

Georesources beneath our feet

Report of Contributions

Contribution ID: 1

Type: **not specified**

Welcome and Intro

Thursday 16 June 2022 10:00 (15 minutes)

Introduction and organisational things

Presenter: GLEESON, Sarah

Contribution ID: 7

Type: **not specified**

Numerical modelling of reservoir depletion induced seismicity in Groningen natural gas reservoir in the Netherlands using distinct element modelling

Friday 17 June 2022 11:45 (15 minutes)

Presenter: YOON, Jeoung Seok (GFZ/Dynafrac)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 8

Type: **not specified**

Geothermal research activities in the Berlin - Brandenburg region with focus on reservoir fluid properties and their potential for critical raw material extraction

Thursday 16 June 2022 12:15 (15 minutes)

Presenter: REGENSPURG, Simona (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 12

Type: **not specified**

Structural evolution and the thermal field of the NGB

Thursday 16 June 2022 10:15 (15 minutes)

Presenter: SCHECK-WENDEROTH, Leni (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 13

Type: **not specified**

Georesources and coupled THM models - applications to the NGB

Thursday 16 June 2022 14:00 (15 minutes)

Presenter: CACACE, Mauro (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 14

Type: **not specified**

Reservoir Monitoring using Controlled Source Electromagnetics ? A case study from a producing oil field in NW Germany

Friday 17 June 2022 12:00 (15 minutes)

Presenter: TIETZE, Kristina (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 16

Type: **not specified**

3-D horizontal and vertical seismic profiling at the geothermal site Groß-Schönebeck

Thursday 16 June 2022 12:30 (15 minutes)

Presenter: KRAWCZYK, Charlotte (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 17

Type: **not specified**

Quantification of Methane leakage in abandoned oil wells in the North Sea

Friday 17 June 2022 09:45 (15 minutes)

Presenter: HÄCKEL, Matthias (Geomar)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: **18**

Type: **not specified**

Gas leakage and leakage mitigation studies

Friday 17 June 2022 10:00 (15 minutes)

Presenter: DEUSNER, Christian (Geomar)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 19

Type: **not specified**

Organic Geochemistry in the North German Basin - Part I: Elements of the fossil carbon cycle

Friday 17 June 2022 09:15 (15 minutes)

Presenter: SCHULZ, Hans-Martin (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 20

Type: **not specified**

Organic Geochemistry in the North German Basin - Part II: Monitoring the role of organic carbon and microbial systems on the utilization of the deep subsurface

Friday 17 June 2022 09:30 (15 minutes)

Presenter: VIETH-HILLEBRAND, Andrea (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 21

Type: **not specified**

GeoFern: Suitability of Mesozoic aquifers for subsurface energy storage in the North German Basin

Thursday 16 June 2022 12:00 (15 minutes)

Presenter: PIEKARSKI, Jan-Kristian (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 22

Type: **not specified**

Thermal characterization of the North German Basin: Experiments and field campaigns for geothermal exploration

Thursday 16 June 2022 11:45 (15 minutes)

Presenter: FUCHS, Sven (GFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 23

Type: **not specified**

Enhanced NAPL Remediation Caused by Thermal Energy Storage in Shallow Subsurface

Thursday 16 June 2022 14:30 (15 minutes)

Presenter: SHAO, Haibing (UFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 24

Type: **not specified**

Modeling neighborhood-scale shallow geothermal energy utilization: a case study in Berlin

Thursday 16 June 2022 12:45 (15 minutes)

Presenter: RANDOW, Jakob (UFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 25

Type: **not specified**

Parametric optimization and comparative study of an organic Rankine cycle power plant for two-phase geothermal sources

Thursday 16 June 2022 14:45 (15 minutes)

Presenter: CHEN, Chaofan (UFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 26

Type: **not specified**

An environmental information system for the exploration of energy systems in Schleswig Holstein

Thursday 16 June 2022 14:15 (15 minutes)

Primary author: RINK, Karsten (UFZ)

Presenter: GRAEBLING, Nico (UFZ)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 27

Type: **not specified**

Interactive 4D Visualisation of the Mont Terri Underground Laboratory in Virtual Reality

Thursday 16 June 2022 16:15 (15 minutes)

Presenter: GRAEBLING, Nico (UFZ)

Session Classification: Geological Storage

Contribution ID: 36

Type: **not specified**

Diagenesis and carbonate replacement sulfide mineralization in the Permian Kupferschiefer (Saale Basin East Germany)

Friday 17 June 2022 09:00 (15 minutes)

Presenter: MOHAMMEDYASIN, Mohammed Seid (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 49

Type: **not specified**

A monolithic thermo-hydro-mechanical two-phase flow formulation for modelling gas migration in geotechnical barriers

Thursday 16 June 2022 15:45 (15 minutes)

Presenter: GRUNWALD, Norbert (UFZ)

Session Classification: Geological Storage

Contribution ID: 50

Type: **not specified**

From Workflows towards Digital Twins for Geological Repositories

Thursday 16 June 2022 16:00 (15 minutes)

Presenter: KOLDITZ, Olaf (UFZ)

Session Classification: Geological Storage

Contribution ID: 51

Type: **not specified**

Subsurface on-shore storage of climate and energy relevant gases: The example of the Ketzin pilot site in the North German Basin

Thursday 16 June 2022 15:30 (15 minutes)

Presenter: SCHMIDT-HATTENBERGER, Conny (GFZ)

Session Classification: Geological Storage

Contribution ID: 52

Type: **not specified**

General Discussion

Friday 17 June 2022 12:15 (45 minutes)

Guiding Questions:

Could we produce a “road map” document on the NGB describing potential uses of different Formations in the sub-surface and the associated ESG issues?

What would need to be done in terms of environmental baseline studies, monitoring, remediation if we want to use Formation X for Georesource Y etc. (coupling underground and above ground aspects)?

How do stakeholders choose if there is more than one potential use? What about governance of underground usage?

Where do we see the biggest potential for future research in the NGB?

Where do we see potential fields for cooperation between different centres and scientific fields?

What competences are missing?

How to make best use of new models, technical developments, existing infrastructure and generated data?

Contribution ID: 53

Type: **not specified**

Exploration and use of geothermal reservoirs in NE Germany

Thursday 16 June 2022 10:30 (45 minutes)

Presenter: OBST, Karsten (Landesamt Geologie M-V)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 54

Type: **not specified**

Discussion

Thursday 16 June 2022 13:00 (30 minutes)

Session Classification: Geodynamics and Geothermal use

Contribution ID: 55

Type: **not specified**

Discussion

Thursday 16 June 2022 16:30 (30 minutes)

Session Classification: Geological Storage

Contribution ID: 56

Type: **not specified**

A micrometeorological method for quantifying gas leakage

Friday 17 June 2022 10:15 (15 minutes)

Presenter: SACHS, Torsten (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 57

Type: **not specified**

Investigating seismicity accompanying gas exploitation and storage

Friday 17 June 2022 11:30 (15 minutes)

Presenter: SIMONE, Cesca (GFZ)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 58

Type: **not specified**

Slow Migrations of the North Sea: An Anthropological Investigation of the Energy Transition in the Shetland Islands and Off-Shore Oil and Gas Assets of the Northern North Sea

Friday 17 June 2022 10:30 (15 minutes)

Presenter: BAKKE, Gretchen (IASS)

Session Classification: Raw Materials, Carbon resources and Environmental aspects

Contribution ID: 59

Type: **not specified**

Discussion

Friday 17 June 2022 10:45 (15 minutes)

Session Classification: Raw Materials, Carbon resources and Environmental aspects