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# Gas Diffusivity in Reservoir-Fluid Systems

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Deadline for manuscript submissions: 15 May 2024

## Message from the Guest Editors

The focus of this special issue will be on multicomponent systems and considering the multi-scale multi-physics aspects of the problems. Thus, the topics include but are not limited to:

- Application of diffusivity for subsurface processes and implications
  - 1. Recovery processes
  - 2. Pressure history
  - 3. CO2 sequestration
  - 4. Gas storage
- Experimental processes
  - 1. Parameter estimation
  - 2. Experimental data and methodologies
  - 3. CO2 and reactive transport
- Porous material design
  - 1. Gas or liquid permeation or penetration in porous materials
  - 2. Treatment of porous materials (increase/decrease the permeation)
  - 3. Adsorption, phase behavior and diffusive transport in unconventional
- Mathematics of diffusion in application to subsurface engineering
  - 1. Natural gases and oils
  - 2. CO2 dissolution CO2 propagation









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### Message from the Editor-in-Chief

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