

## Special Issue

# The Formation and Transformation of Atmospheric Soluble Iron

### Message from the Guest Editor

With iron solubility largely controlled by its oxidation state and its chemical reactivity largely controlled by solubility, the theme of this Special Issue focuses on how iron speciation, oxidation state, and atmospheric transformations affect iron solubility and reactivity. As iron solubility is key to atmospheric iron's chemistry, this Special Issue focuses on understanding the origins of atmospheric iron solubility, both from the standpoint of emission sources and transformations during atmospheric transport. Although not restricted to these issues, topics related to the following are of interest:

- Iron speciation, oxidation state, and solubility measurements in both ambient atmospheres and from specific sources;
- Laboratory experiments modeling iron behavior and chemistry under relevant atmospheric conditions;
- Atmospherically relevant chemical reactions between iron and organic compounds.

By bringing these topics together, we hope to integrate the current state of knowledge of both iron emissions and iron transformations, painting a more complete picture of how iron contributes to atmospheric chemistry.

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### Guest Editor

Dr. Brian Majestic

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### Deadline for manuscript submissions

closed (1 November 2020)



## Atmosphere

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## 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!

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### Editor-in-Chief

Dr. Daniele Contini

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