



## ENGINE

ENhanced Geothermal Innovative Network  
for Europe

<http://engine.brgm.fr>

### Workshop

## Electricity generation from Enhanced Geothermal Systems

September 14<sup>th</sup> – 16<sup>th</sup> 2006  
Strasbourg, France

### BACKGROUND

The workshop is organised within the framework of the BMU Geothermal Advisory Board and the EU ENGINE-project.

### AIM OF THE WORKSHOP

The aim of the workshop is the exchange of experience between experts in different fields of conversion technology in order to support the electricity generation from Enhanced Geothermal Systems (EGS). Therefore following topics are covered:

- Discussion of the basics of electricity generation from EGS (i.e. thermodynamic frame conditions)
- Presentation of the state of technology from the point of view of
  - Producer of low temperature power plants
  - Operator and planner of low temperature power plants
- Identification of technical improvement potentials for the following years
- Discussion of new concepts and developments
- Analysis of technical risks and challenges
- Discussion of economic and environmental aspects
- Analysis of cost reduction potentials
- Identification of R&D necessities
- Discussion of existing experiences
- Lessons learned from existing plants
- Conclusions to be drawn

### PROVISIONAL PROGRAMME

Thursday, September 14<sup>th</sup> 2006

#### Sessions I to II

9:00 – 10:30 a.m.

Meeting for Workpackage 5 Members

11:00 a.m. – 1:00 p.m.

#### Session I “Introduction and Overview”

- Opening address
- Status of geothermal electricity generation
- Low enthalpy cycles – thermodynamic constraints
- Low enthalpy cycles – power plant concepts

#### Lunch Break

2:00 – 3:35 p.m.

#### Session II “Producer and Manufacturer of ORC-Technology”

- Presentations of
  - ORMAT Technologies, USA*
  - Gesellschaft für Motoren und Kraftanlagen (GMK), Germany*
  - Turboden, Italy*
  - Enex, Iceland*
- Discussion

#### Coffee Break

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### Session III

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3:50 - 5.25 p.m.

#### Session III "Producer and Manufacturer of Kalina-Technology"

- Presentations of
  - Siemens, Germany*
  - Exorka, Iceland*
  - Cryostar, France*
  - M+W Zander, Germany*

- Discussion

7:00 p.m. **Dinner**

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**Friday, September 15<sup>th</sup> 2006**

### Session IV

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9:00 - 10.10 a.m.

#### Session IV "Possibilities and Restrictions of Cooling Systems"

- Geothermal Binary Plants: Water or Air Cooled ?  
*CRES, Greece*
- Experience of Running Geothermal Power Plants  
under Severe Climate Conditions in Russia  
*Intergeotherm JSC, Russia*
- Discussion

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### Sessions V to VI

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10:10 - 12.25 a.m.

#### Session V "Running and Forthcoming ORC-Projects"

- Presentations of
  - Altheim, Austria*
  - Neustadt-Glewe, Germany*
  - FirstGeoTherm, Germany*
  - Soultz-sous-Fôrets, France*
  - CFG, France*

- Discussion

#### Lunch

1:25 - 2:55 p.m.

#### Session VI "Running and Forthcoming Kalina-Projects"

- Presentations of
  - Húsavík, Iceland*
  - Unterhaching, Germany*
- Discussion

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**Saturday, September 16<sup>th</sup> 2006**

#### Site Visit Basel, Switzerland

- 8:00 a.m. *Departure to Basel (Bus Trip)*
- 10:00 a.m. *Site Visit*
- 12:30 a.m. *Lunch*
- 2:30 p.m. *Departure to Strasbourg (Bus Trip)*
- 4:00 - 5:00 p.m. *Arrival at Strasbourg*

### Place

*Hôtel Regent Petite France*  
*5, rue des Moulins*  
*67000 Strasbourg*  
*<http://www.regent-hotels.com/>*

### Registration

***For registration please use online  
registration form at***

*[http://conferences-engine.brgm.fr/  
confRegistrationFormDisplay.py/display?co  
nfId=6](http://conferences-engine.brgm.fr/confRegistrationFormDisplay.py/display?confId=6)*

***Registration deadline: August 31st 2006***

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