



Atmosphere's Oxidation Chemistry

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Deadline for manuscript submissions:

closed (23 November 2023)

Message from the Guest Editor

The atmospheric oxidation capacity is the basis for converting freshly emitted substances into secondary products and is dominated by reactions involving hydroxyl radicals (OH) during the daytime. Radical chemistry provides insights into key processes regarding the formation of secondary pollutants. In the planetary boundary layer, high concentrations of primary pollutants, such as carbon monoxide (CO), nitrogen oxides (NO_x), and volatile organic compounds (VOCs) from both biogenic and anthropogenic origins, are transformed by reactions with atmospheric oxidants, such as hydroxyl (OH) radicals, nitrate (NO₃) radicals, chlorine atoms and ozone (O₃) on local to global scales.

Original research articles and reviews are welcome. Topics may include (but not limited to) the following:

- Aerosol chemistry;
- Ambient air quality;
- Indoor chemistry;
- Oxidation chemistry;
- Ozone chemistry;
- Radical chemistry.





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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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