Special Issue

Biomonitoring Air Pollution for a Healthier Planet

Message from the Guest Editors

Biomonitoring, using living organisms to observe changes in environmental conditions, offers an effective method for detecting air pollutants and assessing their impacts on ecosystems and human health. Biomonitoring is a good tool for early detection of air pollution and plays a vital role in sustainable environmental management, with an emphasis on air pollution and its interactions with the biosphere. Some key areas of study within environment and biomonitoring include the following:

Air Pollution Monitoring: Using bioindicators like lichens and mosses to assess air quality and detect pollutants such as sulfur dioxide, ozone, and heavy metals.

Atmospheric Deposition and Environmental Toxicology: Studying the effects of atmospheric pollutants on living organisms, with a focus on toxicity levels and ecological risks linked to atmospheric deposition.

Integrating Biomonitoring with Atmospheric Modeling and Remote Sensing: Combining ground-based biological measurements with satellite data and atmospheric transport models to validate pollutant dispersion and improve source attribution.

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Deadline for manuscript submissions

9 January 2026

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/245751

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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

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