

## Special Issue

# Green Infrastructure and Sustainable Construction to Mitigate the Urban Heat Island Phenomenon in Urban Environments

### Message from the Guest Editors

In the last few years, the mitigation of the urban heat island (UHI) phenomenon has become an increasingly critical challenge in urban environments. Frequent summer heatwaves result in diffuse overheating in urban centres, not only leading to uncomfortable conditions in outdoor spaces for the resident population but also threatening human health because of thermal stress. In this context, this Special Issue invites the submission of contributions relating to innovative strategies for mitigating the UHI effect in the built environment. The submission of original research articles and reviews to this Special Issue is welcomed and encouraged. Research areas may include (but are not limited to) the following:

- \*Urban heat island mitigation;
- \*Green and/or blue technological solutions for UHI mitigation;
- \*Environmental sustainability;
- \*Sustainable and integrated retrofitting;
- \*Life cycle assessment (LCA) and life cycle cost (LCC) analysis;
- \*Cooling materials and technologies;
- \*Buildings' energy performance;
- \*Integration of BIM with sustainable design strategies;
- \*Climate resilience and risk management.

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### Guest Editors

Dr. Frida Bazzocchi

Dr. Vincenzo Di Naso

Dr. Cecilia Ciacchi

Dr. Stefano Cascone

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### Deadline for manuscript submissions

31 December 2025



## Atmosphere

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*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)

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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!

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### Editor-in-Chief

Dr. Daniele Contini

Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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