Special Issue

Gas Emissions from Soil

Message from the Guest Editor

Greenhouse gas (GHG) emissions from the agricultural sector, particularly carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), are increasing globally as a result of anthropogenic activities, and they are mainly responsible for changing Earth's climate by absorbing and re-emitting energy from the lower atmosphere. Human intervention, especially through changing land use, and the steady increase in gas throughout the twentieth century have caused an increase in emissions of all three trace gases. Although these gases are usually emitted from soils, they can also be absorbed by soils in certain circumstances. Understanding the relevant soil processes will enable the introduction of measures to limit emissions and lessen their effect. More knowledge on the biological processes that promote GHG emissions from soil, as well as on their relation with different types of soil management and use, will allow the creation of new opportunities for agricultural development under environmentally friendly conditions. I would like to invite everyone studying greenhouse gas emissions in agroecosystems to contribute their papers to this Special Issue.

Guest Editor

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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

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