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Molecular Characterization of Aerosols: Nucleation and Growth

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Message from the Guest Editors

Atmospheric aerosols can affect the Earth's radiative balance and thus impact climate change and human health in multiple ways; however, they are complex and therefore challenging to model. Having a detailed understanding of how new aerosol forms will guide the models and reduce uncertainty in climate change predictions as well as the control of environmental pollution.

To improve our molecular-level understanding of aerosols, Atmosphere is now launching a Special Issue focusing on the fundamental understanding of what is happening in the initial steps of atmospheric aerosols at the molecular level. We cordially invite you to contribute reviews, communications, and/or articles to this Special Issue, representing your research expertise. Experimental and theoretical works, or a combination of both, are welcome. Topics in this Special Issue will include all aspects that relate to aerosol nucleation and growth, such as new aerosol techniques and methodology development, structural characterization of aerosol particles and clusters as well as their formation mechanisms, and physicochemical properties of aerosol particles.











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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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