

ISRM Specialized Conference

CouFrac 2024

The 4th International Conference on
Coupled Processes in Fractured Geological Media:
Observation, Modeling, and Application

Kyoto University Katsura Campus
Kyoto, Japan
November 13-15, 2024

Topics

Carbon Sequestration
Energy Storage
Geothermal Exploration
Hydrocarbon Exploitation
Nuclear Waste Disposal
Mining Engineering
Petroleum Engineering
Hydraulic Fracturing
Induced Seismicity
Contaminant Transport
Clay Science
Salt Mechanics
Diagenesis
Enhanced Weathering
Critical Zone
Numerical Modeling
Lab and in Situ Testing
Machine Learning

Important Dates

Abstract Submission Deadline: March 31, 2024
Notification of Abstract Acceptance: April 30, 2024
Extended Abstract Deadline: July 10, 2024
Extended Abstract Acceptance: August 31, 2024

Awards

Chin-Fu Tsang Coupled Processes Award
Best Oral/Poster Presentation Award



Organized by
Japanese Society for Rock Mechanics
International Society for Rock Mechanics and Rock Engineering
www.ec-convention.com/coufrac2024





Aim of Conference

Delving into the intricacies of coupled thermal-hydro-mechanical-chemical (THMC) processes within fractured geological media not only provides insights into the earth's evolution but also underscores their pivotal role in myriad near-surface and subsurface activities. These include, but are not limited to, carbon sequestration, energy storage, nuclear waste disposal, geothermal exploration, and oil and gas exploitation. To truly harness and optimize these THMC processes, a blend of numerical modeling and experimental observations is paramount. This conference aims to propel scientific discoveries and refine subsurface engineering practices.

The 4th International Conference on Coupled Processes in Fractured Geological Media: Observation, Modeling, and Application (CouFrac2024) invites you to Kyoto, Japan, November 13-15, 2024. The conference, which succeeds the first held in Wuhan, China in 2018, the second held in Seoul, Korea in 2020, and the third held in Berkeley, USA in 2022, will focus on new and exciting advances in all areas of coupled processes associated with fractured geological media, including numerical methods, in-situ tests, lab experiments, machine learning, and applications to different activities in the near-surface, subsurface, and critical zone. The conference will be held in a face-to-face format only. We look forward to your participation!

Prof. Hideaki Yasuhara, Chair of the Local Organizing Committee

Timetable

*tentative

	Day 1 Wednesday, Nov 13	Day 2 Thursday, Nov 14	Day 3 Friday, Nov 15
AM	Opening Ceremony Keynote Speech 1 Oral Session 1	Keynote Speech 3 Oral Session 3	Keynote Speech 5 Oral Session 6 Keynote Speech 6
PM	Keynote Speech 2 Oral Session 2 Panel Discussion	Keynote Speech 4 Oral Session 4 Oral Session 5	Emerging Scientists Session Closing Ceremony
Night	Poster Session Welcome Reception	Banquet	—

Conference Chairs

Jonny RUTQVIST, Lawrence Berkeley National Laboratory, USA

Carl STEEFEL, Lawrence Berkeley National Laboratory, USA

Ki-Bok MIN, Seoul National University, KOREA

Qinghua LEI, Uppsala University, SWEDEN

Hideaki YASUHARA, Kyoto University, JAPAN

Local Organizing Committee

Hideaki YASUHARA, Kyoto University (Chair of Local Organizing Committee)

Ryota HASHIMOTO, Kyoto University (Secretary General)

Shinichiro NAKASHIMA, Yamaguchi University (Associate Chair)

Tomofumi KOYAMA, Kansai University (Associate Chair)

Kazuhei AOYAGI, Japan Atomic Energy Agency (Associate Chair)

Sho OGATA, Osaka University (Associate Chair)

Toshifumi AKAKI, Taisei Corporation

Jian CHEN, Shimizu Corporation

Masakazu CHIJIMATSU, Hazama Ando Corporation

Daisuke FUKUDA, Hokkaido University

Takuya ISHIBASHI, National Institute of Advanced Industrial Science and Technology

Mamoru KIKUMOTO, Yokohama National University



Masanori KOHNO, Tottori University

Hitoshi MATSUBARA, University of the Ryukyus

Yusuke MUKUHIRA, Tohoku University

Kenichi NAKAOKA, Obayashi Corporation

Soshi NISHIMOTO, Central Research Institute of Electric Power Industry

Yusuke OZAKI, Japan Atomic Energy Agency

Atsushi SAINOKI, Kumamoto University

Kazuki SAWAYAMA, Kyoto University

Hiroyuki SHIMIZU, Kajima Corporation

Mayuko SHIMIZU, Japan Atomic Energy Agency

Anna SUZUKI, Tohoku University

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