Special Issue

Atmospheric Pollution Dynamics in China

Message from the Guest Editors

China faces significant atmospheric pollution challenges, with ground-level ozone (O3) and fine particulate matter (PM2.5) posing major threats to air quality, public health, and climate. This Special Issue explores the complex dynamics of these pollutants, focusing on their formation mechanisms, spatiotemporal variability, and interactions under changing emission patterns and meteorological conditions. This Special Issue calls for original research papers on urban ozone pollution, including, but not limited to, the following topics:

- The formation and transport of ozone in the atmosphere;
- Ozone pollution over complex terrains;
- Physical and chemical processes governing ozone in the atmospheric boundary layer;
- Interaction between ozone, aerosols, and meteorology;
- Observation of greenhouse gas;
- Long-range transport of aerosols;
- Chemical mechanism for the formation of secondary aerosols;
- Interaction between aerosols, radiation, and clouds.

Contributions regarding field observations, air quality models, smog chamber simulations , and machine learning are also welcome.

Guest Editors

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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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