

Geothermal Innovation Days 2024 - Munich, Germany

Agenda

Thursday, November 21, 2024

9:30 to 20:30 - Full Conference and Networking Dinner

Venue: Hotel NH München Ost Conference Center: Einsteinring 20, 85609 Aschheim,

Germany

9:00 – 9:30 Registration and Welcome

9:30 – 9:35 Welcome by the ETIP Geothermal President, Luca Xodo

9:35 - 9:50 Keynote about Making impact with innovation: case of Dutch and R&I

Innovation, Jan Diederik van Wees, TNO

9:50 - 11:00 | Session 1 - Bring Innovation to the Market

Moderator: Luca Xodo, ETIP Geothermal President

| Report on innovation trends | Philippe Dumas, EGEC and Katrin Kieling, GFZ Potsdam |
|---|---|
| Increasing the scale of the next generation of geothermal projects, through innovation on AGS/EGS and ORC systems | Davide Toselli, TURBODEN |
| Producing carbon neutral lithium from | Norbert Pralle, Vulcan Energy Resources |
| geothermal brines in Europe | |
| Corrosion Resistant Podded Electrical | Francesco di Credico, Baker Hughues |
| Submersible Pump & Completion System | |
| Geothermal innovation with Exergy's radial outflow turbine orc technology | Sylvain Brogle, Exergy |
| | |
| | Q&A Session |

Geothermal Innovation Days 2024 – Munich, Germany

11:00 - 11:30 | Coffee Break

11:30 – 12:10 | Session 2 – Funding research and innovation

Moderator: Philippe Dumas, ETIP Geothermal Secretariat

| Financial support to innovation | Gerdi Breembroek, IWG geothermal |
|---------------------------------------|------------------------------------|
| EU Funding Programme | tbc, CINEA-EC |
| Other funding opportunities | Giulia Cittadini, EGEC |
| Funding innovation: Eavor-Loop™ Power | Robert Winsloe, EAVOR Technologies |
| Plant at Geretsried | |

12:10 - 13:10 | Session 3 - Review on R&I on drilling technologies

Moderator: Florian Mercier, ETIP Geothermal Working Group Leader

| The Development of Sensors and Electronics for Drilling Above 200°C | John Clegg, Hephae Energy Technology |
|---|--|
| From digital twins to well execution & Carbon negative power generation | Alejandro Schiuma, Enovate.Ai |
| Drilling Technology Developments at the Rijswijk Centre for Sustainable Geo-energy (RCSG) | Andreas Reinicke, TNO |
| Micro logging tool for improved geothermal well and reservoir production | Volker Wittig, Fraunhofer IEG |
| O&G Drilling technologies transition to geothermal – US shale gas experience | Florian Mercier, H&P (Helmerich & Payne) |

Geothermal Innovation Days 2024 – Munich, Germany

14:10-15:30 | Session 4 – Review of R&I on geothermal technologies

Moderator: Jan Diederik van Wees, ETIP Geothermal Working Group Leader

Drilling technologies - continuation

| Innovative laser drilling for deep geothermal heat exchangers: the advances of the DeepU Project | Luc Pockelè, RED |
|--|---|
| DTH Drilling - 2000 m deep energy wells - 20 m/h progress | Ari Kuhalampi , Geomachine Oy |
| Choose your own path. The application of Multiple Activation Circulation Subs in SplitFlow mode to increase total flow rates while drilling. | Jake Steele, Schoeller-Bleckmann (DSI) |
| Good practice of collaboration with O&G companies on development of innovative drilling technologies | Matus Gajdos, GA Drilling |
| ORCHYD: Theory to Lab - Journey of developing a deep geothermal drilling tool | Naveen Velmurugan, ARMINES/ Mines Paris |
| Geothermal drilling projects - Optimizing drilling rig technology and drilling processes | Ulrich Hahne, Herrenknecht Vertical GmbH |

Exploration technologies

| URGENT EU Project | Matsen Broothaers, VITO |
|-------------------|-------------------------|
|-------------------|-------------------------|

15:30 - 16:00 | Break

Geothermal Innovation Days 2024 – Munich, Germany

16:00-17:30 | Session 4 – continuation

Moderator: Adele Manzella, ETIP Geothermal Working Group

Exploration technologies

| Advanced geothermal systems and specific applications in the exploration geophysics | Angelo Piasentin, GeoNeurale |
|--|---|
| Innovative, user-friendly computational tools supporting the management and development of geothermal fields | Beata Kępińska, Mineral and Energy Economy Research Institute, Polish Academy of Sciences (MEERI PAS), and Aleksandra Kasztelewicz, IGSMiE PAN |
| White hydrogen associated with geothermal resources | Bruno Gomes, Sinergeo |

Production and Storage solutions

| PUSH-IT EU Project Storage – and CRM-geothermal - raw material | Katrin Kieling, GFZ Potsdam |
|--|--|
| extraction from geothermal fluids Digital Twin of Geothermal Plants | Jan Diederik van Wees, TNO |
| Diverse applications of adjustable flow rates in closed loop geothermal well solutions | Kim Gunn Maver, Green Therma |
| Showcasing the FlexGeo EU Project | Aaron Wesemann, Technical University of Munich |
| Geothermal heat storage: from R&I to commercial application | Thorsten Hörband, SWM |
| GEOSYN EU Project | Dario Bonciani, COSVIG |

Market uptake

| Why should Oil + Gas go Geothermal? | Henning von Zanthier, Von Zanthier & | |
|-------------------------------------|--------------------------------------|---|
| | Dachowski | ĺ |



Geothermal Innovation Days 2024 - Munich, Germany

17:30 - 18:00 | Conclusions of the day

| The contribution of EERA JP Geothermal | Adele Manzella, CNR |
|--|----------------------------------|
| to "Act, Align, Accelerate" research and | |
| innovation of geothermal technologies | |
| ETIP geothermal: next activities | Luca Xodo, ETIP geothermal Chair |

19:00 to 20:30 – Networking Dinner

Friday, November 22, 2024

Site Visit at Eavor-Loop™ Power Plant at Geretsried

The Eavor-Loop™ is a cutting-edge geothermal power plant that operates with a closed-loop system. In an underground heat exchanger, a heat medium circulates in the deep rock, completely independent of external water sources.

Registration for site visits is exclusively available to event attendees due to limited space.

GROUP 1:

Meeting Point: Hotel NH München Ost Conference Center: Einsteinring 20, 85609 Aschheim,

Germany At: 8:30

Site Visit: from 9:30 to 10:30 circa.

Returning to: Hotel NH München Ost Conference Center: Einsteinring 20, 85609 Aschheim,

Germany At 11:30

GROUP 2:

Meeting Point: Hotel NH München Ost Conference Center: Einsteinring 20, 85609 Aschheim,

Germany At: 10:30

Site Visit: from 11:30 to 12:30 circa.

Returning to: Hotel NH München Ost Conference Center: Einsteinring 20, 85609 Aschheim,

Germany At 13:30

→ Participants are required to bring their own ID or passport.