

## Special Issue

# Atmospheric Dispersion of Pollutants in Urban Environments

### Message from the Guest Editor

Since 2014, more than 50% of the world's population is residing in urban areas. Urban areas represent hotspots for air pollution problems, given the presence of different pollution sources, such as traffic, industries, house heating. This is true especially for large and densely populated cities. This Special Issue is devoted to all theoretical, modelling, and observational aspects of atmospheric dispersion of pollutants in urban environments, characterized by distinctive processes due to the interaction of the atmospheric flow with the complex urban geometry. Studies on all scales are of interest, from the street scale to the city and regional scales, including those related to the effects of the urban heat island. The topics of interest of this Special Issue include the investigation and parameterization of all atmospheric processes related to dispersion, numerical modelling with different approaches at various scales, data analysis of observed quantities determining the dispersion of pollutants, in both real urban sites and physical models.

---

### Guest Editor

Dr. Silvia Trini Castelli

National Research Council, Institute of Atmospheric Sciences and Climate (CNR-ISAC) Torino Branch, 10133 Torino, Italy

---

### Deadline for manuscript submissions

closed (30 November 2019)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/27082](https://mdpi.com/si/27082)

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

[mdpi.com/journal/  
atmosphere](https://mdpi.com/journal/atmosphere)





# Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/journal/  
atmosphere](https://mdpi.com/journal/atmosphere)



## 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

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

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

#### Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))