Special Issue

Reactive Nitrogen Chemistry: From Photolysis to Secondary Pollution Formation

Message from the Guest Editor

The study of reactive nitrogen (Nr) chemistry is crucial in understanding the complex processes that govern atmospheric composition and air quality. This Special Issue aims to explore the pivotal role of reactive nitrogen species in atmospheric chemistry, from their formation and photolysis to their contribution to the formation of secondary pollution. Nitrogen compounds, including nitrogen oxides, ammonia, and organic nitrogen species, undergo complex chemical transformations that have significant implications for both local and global air quality, as well as human and ecosystem health. The focus of this Special Issue is to advance our understanding of the physical and chemical mechanisms that drive the formation and fate of reactive nitrogen in the atmosphere. We invite contributions that examine the various processes, including photolysis, oxidation, and heterogeneous reactions, that convert primary nitrogen emissions into secondary pollutants. The issue also encourages research that investigates the role of Nr in atmospheric reactions and their impact on secondary pollution formation, as well as their contribution to climate change and ecosystem damage.

Guest Editor

Dr. Li Zhou
College of Carbon Neutrality Future Technology, Sichuan University, Chengdu 610065, China

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

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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!

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

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