



## Carbonaceous Aerosols: Sources, Physical and Chemical Characterization, and Toxicity

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### Message from the Guest Editor

Carbonaceous aerosols are one of major particle types in fine ambient particles and should be more toxic than inorganic ions. Physical and chemical characterization of carbonaceous aerosols in atmosphere is essential to find their sources and to establish their mitigation strategy. Additionally, understanding effects of carbonaceous aerosols on human health and climate and their aging process in atmosphere are complex tasks, requiring further research. In this Special Issue of *Atmosphere*, we seek to publish papers dealing with carbonaceous particles in the ambient atmosphere as well as those produced from various combustion sources in the laboratory and field studies, addressing their measurements, physical and chemical properties, aging and transformation, toxicity, and effects on climate and human health.





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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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