

## Special Issue

# Chemical Characterization of Urban Air Pollution

### Message from the Guest Editor

Urban environments are hotspots for complex and dynamic air. Understanding the chemical composition, sources, and processes of urban air pollutants is essential for developing effective mitigation strategies and assessing adverse health effects. This Special Issue invites original research and review articles focused on the chemical characterization of urban air pollution, including but not limited to:

- Chemical speciation of PM<sub>2.5</sub> and PM<sub>10</sub>,
- Volatile organic compounds (VOCs) and their ozone formation potential;
- Secondary organic aerosols (SOAs) and formation and evolution mechanisms of SOAs;
- Atmospheric reactive nitrogen compounds and secondary formation of inorganic nitrate and nitrogen-containing organic aerosols;
- Source apportionment of major pollutants using isotopic techniques,
- Emerging pollutants in urban air environment,
- Development and application of novel analytical methods;
- Case studies from megacities or emerging urban areas;
- Links between pollutant chemistry and adverse health effects.

### Guest Editor

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### Deadline for manuscript submissions

30 January 2026



## Atmosphere

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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!

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### Editor-in-Chief

Dr. Daniele Contini

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