

## Special Issue

# Optical Sensing and Metrology of Atmospheric Species: Trace Gases and Aerosols

### Message from the Guest Editors

Emission process awareness and emission source mapping constitute the first step toward implementing policies that aim to reduce atmospheric pollution, causing severe damage to both air quality and human health. The recent advances in scientific metrology are fundamental to the development of new methods for measuring gases and aerosols, the realization of measurement standards, and the transfer of these standards to users.

We are pleased to announce that a Special Issue on Optical Sensing and Metrology of Atmospheric Species: Trace Gases and Aerosols will be hosted by the open-access journal *Atmosphere*. The aim is to enhance the one-health approach and improve our scientific understanding of pollutants, greenhouse gases, and aerosol emissions, as well as their distribution in the atmosphere through optical sensing and metrology, with the final goal of achieving reductions in air pollution, in turn affecting the health of people, animals, and environment.

Original research examinations, systematic reviews, meta-analyses, and model studies related to the theme of Optical Sensing and Metrology of Atmospheric Species: Trace Gases and Aerosols are welcome for submission.

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### Guest Editors

Dr. Marilena Giglio  
Prof. Dr. Weidong Chen  
Dr. Andrea Zifarelli

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### Deadline for manuscript submissions

closed (30 September 2024)



## 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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