



## The Michigan-Ontario Ozone Source Experiment (MOOSE)

Guest Editors:

**Dr. Eduardo (Jay) Olaguer**

Michigan Department of  
Environment Great Lakes and  
Energy, Air Quality Division,  
Lansing, MI 48909, USA

**Dr. Yushan Su**

Ontario Ministry of the  
Environment, Conservation and  
Parks, Toronto, ON M9P 3V6,  
Canada

Deadline for manuscript  
submissions:

**closed (30 September 2023)**

### Message from the Guest Editors

MOOSE has three components. The first component, the Great Lakes Meteorology and Ozone Recirculation (GLAMOR) sub-experiment, deals with the physics and chemistry of land–lake atmospheric circulations and their influence on regional oxidative capacity, including the role of reactive nitrogen reservoirs such as HONO. The second, called the Chemical Source Signatures (CHESS) sub-experiment, characterizes emissions of ozone precursors and air toxins (e.g., formaldehyde) from industrial point sources and their ambient concentration impacts on fine to regional scales. The third component, Methane Releases from Landfills and Gas Lines (MERLIN), examines the role of large methane leaks in enhancing the amount of ozone formed from surrounding emissions of more reactive Volatile Organic Compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>).

The papers in this Special Issue are devoted to the experimental methods and data interpretation methods, including real-time measurements and advanced modeling approaches, used during MOOSE, and the latest scientific conclusions drawn from these that may enhance ozone attainment strategies in the border region.





an Open Access Journal by MDPI

## 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

## 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!

## 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))

## Contact Us

---

Atmosphere Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/atmosphere](http://mdpi.com/journal/atmosphere)  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)  
[X@Atmosphere\\_MDPI](https://twitter.com/Atmosphere_MDPI)