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Atmospheric Aerosols and Their Impact on Air Quality and the Climate

Guest Editor:

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Deadline for manuscript submissions:

closed (15 March 2024)

Message from the Guest Editor

Dear Colleagues,

The impact of aerosols on the climate and air quality is an ongoing issue. Due to climate change, especially in carbon-peaking and carbon-neutrality scenarios, the negative effect of aerosols on air quality has posed a new challenge to accurately quantify aerosols' impacts in the long- and short-terms, as well as the feedback between them.

This Special Issue aims to publish new studies on the following aspects, but is not limited to:

- (1) emissions and trends
- (2) the impact of aerosols on the climate, meteorology, extreme weather, and global and regional ozone levels and trends
- (3) policy implications and adaptions to these impacts.

The purpose of this Special Issue is to provide an overview of the recent advances in the interactions between atmospheric aerosols and weather/the climate. Contributions from field experiments, network monitoring, and modeling, including data science investigations, are all welcome.

Prof. Dr. Sunling Gong Guest Editor











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Editor-in-Chief

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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!

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