Special Issue

Secondary Organic Aerosol Formation and Composition

Message from the Guest Editor

As a major component of global atmospheric aerosols, secondary organic aerosols play important roles in air quality, global climate, and human health. However, the scientific understanding of the principles underpinning these important roles. This inhibits our ability to develop the predictive models needed to inform mitigation and adaptation strategies. This Special Issue aims to address this need by highlighting high-quality research into the formation processes and composition of secondary organic aerosols. This includes laboratory and field measurements and modeling research regarding:

- Formation processes such as gas-phase oxidation, aqueous chemistry, heterogeneous/multiphase chemistry, and particle phase processes;
- Organic aerosol composition, from molecular speciation to bulk analysis;
- Effects of composition on aerosol properties, e.g., volatility, hygroscopicity, phase;
- Positive matrix factorization (PMF), principle component analysis (PCA), or other factorization methods;
- New and innovative methods and techniques.

Guest Editor

Dr. Brett B. Palm

Department of Atmospheric Sciences, College of the Environment, University of Washington, Seattle, WA 98195, USA

Deadline for manuscript submissions

closed (26 October 2020)



an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



mdpi.com/si/46476

Atmosphere MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 atmosphere@mdpi.com

mdpi.com/journal/ atmosphere





an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 4.6



atmosphere



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

Dr. Daniele Contini Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))