

## Special Issue

# Atmosphere–Cryosphere Interactions in a Changing Climate

### Message from the Guest Editors

For this Special Issue on Atmosphere–Cryosphere interactions, we welcome model- and observational-based investigations on different aspects of linkages between atmospheric processes and snow and ice on local, regional, and global scales. We encourage studies that consider atmospheric particles, such as black carbon, organic carbon, mineral dust, volcanic ash, diatoms, bioaerosols, bacteria, algae, and microplastics, and changes in the cryosphere, such as effects on snow/ice biogeochemistry, melting, and albedo reduction. In particular, the work may focus on dust transport, aeolian deposition, effects of aerosols on atmospheric chemistry, volcanic dust, or environmental or climate impacts at high latitudes, at high altitudes, and in cold polar regions. Furthermore, the integration of field data, remote sensing data, modelling, and biogeochemical measurements represents a fundamental approach to studying the interaction between the atmosphere and the cryosphere. In this respect, relevant topics include light-absorbing impurities, cold deserts, dust storms, long-range transport, the darkening of glaciers, polar ecology, and cryoconite characterization.

### Guest Editors

Dr. Pavla Dagsson Waldhauserova  
Faculty of Agricultural and Environmental Sciences, Agricultural University of Iceland, Hvanneyri, Iceland

Dr. Biagio Di Mauro  
Earth and Environmental Sciences Department, University of Milano-Bicocca, Milan, Italy

### Deadline for manuscript submissions

closed (31 July 2020)



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*Geosciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[geosciences@mdpi.com](mailto:geosciences@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks,  
Fairbanks, AK, USA

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