

Good indoor air quality is more than ventilation



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Energy efficiency, indoor climate and ventilation have been for years in the focus of construction sector in Nordic countries. There are good reasons for the high interest in HVAC-technology. Good heating has always been a necessity due to cold climate. Most of the energy is imported in Denmark, Finland and Sweden. As the primary energy use of buildings is about 40% of energy demand, the good energy efficiency has been on agenda for decades. The harsh climate has also made people to demand a good and comfortable indoor environment, which again has boosted the R&D work of industry. High interest on public health has been always an essential part in government policy of all Nordic countries. A specific interest has been for long time in the performance of ventilation systems for better indoor environment. The ongoing COVID-19 pandemic has brought much desired attention to indoor air quality issues, which spark investments in engineering solutions for virus control and research and development of advanced solutions for improving the living and working conditions of people. This issue contains several articles that deal with different methods for improving indoor air quality and bring attention to aspects that are often not acknowledged.

The articles in this issue are mostly from two sources – recently revived Nordic Ventilation Group, a group of scientists from Nordic countries and also selected

articles from the virtual conference Cold Climate HVAC and Energy 2021.

The original Nordic Ventilation Group was established in 1980s, with focus on ventilation guidelines on air flow measurements, balancing the ductwork etc. The results were widely used in Scandinavian counties. The Group was reactivated in 2020 with focus on better understanding of indoor environment and ventilation technology. In this issue, the articles on air cleaners, indoor environment and productivity, effect of indoor humidity, illustrate the current and future voluntary work of this group. The group is integrated with Scanvac, and works in close cooperation with REHVA and its technical committees.

The articles from the conference focus on some impacts of the COVID-19 pandemic on the energy use and infection risk in University campus, describe a novel solution for air distribution at work desk. There is a study that addresses issues related with solutions required for fulfilling current NZEB requirement.

We believe that this Nordic Issue of the REHVA Journal gives you better basis for discussions on methods for controlling the spread of COVID-19 and helps you to make a better selection of appropriate solutions when needed. ■