

## Special Issue

# Global and Regional Perspectives on Particulate Matter and Air Quality: Environmental and Health Impacts, Challenges, Policies, and Solutions

### Message from the Guest Editors

Particulate matter (PM) air pollution is one of the most critical environmental challenges of our time. The Global Burden of Disease study group confirms that particulate matter is the leading contributor to the global disease burden, while the World Bank estimates the global health costs associated with PM exposure at USD 8.1 trillion. These findings highlight its profound socio-economic and public health implications while underscoring the urgent need to address PM pollution as a pivotal aspect of improving air quality worldwide. The complex interplay between natural and anthropogenic sources complicates the challenge of achieving cleaner air. Additionally, variations in PM concentrations and composition across geographic regions, driven by local emission profiles and meteorological conditions, demand tailored mitigation strategies informed by scientific evidence. This Special Issue seeks to advance the understanding of PM air pollution by bringing together research on global and regional studies that investigate its sources, health impacts, environmental implications, economic evaluations, future scenarios, and potential solutions.

---

### Guest Editors

Dr. Ronan Adler Tavella  
Prof. Dr. Flavio Rodrigues  
Dr. Simone Georges El Khouri Miraglia

---

### Deadline for manuscript submissions

closed (30 April 2026)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/229958](https://mdpi.com/si/229958)

*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))