

## **Couplable Wellbore-Reservoir Simulators to Model Multiscale Geothermal Systems**

**Abstract:** Coupled TIGER-MOSKITO Simulator: MOSKITO and TIGER are part of a project with on-demand coupling capabilities for dealing with multiscale and multi-physics systems in geoscience. By coupling them, one reservoir model can be coupled with several wellbore models. Using this approach, the reservoir and wellbore(s) are standalone models which can run and be tested separately to avoid the complexity of one extremely large model. Please see attached flyer for more details.

**Short bio:** Maziar Gholami Korzani is currently a senior research fellow in the School of Civil Engineering at the Queensland University of Technology, Australia, and he is also Executive Editor-In-Chief in Geothermal Energy Journal, Springer. After several years of working experience in industry, he received his PhD in civil-geotechnical engineering at the University of Queensland, Australia in 2017, after which, he joined Karlsruhe Institute of Technology as a postdoctoral researcher in the Institute of Applied Geosciences. Maziar's research field is computational mechanics using advanced numerical modelling techniques. His research interests are numerical modelling of coupled thermo-hydro-mechanical-chemical (THMC) processes, multi-phase and multi-component flow in porous media, post-failure behaviour of terrestrial structures, Smoothed Particle Hydrodynamics (SPH) and finite element method (FEM). Maziar has also been the organizer and committee member in several European Geothermal Workshops.

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