EUROPEAN GEOTHERMAL WORKSHOP 2023

November 8 – Utrecht Science park, Koningsberger & Minnaert building

8:30-9:00	**Registration & coffee**	
9:00-9:10	**Opening Adress**	
9:10-11:00	**Assessment of Geothermal Resources**	
09:10	key note: Van Der Vaart (TUDARM)	3D Modelling and Uncertainty Evaluation of the Northern Upper Rhine
09:30	Schill (KIT)	Graben DeepStor – a blue print for heat storage in urban areas
09:45	Liotta (UNIBA)	Mining heat in a regional brittle shear zone: The potentiality of the Gavorrano area (Southern Tuscany, Italy)
10:00	Fischer (UNIPRAGUE)	DTS Monitoring of Cold-Water Injection Tests in Litoměřice: Understanding Flow Patterns in EGS Development
10:15	Petrova (GFZ)	Push pull tests for aquifer parameterization of ATES systems: lessons learned from parameter optimization
10:30	Van den Berg (UU)	Do salt diapirs promote the geothermal potential of shallow depth aquifers?
10:45	Kieling (GFZ)	The REFLECT project – improving the availability of data on the characteristics and behaviour of geothermal fluids
11:00-11:30	**Coffee break**	
11:30-13:05	**Exploration of Geothermal Reservoirs**	
11:30	Key note: Leewis (EBN)	Developing a marginal reservoir for urban heating in Zwolle (NL): integrating advanced 3D reservoir characterization models and well technology options for concept select
11:50	Open slot (TBD)	Xxx
12:05	Wallentin (EOST)	Understanding native Hydrogen generation in granitic geothermal reservoirs of the Upper Rhine Graben, an experimental and geochemical modeling approach
12:20	Hofstra (UU)	On the Structure and Geothermal Energy Potential of the Sedimentary Basins of Africa
12:35	Moscariello (UNIGE)	Searching for hot rocks & water with lukewarm results: Lessons learnt from 30 years of geothermal E&P activity in Switzerland
12:50	Sy (Lithium France)	Developing conceptual model for geothermal reservoir exploration in Northern Alsace (France)
13:05-14:00	**Lunch**	
14:00-15:35	**Engineering of Geothermal wells and Resources**	
14:00	Key note: Buijze (TNO)	Dominant mechanisms of stress change and fault reactivation in direct-use geothermal doublets in sandstone reservoirs
14:20	Clark (ISOR)	Developing a Novel Downhole Sampler for Geochemical Monitoring of High-Temperature Geothermal Reservoirs
14:35	Kvalsvik (NORCE)	Distributed Temperature Sensing measurements for exploring Borehole Thermal Energy Storages in Scandinavia
14:50	Szklarz (TNO)	Developing a marginal reservoir for urban heating in Zwolle (NL): Optimized well and completion design
15:05	Kristjansson (OR)	Reservoir analysis and characterization of the temperature and chemical changes in the Ellidaárdalur low temperature field, Reykjavík, Iceland
15:20	Habibi(KIT)	Coupling of thermo-hydro-mechanical modeling with seismicity modeling in a faulted geothermal reservoir
15:35-16:00	**Coffee break**	
16:00-17:00	**Poster Pitches (see below)**	
17:10-18:30	**Drinks & Posters**	
18:30-20:00	**Conference Diner**	

November 8- Posters

16:00-17:00	Poster Pitches (3 min each)	
Time	**Assessment of Geothermal Resources**	
16:00	Bandarwadkar (KTU)	Enhancing Subterranean Building Thermal Energy Efficiency through Ground Heat Transfer
16:03	Weydt (TUDArm)	A new 3D geological model of the Upper Rhine Graben for medium-depth geothermal energy assessment
16:06	Popadynets (Ukraine)	Geothermal potential of Ukraine can play a key role in accelerating the transition to net-zero energy target
16:09	Veldkamp (TNO)	Geothermal potential of the Miocene Breda Formation in the Netherlands
16:12	Tfouzka (TUM)	Assessing High-Temperature Aquifer Thermal Energy Storage (HT-ATES) in the Upper Jurassic reservoir of the German Molasse Basin
	Exploration of Geothermal Reservoirs	
16:18	Arts (UU)	Mechanical and microstructural characterization of spatially heterogenous simulated fault gouges, derived from the Dutch Rotliegend
16:21	Buness (KIT)	Fluid dynamics in rough rock fractures
16:24	Dashti (KIT)	Using Machine Learning-based Workflows to quantify the effects of the Geological Uncertainty in Geothermal Applications
16:27	Emili (UNITRE)	Evaluation of the geothermal potential in the Acque Albule Basin (RM) through a multidisciplinary approach
16:30	Erb (LIAG)	Geological Characterization and Modeling of Maastrichtian Calcarenites in the North German Basin Regarding Their Potential as a Medium-Depth Geothermal Reservo
16:33	Jagert (IEG)	Exploring Future Geothermal Potential in the Ruhr District, Germany: A Borehole Study on Two Diverse Reservoir Rock Types
16:36	Fischer (UNIPRAGUE)	Geothermal projects in Litoměřice, Czech Republic
	Engineering of Geothermal wells and Resources	
16:42	Aydinli	Major challenges on enhanced geothermal system projects
16:45	Assadi (NCS)	A Coupled Thermo-Hydro-Mechanical Simulation of Borehole Heat Storage in the Nordic Climate: A Case Study from Norway
16:48	Korevaar (TNO)	Thermal properties of unconsolidated sediments and borehole back fill materials for ground source thermal energy system
16:51	Stricker (KIT)	Risk assessment of fault reactivation and induced seismicity for the high-temperature heat storage demonstrator, DeepStor, in the Upper Rhine Gr
16:54	Marelis (UU)	A sensitivity analysis of stress changes related to geothermal direct heat production in clastic reservoirs and potential for fault reactivation and seismicity
16:57	Rudolph (KIT)	GeoLaB - Geothermal Laboratory in the Crystalline Basement

All posters are on display in the Minnaert Building Hall for November 8&9.

November 9 – Utrecht Science park, Koningsberger & Minnaert building

8:30-9:00	**Registration & coffee**	
9:00-10:20	**Computing and Data Management, Machine Learning**	
09:00	Key note: Vardon (TUD)	Delft campus geothermal project
09:20	Chen (TUD)	Simulation of the Delft campus geothermal wells constrained by the producer well logs
09:35	Song (TUD)	A digital twin for the TU Delft campus geothermal project: First concepts
09:50	Ystroem (KIT)	MALEG - Machine learning for enhancing geothermal energy production
10:05	Trumpy (CNR)	EGRISE 2.0 an empowered tool to figure geothermal sector status and needs
10:20-10:50	**Coffee break**	
10:50-11:55	**Energy Conversion Systems**	
10:50	Key note: Maver (GREENTHERMA)	New closed loop well solution for geothermal heat extraction
11:10	Ungar (UNIFI)	Experimental Investigation of the usage of CO2 in closed loop systems:the HOCLOOP Project
11:25	Merbecks (ETH)	On novel binary power plant configurations for the exploitation of two-phase geothermal resources
11:40	Manfrida (UNIFI)	Preliminary Life Cycle Assessment, Exergo-economic and Exergo-environmental analysis of the Qualtra geothermal power plant
11:55-12:40	**Poster Pitches (see below)**	
12:40-14:15	**Lunch & posters**	
14:15-15:35	**Operation of Geothermal Systems**	
14:15	Key note: Schmittbuhl (UNISTRA)	The largest induced earthquakes during the GEOVEN deep geothermal project, Strasbourg, 2018–2022: from source parameters to intensity maps
14:35	Nederstigt (SPROULE)	A pragmatic approach to monitoring induced seismicity and subsidence at geothermal operations
14:50	Moser (SEISMIK)	New methodology for assessment of the induced seismicity monitoring network
15:05	Fraile (KIT)	Detection of seismic velocity changes from THM modelling at DeepStor demonstrator
15:20	Chicco (UNITO)	Hybrid heating system (geothermal energy and gas) for an innovative greenhouse in NW Italy: how to optimize investment and operative costs
15:35-16:05	**Coffee break**	
16:05-17:10	**Sustainability, Environment and Regulatory Framework**	
16:05	Arnaud (UNISTRA)	On the road to citizen seismology: the PrESENCE and SismoCité research programmes
16:20	Bauer (INE)	Options for drinking water protection close to a deep drilling site, using the example of the planned HT-ATES research infrastructure, DeepStor-1.
16:35	Loschetter (BRGM)	Review of concepts that combine geothermal energy and CCS: comparing performance and sustainability
16:40	Riccardi (UNINA)	Tentative Mass Budget 2019-2022 at Theistareykir Geothermal reservoir (Northern Iceland) by means of time-lapse gravity measurements
16:55	Van Wees (TNO)	An assessment of environmental impact, safety and CO2 footprint and outlook for application of the Eavor Loop in the Netherlands
17:10-17:20	**Closing remarls**	

November 9- Posters

11:55-12:40	Poster Pitches (3 min each)	
Time	**Computing and Data Management, Machine Learning**	
11:55	Benlalam (CNRS)	New data types added to the CDGP: GNSS and geological data
11:58	Gross (GFZ)	Responses of the subsurface thermal field to the paleoclimate history in Germany
12:01	Targhi (TUD)	Using Machine Learning to Characterize Fluid Flow Behaviour in Fractured Geothermal Reservoirs
12:04	Trumpp (KIT)	Validation of thermodynamic databases for geochemical modeling in geothermal environments
12:07	Pijnenburg (UU)	EPOS-NL large scale research infrastructure
	Energy Conversion Systems	
12:10	Anyona (Kenya)	Experimental model investigating potential of geothermal energy in recycling polyethylene terephthalate: case studie of olkaria
12:13	Wiemer (KIT)	Investigation of dry and wet cooling at the supercritical ORC MoNiKa
	Operation of Geothermal Systems	
12:16	Giuliante (GFZ)	Hybrid gravity monitoring at Theistareykir geothermal field, Iceland
12:19	TBD	TBD
12:22	Val (SCKCEN)	Preliminary characterization of leachable organic matter and naturally-occurring radionuclides in the reservoir rocks of the Balmatt geothermal site, Mol, Belgium
12:25	Wang (ITES)	Geothermal Reservoir Deformation Monitoring Based on Coda Wave Interferometry
	Sustainability, Environment and Regulatory Framework	
12:28	Galione (IGG)	Developing a new Geothermal industrial Infrastructure Database based on INSPIRE UML Model in Tuscany, Italy

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