



an Open Access Journal by MDPI

# CO2 Storage, Impurity Gases, and Enhanced Recovery: Geochemical and Geomechanical Effects

Guest Editor:

#### **Dr. Julie Pearce**

University of Queensland, St. Lucia Campus, QLD 4072, Australia

Deadline for manuscript submissions: closed (25 June 2021)

### Message from the Guest Editor

Dear Colleagues,

Geological CO<sub>2</sub> storage is gaining increased interest as a viable method to sequester greenhouse gases. Gas streams produced from processes such as coal combustion, natural gas separation, cement and steel processing can contain impurity gases such as SOx, NOx, O<sub>2</sub>, H<sub>2</sub>S and CH<sub>4</sub>. These gases can have impacts such as increased acidity of fluids and reactivity of rocks. These have implications for mineral trapping, water quality, injectivity, seal integrity, etc. Geochemical gas water rock reactions and geomechanical changes are relevant to CO<sub>2</sub> storage and also conventional and unconventional enhanced recovery of oil or gas. This Special Issue seeks contributions through experimental, modelling or field studies of geological CO<sub>2</sub> storage or enhanced recovery with a focus on geochemical and geomechanical impacts.









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO (CSIC-UCM), C/ Del Doctor Severo Ochoa 7, Edificio Entrepabellones 7 y 8, 28040 Madrid, Spain

## Message from the Editor-in-Chief

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

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases. **Journal Rank:** JCR - Q2 (*Geosciences, Multidisciplinary*) / CiteScore - Q1 (General Earth and Planetary Sciences)

## **Contact Us**

*Geosciences* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/geosciences geosciences@mdpi.com X@Geosciences\_OA