A Numerical Study of Fractured Reservoirs' Productivity Behavior through Coupled Hydromechanical Model
Research output: Research - peer-review › Paper – Annual report year: 2018

A three-dimensional coupled thermo-hydro-mechanical model for deformable fractured geothermal systems
Research output: Research - peer-review › Journal article – Annual report year: 2018

Heat Recovery from Multiple-Fracture Enhanced Geothermal Systems: The Effect of Thermoelastic Fracture Interactions
Research output: Research - peer-review › Journal article – Annual report year: 2018

Investigation on the Productivity Behaviour in Deformable Heterogeneous Fractured Reservoirs
Research output: Research - peer-review › Paper – Annual report year: 2018

Synergy potential for oil and geothermal energy exploitation
Research output: Research - peer-review › Journal article – Annual report year: 2018

Thermoporoeelastic effects during heat extraction from low-permeability reservoirs
Research output: Research - peer-review › Journal article – Annual report year: 2018

An evaluation of interferences in heat production from low enthalpy geothermal doublets systems
Research output: Research - peer-review › Journal article – Annual report year: 2017

An integrated workflow for stress and flow modelling using outcrop-derived discrete fracture networks
Research output: Research - peer-review › Journal article – Annual report year: 2017

On the connectivity anisotropy in fluvial Hot Sedimentary Aquifers and its influence on geothermal doublet performance
Research output: Research - peer-review › Journal article – Annual report year: 2017

The impact of reduction of doublet well spacing on the Net Present Value and the life time of fluvial Hot Sedimentary Aquifer doublets
Research output: Research - peer-review › Journal article – Annual report year: 2017

Thermodynamic Analysis of Chalk–Brine–Oil Interactions
Research output: Research - peer-review › Journal article – Annual report year: 2017
A geometrically based method for predicting stress-induced fracture aperture and flow in discrete fracture networks
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Application of infrared thermography for temperature distributions in fluid-saturated porous media
Research output: Research - peer-review › Journal article – Annual report year: 2016

The impact of different aperture distribution models and critical stress criteria on equivalent permeability in fractured rocks
Research output: Research - peer-review › Journal article – Annual report year: 2016

The impact of in-situ stress and outcrop-based fracture geometry on hydraulic aperture and upscaled permeability in fractured reservoirs
Bisdom, K., Bertotti, G. & Nick, H. 2016 In : Tectonophysics. 69, Part A, p. 63-75
Research output: Research - peer-review › Journal article – Annual report year: 2016

The influence of facies heterogeneous on the doublet performance in low-enthalpy geothermal sedimentary reservoirs
Research output: Research - peer-review › Journal article – Annual report year: 2016

A prototype design model for deep low-enthalpy hydrothermal systems
Saeid, S., Al-Khoury, R., Nick, H. M. & Hicks, M. A. 2015 In : Renewable Energy. 77, p. 408-422
Research output: Research - peer-review › Journal article – Annual report year: 2015

Multiscale fracture network characterization and impact on flow: A case study on the Latemar carbonate platform
Hardebol, N. J., Maier, C., Nick, H., Geiger, S., Bertotti, G. & Boro, H. 2015 In : Journal of Geophysical Research-solid Earth. 120, 12, p. 8197-8222
Research output: Research - peer-review › Journal article – Annual report year: 2015

Experimental-numerical study of heat flow in deep low-enthalpy geothermal conditions
Research output: Research - peer-review › Journal article – Annual report year: 2014

Modelling stress-dependent permeability in fractured rock including effects of propagating and bending fractures
Research output: Research - peer-review › Journal article – Annual report year: 2013

Reactive dispersive contaminant transport in coastal aquifers: Numerical simulation of a reactive Henry problem
Research output: Research - peer-review › Journal article – Annual report year: 2013

Pore-scale modeling of reactive transport in wellbore cement under CO2 storage conditions
Research output: Research - peer-review › Journal article – Annual report year: 2012

A Hybrid Finite-Element Finite-Volume Method with Embedded Discontinuities for Solute Transport in Heterogeneous Media
Research output: Research - peer-review › Journal article – Annual report year: 2011
Research output: Research - peer-review › Journal article – Annual report year: 2011

Role of geomechanically grown fractures on dispersive transport in heterogeneous geological formations
Research output: Research - peer-review › Journal article – Annual report year: 2011

Research output: Research - peer-review › Journal article – Annual report year: 2010

Modeling Transverse Dispersion and Variable Density Flow in Porous Media
Research output: Research - peer-review › Journal article – Annual report year: 2009

Upscaling two-phase flow in naturally fractured reservoirs
Research output: Research - peer-review › Journal article – Annual report year: 2009

Projects:

Geomechanical and flow modelling fractures in Lower Cretaceous rock
Clemmensen Glad, A., Nick, H. & Clausen, O. R.
01/10/2018 → 30/09/2021
Project: PhD

Numerical modelling and upscaling of modified salinity water flooding
Bonto, M., Nick, H. & Eftekhari, A. A.
Institut stipendie (DTU)
01/07/2018 → 30/06/2021
Project: PhD

Numerical modelling of reservoir souring in chalk reservoirs
Jahanbani Veshareh, M., Nick, H. & Nielsen, S. M.
Institut stipendie (DTU)
01/11/2017 → 31/10/2020
Project: PhD

SURE: Novel Productivity Enhancement Concept for a Sustainable Utilization of a Geothermal Resource
Nick, H.
H2020
01/03/2016 → 31/08/2019
Project: Research

Numerical modelling of near wellbore flow
Kadeethum, T., Nick, H. & Salimzadeh, S.
Institut stipendie (DTU)
01/07/2017 → 30/06/2020
Project: PhD

Enhanced Oil Recovery Methods targeting Danish North Sea Chalk Reservoirs
Taheriotaghisara, M., Feilberg, K. L., Nick, H. & Shapiro, A.
Institut stipendie (DTU)
15/01/2017 → 14/01/2020
Production performance of radial water-jet drilled wells: a modelling and laboratory study
Medetbekova, M., Nick, H., Christensen, H. T. & Salimzadeh, S.
Institut stipendie (DTU)
01/10/2016 → 30/09/2019
Project: PhD

Simulation and Optimization of Oil Reservoirs in the Danish North Sea
Hersholt, S., Jørgensen, J. B., Capolei, A. & Nick, H.
Eksternt finansieret virksomhed
01/12/2015 → 02/05/2019
Project: PhD