Special Issue

Monitoring and Modelling Air Pollution and Thermal Environment through Applications in Urban Areas

Message from the Guest Editors

We invite researchers to contribute original research articles and review articles dealing with all aspects of monitoring and modelling air pollution and the thermal environment through applications in urban areas. Research efforts in modelling the dispersion of atmospheric pollutants and the microclimate have, until recently, mainly been focused on improving the understanding and modelling of physical and dynamical processes affecting the ventilation and pollutant transport in the urban environment. More and more field measurements have also been carried out to monitor air pollution and the thermal environment. Some emphasize urban air pollution and exposure assessment, while others focus on the outdoor thermal environment and thermal comfort. Only a few outdoor experiments and modelling works investigated both of them. Contributions to this Special Issue include advanced and original experimental and modelling studies, techniques, numerical simulations and developments aimed at evaluating urban ventilation, pollutant dispersion, and thermal environment/comfort in cities. We are also interested in reviews proposing future perspectives.

Guest Editors

Prof. Dr. Riccardo Buccolieri

Dr. Jian Hand

Dr. Liyue Zeng

Dr. Cho Kwong Charlie Lam

Deadline for manuscript submissions

closed (30 September 2022)



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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

Dr. Daniele Contini

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