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# Challenges and Advances in the Preparation, Management, and Review of Greenhouse Gases and Air Pollutant Emission Inventories

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Message from the Guest Editors

Dear Colleagues,

Emission inventories play a significant role in assessing the effects of anthropogenic activity on atmospheric pollution and climate change. In response to obligations from international conventions and protocols, annual schemes of reporting national total emissions to the United Nations Framework Convention on Climate Change (UNFCCC) for greenhouse gases (GHGs) and to the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP) for air pollutants have been developed. In addition, countries need to forecast their emissions and assess the impact of mitigation policies and measures in order to define their low-carbon development strategies and air pollution control programs.

This Special Issue aims to collect original research and review papers on emission inventories and forecasting, and the assessment of mitigation policies for GHGs and air pollutants. All studies that are related to the improvement of emission inventories through the use of advanced methods and models, the forecasting of GHGs/air pollutants in key sectors, and the assessment of the impact of mitigation policies and measures, especially in developing countries, are welcome.







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# **Editor-in-Chief**

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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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