest Grouping. The main reason for founding INIVE was to set up a worldwide acting network of excellence in knowledge gathering and dissemination. At present, INIVE has 8 member organisations (BBRI, CETIAT, CSTB, eERG, IBP-Fraunhofer, NKUA, SINTEF, and TNO) (www.inive.org)

INIVE is coordinating and/or facilitating various international projects, e.g. AIVC (<a href="www.aivc.org">www.aivc.org</a>), TightVent Europe (<a href="www.tightvent.eu">www.tightvent.eu</a>), venticool and Dynastee (<a href="www.dynastee.info">www.dynastee.info</a>). INIVE has also coordinated the ASIEPI project dealing with the evaluation of the implementation and impact of the EU Energy Performance of Buildings Directive, the QUALICHeCK project aiming towards improved compliance and quality of the works for better performing buildings, BUILD UP the European portal on Energy Efficiency and the EPBD feasiblity study 19a (<a href="https://www.epbd19a.eu/">https://www.epbd19a.eu/</a>).



