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## Advances in Experimental and Theoretical Studies of Fluid Flow and Solute Transport in Porous Media

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### Message from the Guest Editors

Fluid-saturated porous media are present in a variety of natural systems. Their performance is influenced and controlled by fluid flow and solute transport. Examples of natural porous media and their corresponding processes are multiphase flow in hydrocarbon reservoirs, geological storage of CO<sub>2</sub>, and contamination transport in aquifers. Many physical and chemical processes (including fluid flow, diffusion, dispersion, capillarity, reaction, dissolution, adsorption, swelling, and hydraulic fracturing) happen in porous media. These processes can be observed, studied, and modelled at a wide range of scales (from nanoscale to microscale or from laboratory scale to field scale). Understanding the transport phenomena in porous media, their experimental studies, and their theoretical modelling at different scales, as well as considering the uncertainties due to heterogeneities, are the aim of this Special Issue. Therefore, the focus here is on the advances in experimental and theoretical techniques to study fluid flow and solute transport in porous media.



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# Special Issue



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## Message from the Editor-in-Chief

*Processes* (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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