

IEA-EBC Annex 87 Energy and Indoor Environmental Quality Performance of Personalised Environmental Control Systems (PECS)

Monday December 12 th , 2022	
16:30-18:00 (Brussels, BE)	REGISTER NOW FREE – Participation to the Webinar is free
15:30-17:00 (London, UK)	
07:30-09:00 (Los Angeles, USA)	Registration is required: A link to join the webinar
Tuesday December 13 th , 2022	will be included in the email confirmation.

Personal Environmental Control System (PECS) with the functions of heating, cooling, ventilation, lighting and acoustic has advantages of controlling the localized environment at occupant's workstation by their preference instead of conditioning an entire room. This improves personal comfort, health and energy efficiency of the entire heating, ventilation and air-conditioning (HVAC) system substantially. Personalized ventilation will also protect against cross contaminations, which are critical in open plan offices and workplaces with close distance.

There will in the future be an increasing interest and marked for PECS. The application is for workplaces with mainly sedentary activity like offices (open plan, banks, control centres, etc.). Due to the pandemic, where many people worked at home, there will be an increase in home working places where PECS may be a solution.

This webinar aims to present the new IEA-EBC Annex 87 on Personalized Environmental Control Systems.

This webinar is organized by the <u>IEA-EBC Annex 87</u> & the <u>AIVC</u>. The webinar is facilitated by <u>INIVE</u>.

Programme (Brussels time)

00:30-02:00 (Tokyo, JP)

- 4 16:30 | Introduction to IEA-EBC Annex 87, *Bjarne W. Olesen, ICIEE/DTU, Denmark*
- 4 16:40 | Desk mounted Personalized ventilation systems, Ongun Berk Kazanci, ICIEE/DTU, Denmark
- 4 16:55 | Footwarmers providing efficient heating, Hui Zhang, UC-Berkeley, USA
- 4 17:10 | Questions and answers
- 4 17:20 | Heated and cooled chairs, Sabine Hoffmann, Technical University of Kaiserslautern, Germany
- 4 17:35 | Wearable heating and cooling technology, Joon-Ho Choi, University of Southern California, USA
- 4 17:50 | Questions and answers
- 🖊 18:00 | End of webinar







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 "webinar 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 online surveys.

Hardware, software

Our webinars are powered by WebEx. The only thing you need is a computer with a sound card and speakers. Before you can log in the "webinar room", WebEx will install the required application. If you are not a WebEx user, please visit https://help.webex.com/en-us/landing/ld-7srxjs-WebexWebinars/Webex-Webinars#Join-Webinars to check the system requirements and be informed on how to join a webinar. Please also join the event at least 10 minutes in advance.

About IEA EBC Annex 87 - Energy and Indoor Environmental Quality Performance of Personalised Environmental Control Systems

Annex 87 Energy and Indoor Environmental Quality Performance of Personalised Environmental Control Systems (<u>https://annex87.iea-ebc.org/</u>) is an international research project of the IEA Energy in Buildings and Communities (EBC) programme. The objective of this project is to establish design criteria and operation guidelines for PECS and to quantify the benefits regarding health, comfort and energy performance. This includes also control concepts and guidelines for operating PECS in spaces with general ambient systems for heating, cooling, ventilation, and lighting. The scope of the project includes all types of PECS for local heating, cooling, ventilation, air cleaning, lighting, and acoustics. It includes desktop systems, which are mounted on desks, or integrated into furniture, chairs with heating / cooling and ventilation, and other types that can be found during the study. It also includes wearables, where heating, cooling, and ventilation are included in garments or devices attached to an occupant's body.

About AIVC

Created in 1979, the Air Infiltration and Ventilation Centre (<u>www.aivc.org</u>) 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, China, Denmark, France, Greece, Italy, Ireland, Japan, Netherlands, New Zealand, Norway, Republic of Korea, Spain, Sweden, UK and USA.

About INIVE

INIVE (International Network for Information on Ventilation and Energy Performance) was created in 2001. 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 as member organisations BBRI, CETIAT, CSTB, eERG, Ghent University, IBP-Fraunhofer, KU Leuven, NKUA, SINTEF, and TNO (www.inive.org)

INIVE is coordinating and/or facilitating various international projects, e.g. AIVC (<u>www.aivc.org</u>), TightVent Europe (<u>www.tightvent.eu</u>), venticool and Dynastee (<u>www.dynastee.info</u>). 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 feasibility study 19a.



