Special Issue

Measurement, Characterization and Source Identification of Atmospheric Pollutants

Message from the Guest Editors

Accurately measuring and tracing atmospheric pollutants is essential for understanding their environmental and health-related impacts. Recent advances in high-resolution mass spectrometry, remote sensing, and multi-dimensional separation techniques now allow for molecular-level insights into complex mixtures of volatile, semi-volatile, and particle-bound species. These analytical breakthroughs also facilitate the identification of **emerging pollutants**, whose roles in atmospheric chemistry, air quality, and the climate remain insufficiently understood.

This Special Issue invites contributions on the **measurement, characterization, and source identification of atmospheric pollutants**.
(i) innovative analytical methods for detecting pollutants across a broad volatility range;
(ii) molecular-resolved characterization of both conventional and emerging species;
(iii) source identification and apportionment using isotopic, molecular, or statistical tools;
(iv) emission characteristics of major pollution sources and their contributions to **ambient air quality**;
(v) the integration of field and laboratory observations with modeling to reveal transformation processes.

Guest Editors

Dr. Lewei Zeng

College of Chemistry and Environmental Engineering, Shenzhen University, Shenzhen 518060, China

Dr. Dawen Yao

School of Intelligent Systems Engineering, Sun Yat-sen University, Shenzhen 518100, China

Deadline for manuscript submissions

31 March 2026

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/253760

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

mdpi.com/journal/atmosphere

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

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))

MDPI