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CO₂ Capture Technologies — Utilization and Storage

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Deadline for manuscript submissions:

closed (15 April 2023)

Message from the Guest Editors

The open access journal *Atmosphere* is hosting a Special Issue to showcase the most recent findings related to CO₂ capture, utilization and storage. With the recent expansion of research showing that the CO₂ technologies are a feasible solution to reduce the CO₂ emissions and achieve climate neutrality. This Special Issue is also an appropriate venue for papers that deal with CO₂ utilization and CO₂ storage. Ultimately, this Special Issue aims to showcase the most recent comparable evidence on the impact of CO₂ capture and how the captured/pure CO₂ can be used to produce high added-value products.

Contributions of original results are welcome, from field and controlled investigations, subjective surveys, models and review papers related to carbon capture, storage and utilization (CCUS) technology, including the following research topics:

- Design and optimization of CCUS processes;
- Production of products from captured CO₂;
- New CO₂ capture technology;
- CCUS technologies to climate neutrality;
- Process simulation of CCUS;
- CCUS policies











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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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