Special Issue

Investigation of Heat Transfer Performance and Sustainability

Message from the Guest Editors

The convective heat transfer mechanism and main control factors between low-temperature heat exchange working fluid and high-temperature rock mass in reservoirs are the keys to geothermal development. Deep in situ rock mass is under three-dimensional high-stress and high-temperature conditions. The role of high-pressure water is involved in the geothermal development process, and its mechanical behavior and seepage heat transfer mechanism are extremely complex. Therefore, clarifying the high-temperature mechanical behavior of deep in situ rock mass and the coupling mechanism of seepage heat and mass transfer is the theoretical basis and prerequisite for realizing the safety and rational development of deep earth resources. This Special Issue encourages submissions which will provide new insights into the development of deep geothermal energy, focusing on rock mechanics and heat/mass transfer behaviors in geothermal reservoirs. We actively encourage participation from researchers in the fields of deep resource exploration and evaluation, reservoir simulation technology, rock mechanics theory, and heat and mass transfer.

Guest Editors

Dr. Jun Lu

Institute of Deep Earth Science and Green Energy, Shenzhen University, Shenzhen 518060, China

Dr. Delei Shang

Institute of Deep Earth Sciences and Green Energy, Shenzhen University, Shenzhen 518060, China

Deadline for manuscript submissions

closed (30 July 2023)

Sustainability

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 7.7

mdpi.com/si/149813

Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

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Editor-in-Chief

Prof. Dr. Marc A. Rosen
Faculty of Engineering and Applied Science, University of Ontario Institute of Technology, Oshawa, ON L1G 0C5, Canada

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