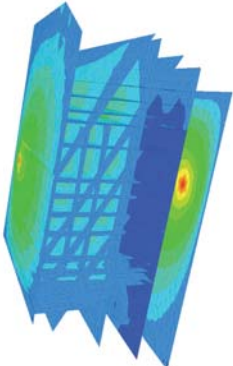


PROGRAM



SYMPOSIUM

DEEPEGS



# How to enhance deep geothermal well productivity?

## 6<sup>th</sup>-7<sup>th</sup> November 2019

*International symposium, BRGM in Orléans, FRANCE*

The symposium aims at discussing new approaches and methods to enhance and to assess the improvement of the well productivity in the field of deep geothermal reservoirs. There will be a strong focus on tight geothermal reservoir and low permeability formations.

It is an Horizon 2020 event of the DEEPEGS project on three streams:

- **Well design, drilling & completion:** Designing the well to optimise the connection with the reservoir
- **Enhancement technologies and methods:** Challenges and solutions to enhance the productivity index of the wells
- **Well performance prediction and assessment:** Assessing the efficiency of the well enhancement



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## WEDNESDAY 6<sup>TH</sup> NOVEMBER 2019

- 9:00-9:30** Registration
- 9:30-9:50** **Welcome**  
**Philippe FREYSSINET**,  
*Director for Strategy and Research, BRGM*
- 9:50-10:20** **Introduction**  
**Sylvie GENTIER**,  
*Head of Subsurface space and energy transition Programme, BRGM*
- 10:20-11:00** **Keynote lecture**  
**Julie MAURY**,  
*Overview of the risk and impact associated with EGS, application to EGS in the Rhine graben*
- 11:00-11:20** Coffee break & poster session
- 11:20-12:00** **Keynote lecture**  
**Clément BAUJARD**,  
*ES Géothermie*  
*An overview of geothermal reservoir enhancement results in the Rhine Graben during post-drilling well development operations and reservoir exploitation*
- 12:00-13:20** Lunch & poster session

### Session 1: Well performance prediction and assessment

chairperson: Emmanuel GAUCHER

- 13:20-13:40** **Pierre DE MONTLEAU**,  
*Historical modelling and Forecast of a naturally fractured high enthalpy geothermal reservoir*

- 13:40-14:00** **Jia WANG**,  
*Estimating the Static Formation Temperature Using the Drilling and Logging Data of the RN-15/IDDP-2 Well in Iceland*

- 14:00-14:20** **Sturla SAETHER**,  
*Flow Performance of IDDP-2/DEEPEGS Well by calculating Local Injectivity Indexes for Different Reservoir Depths*

- 14:20-14:40** **Maziar GHOLAMI KORZANI**,  
*The Development of a Coupled Wellbore-Reservoir Simulator for Geothermal Applications*

- 14:40-15:00** **Mathieu DARNET**,  
*Advances for monitoring deep geothermal reservoir development with electromagnetic measurements*

- 15:00-15:20** **Hideo AOCHI**,  
*Concept of Traffic-Light-System (TLS) managing seismicity and injection for geothermal applications*

- 15:20-15:50** Coffee break & poster session

### Session 2: Well design, drilling & completion

chairperson: Camille MAUREL

- 15:50-16:10** **Vlasios LEONTIDIS**,  
*Complete flow modelling of geothermal wells for different reservoir conditions*

**16:10-16:30** Ólafur SVERRISSON,  
*Theistareykir Geothermal  
Power Plant – Successful  
Drilling Campaign*

**16:30-16:50** Omar SIGURDSSON,  
*IDDP2*

**16:50-17:10** Frédéric GUINOT,  
*Injecting more Engineering in  
the E of EGS*

**17:10-17:30** End-of-day speech, sponsor  
presentation Energics –  
Mariane PETER-BORIE &  
Manon CAVRIL

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## THURSDAY 7<sup>TH</sup> NOVEMBER 2019

**9:00-9:40** Keynote lecture  
François CORNET,  
*EOST (U. Strasbourg)  
Engineering safe shear  
motions for the development  
of EGS reservoirs*

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### Session 3: Enhancement technologies and methods

chairperson: Julie MAURY

**09:40-10:00** Morgan LE LOUS,  
*Geothermal well testing  
and stimulation: a complete  
methodology applied to  
Vendenheim well VDH-GT2  
(Alsace, France)*

**10:00-10:20** Barnaby FRYER,  
*Temperature-induced stress  
preconditioning*

**10:20-10:40** Van Hieu TRAN,  
*Numerical Modelling of  
Thermal Stimulation in  
Enhanced Geothermal  
Systems (EGS)*

**10:40-11:00** Coffee break & poster  
session

**11:00-11:20** Théophile GUILLON,  
*Reactivation of a fault zone  
internal structure in response  
to hydraulic stimulation*

**11:20-11:40** Antoine ARMANDINE LES  
LANDES,  
*Hydrothermal simulation  
in a fault zone: Impact  
and efficiency of different  
stimulation methods*

**11:40-12:00** Cyprien SOULAINÉ,  
*Multi-scale modeling of  
coupled hydro-geochemical  
processes*

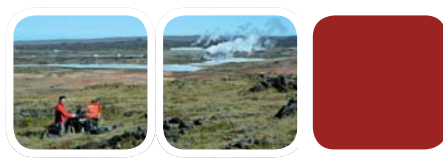
**12:00-12:20** Pierre DURST,  
*From Fenton Hill to  
Vendenheim, 40 years of  
chemical stimulation in  
Enhanced Geothermal  
Systems*

**12:20-13:40** Lunch & poster session

**13:40-14:20** Keynote lecture  
Sébastien CHAILLEUX,  
*UMR PASSAGES  
The politicization of the  
subsurface: from technical  
assumptions to social  
conflicts and political choices*

**14:20-14:30** End of the meeting  
Mariane PETER-BORIE

**14:30-16:30** Visit of the shallow  
Geothermal Energy  
platform  
Antoine VOIRAND



## POSTERS

### Philippe BLANC

*Geothermal drilling: Geochemical assessment of cement durability in the supercritical domain*

### Jia WANG

*Estimating the Static Formation Temperature Using the Drilling and Logging Data of the RN-15/IDDP-2 Well in Iceland*

### Hideo AOCHI

*Statistical analysis of microseismicity during the stimulations at Soultz-sous-Forêts (France) EGS site*

## SCIENTIFIC COMMITTEE MEMBERS

### Sylvie GENTIER

*BRGM  
Head of Subsurface space and energy transition Programme Senior Management*

### Peter ROSE

*Energy & Geoscience Institute (EGI),  
University Utah  
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Hydrogeologist*

### Mariane PETER-BORIE

*BRGM  
Project manager, PhD in geology & rock mechanics*

### Emmanuel GAUCHER

*Karlsruhe Institut of Technology (KIT)  
Research geophysicist*

### Grimur BJORNSSON

*Hs ORKA, Reykjavik  
Reservoir engineer*

### Camille MAUREL

*BRGM  
Reservoir engineer*

## FOR MORE INFORMATION

[www.brgm.eu/news-media/deepegs-symposium](http://www.brgm.eu/news-media/deepegs-symposium)

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