



## Revolutionizing Air Quality Research: Unlocking New Insights through Cutting-Edge Artificial Intelligence Techniques

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Deadline for manuscript submissions:

**closed (30 April 2024)**

### Message from the Guest Editors

This Special Issue of the journal *Atmosphere* is dedicated to "Revolutionizing Air Quality Research: Unlocking New Insights through Cutting-Edge Artificial Intelligence Techniques". We seek submissions of original research articles, reviews, and perspectives following international hotspot-based air quality research and artificial intelligence/machine learning approaches. The scope of this issue mainly includes but is not limited to:

- Novel artificial intelligence/machine learning algorithms for air quality modeling, forecasting, and data analysis;
- The integration of machine learning with air quality monitoring data to identify sources of pollution and estimate emissions;
- Machine-learning-based approaches for air quality management and policymaking;
- Applications of machine learning in assessing the health impacts of air pollution;
- Deep learning, ensemble learning, and transfer learning approaches in air quality research;
- Visualization and interpretation of machine learning results for air quality research.





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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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