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Thermal Comfort and Air Quality in Rooms Equipped with Personalized Ventilation Systems

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Deadline for manuscript submissions: closed (29 February 2024)



mdpi.com/si/175796

Message from the Guest Editors

Dear Colleagues,

We are pleased to introduce a Special Issue in the journal *Buildings* dedicated to the exploration of personalized ventilation systems in indoor spaces. These advanced air distribution systems offer an innovative solution to enhance indoor air quality and occupant comfort. Unlike traditional HVAC systems, personalized ventilation systems are occupant-centric systems that provide individualized airflow directly towards occupants' breathing zones, tailoring conditions to suit their preferences and needs. Occupants gain greater control over their immediate environment, allowing them to adjust airflow rates, temperature, and air quality parameters to optimize their comfort and well-being.

This Special Issue aims to gather ground-breaking and novel research highlighting the numerous advantages of personalized ventilation systems in indoor spaces. We invite researchers and experts in the field to contribute their insights and findings to this Special Issue.

We look forward to receiving your contributions.

Dr. Hayder Alsaad

Dr. Douaa Al Assaad *Guest Editors*







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Editor-in-Chief

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Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance. interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

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