

Note from Coordinator

Dear EERA Geothermal members,

2019 has been an active year for our community. One highlight was the Geothermal Workshop, which this year was held in Karlsruhe. It is the second time EERA Geothermal co-organize the event, which is an important meeting place for the European Geothermal research community.

I would also like to mention our contribution to the work of the SET Plan Deep Geothermal Implementation Working Group (IWG), where we plan and coordinate European geothermal energy research in collaboration with member states and industry.

The IWG's revision of the Deep Geothermal Implementation Plan will be finalized before summer next year and. As our input on the revision is crucial, we have dedicated the workshop associated with our Steering Committee meeting 20 February to discuss the

revision and provide feedback to the IWG. All this you can read more about in this newsletter. You will also get an update on the Europe-Africa collaboration on geothermal, where several pre-proposals from EERA Geothermal were invited to submit full proposals.

I would like to thank all of you for your efforts for geothermal energy research in 2019 and

wish you happy holidays and all the best for the new year ahead!



Inga Berre

Joint Programme Geothermal Coordinator

European Geothermal Workshop -EGW 2019

On the 9th and 10th of October 2019, the 7th edition of European Geothermal Workshop (EGW) was held in Karlsruhe. EGW 2019 in Karlsruhe gathered more than 200 participants, including 55 students, from 21 countries around the world (France, Germany, Belgium, Netherlands, Denmark, United Kingdom, Norway, Italy, Spain Switzerland, Iceland, Algeria, Egypt, Turkey, Canada, China, United States, Djibouti, Japan, Pakistan, Philippines).

EGW is organized by the LabEx G-eau-thermie Profonde and the Karlsruhe Institue of Technology (KIT). The workshop is held every year, over two days, and is hosted alternately by EOST and KIT. In 2019, EERA Geothermal co-organized the event for the second time..

EGW 2019

Also this year for EGW 2019, EERA Geothermal was actively participating in several parts of t organizing the EGW, with representatives like; Phillippe Calcagno (BRGM), David Bruhn (GFZ/TU Delft) and Thomas Kohl (KIT), together with Emmanuel Gauche (KIT) and Jean Schmittbuhl (UNISTRA).

The topics covered at EGW2019 was aligned with the EERA Geothermal Sub Programs:

- Geothermal resources
- Exploration of geothermal reservoirs
- Geothermal wells
- Resource Development
- Energy conversion systems
- Operation of geothermal systems
- Sustainability, environment and regulatory framework
- Computing and Data Management, Machine Learning



Photo to the left: Enjoying lunch and posters at EWG 2019. (From left; Erlend Randaberg, NORCE Sub Program Leader SP3, Inga Berre (UiB) EERA Geothermal Coordinator), Ivar Stefansson (UiB), Olga Suminska-Ebersoldt Deep Geothermal IWP Support Unit at KIT.

EERA

European Geothermal Workshop

Deep Geothermal IWG Workshop

On 8 October this year, alongside the EGW Workshop, the Support Unit for the Deep Geothermal Implementation Working Group (Deep Geothermal IWP Support Unit) workshop took place at the Institute of Applied Geosciences (AGW) of the Karlsruhe Institute of Technology in Karlsruhe, Germany.

The workshop discussed the need to strengthen geothermal research and cross-border project management procedures to better coordinate long-term geothermal research studies in Europe. During the meeting, a very strong focus was placed on the

know-how and human resources to ensure high quality geothermal science, as well as on sustainability and social acceptance of geothermal projects.

The participants were informed about the objectives of the Deep Geothermal IWG and the possible support for cross-cutting activities, the formation of consortia and funding opportunities.

Deep GEOTHERMAL IWG

Revision of Set-Plan; Deep Geothermal Implementation Plan



Deep Geothermal IWG and EERA Geothermal members are involved in the forthcoming revision of the IWG Plan and their possible contributions in this regard. A group led by Inga Berre was set up in the Deep Geothermal IWG to suggest revisions of the Deep Geothermal IP. EERA Geothermal has established its own working group to follow up on the Deep Geothermal IP revisions, consisting of the participants:

- Kristian Bär (TU Darmstadt)
- Inga Berre (EERA Geothermal coordinator/UiB)
- David Bruhn (EERA Geothermal scientific secretary/GFZ)
- Philippe Calcagno (SP1 leader, BRGM)
- Adele Manzella (CNR)
- Jan Diederik van Wees (SP2 leader, TNO)

SET Plan and the EERA Geothermal

To achieve the technology targets that will place Europe at the forefront of the next generation of low carbon technologies, the Deep Geothermal IWG set a Deep Geothermal IWG Support Unit. The main aim of the Unit is to provide the Deep Geothermal IWG with relevant information and data to support the decision-making process and to promote and organise initiatives to mobilize growth of and implementation within the geothermal community.

Support Unit has prepared a survey which can be found here: < https://www.eera-set.eu/support-unit-for-the-iwg-deep-geothermal-starts-an-activity-survey/> https://www.eera-set.eu/support-unit-for-the-iwg-deep-geothermal-starts-an-activity-survey/. We appreciate all project coordinators (EERA as well as no-EERA) to contribute to information exchange in geothermal community by participating in the survey.

We encourage you as well to publish the project deliverables at the ETIP-DG Geothermal Search Engine<https://www.etip-dg.eu/geothermal-research-engine/> which will serve as a documents exchange platform within the community.

PRE-LEAP EU-AU Past-Present-Future:

PRE-LEAP-RE will promote a pathway for empowering local research through Europe-Africa cooperation while fostering the conditions for transforming research into effective innovation, tailored to specific societal needs while acknowledging regional discrepancies. Isabella Nardini has partaken in this initiative and sums up the process so far:



Past:

This EU-AU initiative started with the PRE-LEAP RE Project (preparing a long-term cooperation EU-AU in the renewable energy sector). The Project goal was to prepare a European Joint Programme (EJP) in order to set the foundation for future collaborative African Union-European Union activities in the field of renewable energy (RE). EERA Geothermal has been involved within the European Energy Research Alliance-EERA framework (being EERA a PRE LEAP RE project partner).

After having actively participated on the development of roadmaps and workshops, we submitted several draft proposals on geothermal (as also was done for other renewables).

Six geothermal proposals (EU partners mostly from EERA Geothermal) were preselected and invited to submit a proposal with a strong indication to group them as much as possible

for participating to the call. The call is now open, the deadline is January 3rd 2020.

Present

The groups are now basically working on two main proposals:

- 1. Atlas of high-medium-low temperature geothermal resources and applications, including socio-economical aspects.
- 2. Small size units related (shallow drilling) including socio-economical aspects.

Future:

EC support will be 15MEuro in total and each project will be financed for 50% (the other 50% will be self-financed as staff cost). Around 2MEuro per project are foreseen. The projects are not big, but should have a long term-vision that could be financially supported in the long term.

DGG/SGG Joint Geothermal Workshop

Geophysical Exploration form Fossil to Geothermal Reservoirs

Workshop objectives:

- o to foster networks between both professional societies
- to provide a venue for experts, practitioners, early-career scientists and students to exchange ideas
- to share progress, lessons-learned and on-going research in geophysics for optimal harnessing of
- geothermal energy
- o to share experience between oil, gas and geothermal exploration and applications

More information and details: https://dgg2020.dgg-tagung.de/englisch/organisational/



EERA Geothermal Steering Committee meeting 20 February 2020

Please be reminded of the EERA Geothermal Steering Committee meeting 20 February 2020 in Potsdam, Germany, organized directly after the GEMex Final Conference held 17-19 February, agenda and documents will be forwarded in due

time. More information on logistic and Hotels will be sent to everyone, but you can already register your participation on this link; https://skjemaker.app.uib.no/view.php?id=7710446. It will be accessible for registration untill January 24 2020.

The tentative agenda suggested for the EERA Geothermal Steering Committee meetings 19-20 February in Potsdam, Germany:

19 February 2020:

19:00 EERA Geothermal Dinner

20 February 20202:

09:00 - 12:00 Workshop: revision of the Deep Geothermal Implementation

12:00 - 13:00 Lunch

13:00 - 16:00 Steering Committee meeting

Please also be reminded that the GEMex Final Conference 17-19 February is free of charge, and for registration, please register online until January 24, 2020. More information and

details: (http://www.gemex-

h2020.eu/index.php?option=com_content&view=article&id=93&catid=18&lang=en&Itemid=155)

Thank you all for the Collaboration in 2019, and the very best of Holiday wishes to everyone in the EERA Geothermal Family!



Upcoming events

- 3 January PRE-LEAP EU-AU collaboration projects deadline
- 13 January 2020 EERA Geothermal Management Board meeting
- 17-19 February GEMex Final Conference in Potsdam Germany: http://www.gemex-h2020.eu/index.php?option=com content&view=a rticle&id=93&catid=18&lang=en<emid=155
- 20 February EERA Geothermal Workshop on Deep Geothermal IP revision and Steering Committee Meeting in Potsdam , Germany https://skjemaker.app.uib.no/view.php?id=771044
- 27 March DGG/SEGG Joint Geothermal Workshop https://dgg2020.dgg-tagung.de/englisch/organisational/