

6th International Workshop on Fracturing Geomechanics

Wednesday 12th June 2019

(8.6.2019)

Venue: Aalto University, Otaniemi campus. Lecture hall A2, Otakaari 1, Espoo, Finland.

Program

8.30-09:00	Registration
09:00-09:05	Welcome and Opening. Prof. Mikael Rinne (Aalto)
Session 1. Chair: prof. Ove Stephansson (GFZ)	
09:05-09:35	Keynote: Prof. Ilmo Kukkonen (Univ. of Helsinki). Hydraulic stimulation of crystalline rock at 6 km depth in Espoo, Finland: Hydraulic properties, induced seismicity and reservoir response.
09:35-10:05	Tero Saarno (St1). St1 Deerp Heat project status and lessons learned.
10:05-10:25	Dr Jussi Mattila (RMCF). Does in situ stress control fracture flow in shallow crystalline setting?
10:25-10:40	Coffee break
Session 2. Chair: Dr. Baotang Shen (CSIRO)	
10:40-11:10	Keynote: Prof Ki-Bok Min (SNU). Observations and Analysis of Hydraulic stimulations at Pohang EGS site, Korea.
11:10-11:30	Dr Topias Siren (SMOY). FRACOD back-calculation of POSIVA's spalling experiment (POSE).
11:30-11:50	Johannes Suikkanen (POSIVA). Detailed Rock Mechanics Site Characterization of Olkiluoto Repository Site.
11:50-13:10	Lunch break at Factory. Otakaari 5, ESPOO
Session 3. Chair Prof. Mikael Rinne (Aalto)	
13:10-13:40	Keynote: Dr Baotang Shen (CSIRO) . Rock Fracturing Mechanisms around Underground Openings.
13:40-14:00	Prof. Timo Saksala (Tampere University). Fracturing granite by high voltage piezoelectric actuation of quartz.
14:00-14:20	Dr Martin Ziegler (ETH Zurich). Analysing fault orientations from microseismic datasets of the Basel EGS project — Do they agree with fault orientations inferred from borehole log analysis?
14:20-14:40	Dr Jeoung Seok Yoon (GFZ, Potsdam). Discrete Element Modelling of Dynamic Slip on a Stressed Fault by Brittle Rupture and Generation of Induced Stress Field.
14:40-15:00	Coffee break
Session 4. Chair Prof. Ki-Bok Min (SNU)	
15:00-15:30	Keynote: Prof. Alireza Baghbanan (Aalto /Isfahan Univ. of Techn.). Rock Fracturing in Degraded and Graded Rocks in Laboratory Scale. Experimentally and Numerically by XFEM and BEM Methods.
15:30-15:50	Prof. Mikael Rinne (Aalto). Rock and fracture mechanics research at Aalto.
15:50-16:05	Doc. Student Mateusz Janiszewski (Aalto). Photogrammetric digitization of Aalto Research Tunnel for automatic fracture mapping and virtual training environment.
16:05-16:20	Dr Lauri Uotinen (Aalto). Fracture characterization using photogrammetry (prel)
16:20-16:35	Doc. Studen Risto Kiuru (Aalto). Detection of excavation damage with geophysical measurements.
16:35-16:50	Masoud Torkan (Aalto). Evaluating modes I, II and mixed mode I-II fracture toughness of crystalline rocks using discrete element method.
16:50-17:00	Discussions and closing.
19:00	Tables reserved in Restaurant Fat Lizard, Tietotie 1, Espoo (at your own expense)

Thursday 13th June 2019 Excursion to Olkiluoto

7:30	Bus leaving to Olkiluoto, start Rakentajanaukio 4A
11:00	Study visit to Olkiluoto
13:00	Lunch
15:00	Bus leaving for Helsinki
19:30	Arrival to Helsinki. Central Railway Station then Otaniemi Campus.