

# Special Issue

## Digital Petroleum Geomechanics

### Message from the Guest Editors

We are organizing a Special Issue focusing on both fundamental and application of Digital Rock Mechanics (DRM) in petroleum geo-mechanics. We are targeting original high-quality works and welcome experimental, numerical, and case studies in petroleum geomechanics, preferably with a high level of DRM involvement.

Most petroleum applications involve significant amounts of complexities due to scale-dependency of the problems, as well as tightly coupled physical phenomena. High stresses, the influence of fluid movement, temperature changes and disturbances due to chemical reactions are amongst the roots of these complexities. A better understanding of the small-scale rock behavior and in-depth visualization and modeling of such phenomenon have come to the attention of scientific society in the recent years. Pore scale rock deformation before, during and after multiphysic behaviour is observed experimentally using 3D images and/or modeled numerically where its scientific importance has been acknowledged in a considerable number of articles. However, being a relatively new field of research, there are numerous gaps in understanding.

### Guest Editors

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### Deadline for manuscript submissions

closed (30 June 2019)



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## About the Journal

### Message from the Editor-in-Chief

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

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### Editor-in-Chief

Prof. Dr. John C. Eichelberger

Alaska Center for Energy and Power, University of Alaska Fairbanks,  
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