

Dal 15 febbraio 2021 ONLINE

15th RoomVent virtual Conference - Energy efficient Ventilation for Healthy future Buildings

Conferenza internazionale

RoomVent virtual Conference (<http://roomvent2020.org/>), organized by the Energy Department of Politecnico di Torino together with ATI Piemonte, and previously scheduled in June 2020, will open on February 15 and stay online until March 15, 2021.

First held in 1987 in Stockholm, RoomVent is traditionally supported by SCANVAC, the Scandinavian Federation of Heating, Ventilation and Sanitary Engineering Associations, and is one of the leading international events in the area of indoor ventilation and air distribution.

Energy use in residential, public sector and commercial buildings covers almost one third of the world energy consumption. While thermal insulation of building envelopes can minimize “at will” transmission heat losses, ventilation heat losses cannot be limited simply reducing the ventilation rate, as this would hinder the comfort and health of its occupants. The numerical and experimental study of the different ways the air can effectively remove or dilute contaminants is still an ongoing research subject. The correct design of ventilation in residences, factories, hospitals and commercial building is therefore a complex issue, entailing both challenges and opportunities. For these reasons RoomVent is focused on the theme “*Energy efficient ventilation for healthy future buildings*”.

The Conference will host about **200 peer reviewed technical and scientific articles** presented through recorded presentations. The articles are grouped into **15 sessions** concerning the main subject of ventilation, including research, modelling and experimental methods for air flow characterization, new technologies and ventilation strategies for Near Zero Energy Buildings (NZEB), comfort and air quality in indoor environments, urban pollution, underground ventilation, and the specially important theme of infection containment.

RoomVent offers scientists and academics, business professionals, consultants, engineers and architects a forum for disseminating technical information, new ideas, and discuss the latest developments and future direction in the fields of natural and mechanical ventilation. In addition to presentations of technical papers, the Conference will also include three **Keynote talks** and two **Workshops** on how ventilation technologies, filters and individual protection devices can mitigate the spread of infection.

Keynote speeches and Workshops will be **live events**, where the audience can ask questions and receive live answers from the experts.

Registration to the conference: <http://roomvent2020.org/registration/>.

Keynote speeches:

- 15 February, 3 pm
IAQ in office buildings, recent contributions in Europe & in France
Francis Allard, Emeritus professor at LaSIE, Université La Rochelle, CNRS, France (moderator: Marco Perino)
- 16 February, 2 pm
Development of Indoor Climate Monitoring and Prediction Tools
Manuel Carlos Gameiro da Silva, University of Coimbra, Portugal (moderator: Stefano Corgnati)
- 17 February, 9 am
Ventilation systems for future buildings to mitigate the transmission of infection and ensure good indoor air quality

Lidia Morawska, Queensland University of Technology, Brisbane, Australia (moderator: Gian Vincenzo Fracastoro)

Workshops

- 16 February, 3 pm
 “Cost-benefit analysis based on socio-economical factors for the evaluation of filters performance”
 Organizers: IEEM Unity, DENERG TEBE Group, in collaboration with RHOSS
 - **Stefano Corgnati** (*DENERG, Politecnico di Torino*)
 - **Cristina Becchio** (*DENERG, Politecnico di Torino*)
 - **Micaela Raineri** (*Rhoss*).

- 17 February, 10 am
 “Some technical contributions to Covid-19 pandemic mitigation”
 - Livio Mazzearella (*Department of Energy, Politecnico di Milano*): **A calculation tool for infection management in mechanical ventilated buildings**
 - Marco Simonetti (*Department of Energy, Politecnico di Torino*): **Bio-stopper: a short distance barrier to virus laden by bio-aerosol**
 - Paolo Tronville (*Department of Energy, Politecnico di Torino*): **Assessing the performance of community face coverings**