

Special Issue

Recent Advances in the Chemical Characterization of Atmospheric Aerosols

Message from the Guest Editor

Atmospheric aerosols significantly impact air quality, climate change, and human health. A comprehensive understanding of the chemical characteristics of aerosols, is essential for evaluating their impact on air quality and the climate. Furthermore, studying the chemical characterization of atmospheric aerosols is crucial for refining climate models and formulating effective pollution control strategies. This Special Issue on “Recent Advances in the Chemical Characterization of Atmospheric Aerosols” seeks high-quality works focused on the chemical characterization of atmospheric aerosols and their applications in the field of aerosol chemistry. Topics include, but are not limited to, the following:

- Mass spectrometry analysis method;
- Molecular composition of aerosols;
- Source apportionment of aerosols;
- Formation mechanism of aerosols;
- Molecular marker identification;
- Isotopic tracing;
- Model simulation;
- Atmospheric transport.

Guest Editor

Dr. Yu Xu

School of Agriculture and Biology, Shanghai Jiao Tong University,
Shanghai 200240, China

Deadline for manuscript submissions

closed (25 November 2025)



Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



mdpi.com/si/233728

Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)





Processes

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.5



[mdpi.com/journal/
processes](https://mdpi.com/journal/processes)



About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, 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, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))