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## Formation, Composition, and Potential Risks of Secondary Organic Aerosol

Guest Editors:

**Prof. Dr. Yuemeng Ji**

Institute of Environmental Health and Pollution Control, School of Environmental Science and Engineering, Guangdong University of Technology, Guangzhou, China

**Dr. Weina Zhang**

Institute of Environmental Health and Pollution Control, School of Environmental Science and Engineering, Guangdong University of Technology, Guangzhou, China

**Dr. Ling Liu**

School of Chemistry and Chemical Engineering, Beijing Institute of Technology, Beijing, China

Deadline for manuscript submissions:

**closed (30 April 2026)**

### Message from the Guest Editors

Dear Colleagues,

Secondary organic aerosols (SOAs) contribute to a significant fraction of atmospheric particles, profoundly affecting human health, air quality, and climate change. Previous studies have shown that high levels of SOAs formed under atmospheric conditions are attributed to complex chemical and physical processes, and a quantitative and comprehensive understanding of SOA formation mechanisms is still absent. Also, many studies declare the correlations of SOAs with respiratory diseases, highlighting the necessity of SOA composition analysis and risk evaluation. Moreover, SOAs directly affect the Earth's radiation budget by adsorbing and scattering solar radiation; therefore, the significant role of organic aerosols in the climate system is evident. However, SOA formation and transformation mechanisms remain elusive, resulting in big challenges in understanding their environment and health impacts. This Special Issue solicits original research on the sources, formation, transformation, and impacts of SOAs in the atmosphere. Experimental, theoretical, and field studies concerning SOAs in the atmosphere are encouraged.



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**Special Issue**



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### Dr. Demetrio Raldúa

Department Environmental  
Chemistry, IDAEA-CSIC, Jordi  
Girona 18, 08034 Barcelona,  
Spain

## Message from the Editor-in-Chief

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*Toxics* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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