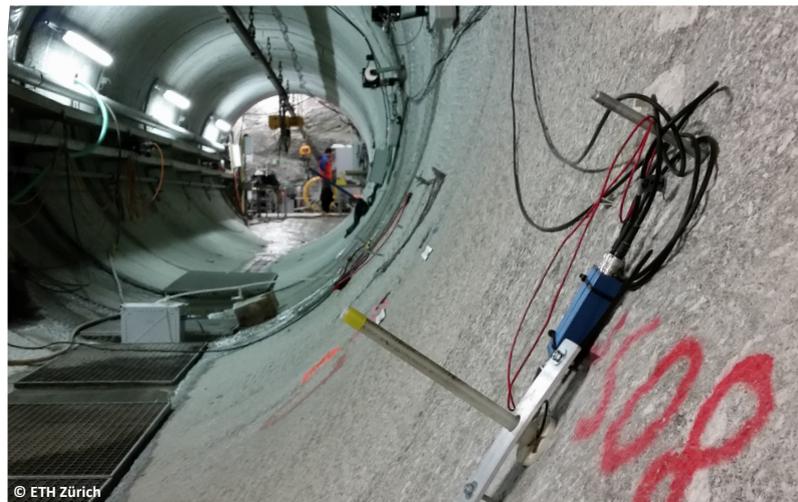
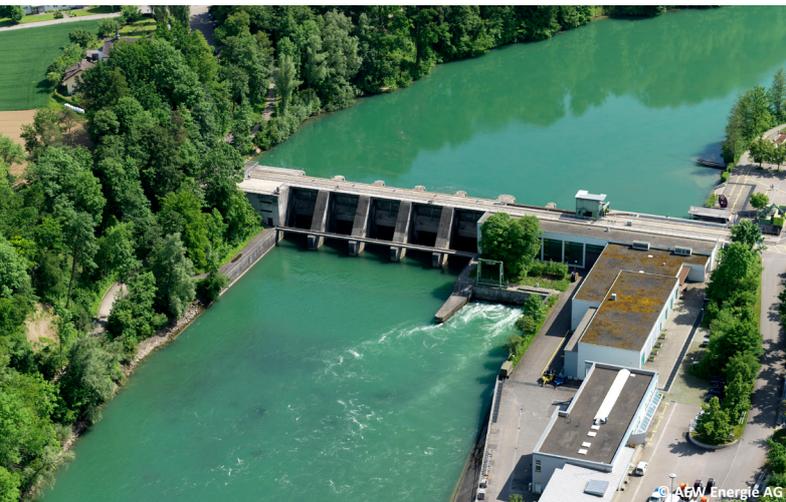


SCCER SoE Annual Conference 2017

Hydropower and Geo-Energy in Switzerland Challenges and Perspectives

14 & 15 September 2017

Birmensdorf (ZH), Swiss Federal Research Institute WSL



After a successful start into the SCCER-SoE's second phase, the recently confirmed revision of the Energy Act comes at the right time. It provides a solid ground for fresh ideas and new developments in hydropower and geo-energy in Switzerland. Besides reflection on these evolutions, the annual conference will present insights into our research highlights, give the floor to views from outside, put a strong emphasis on the project posters, and offer many opportunities for personal exchange.

On Thursday, we will focus on the big picture of the supply of electricity and welcome key representatives from industry, federal offices, and politics.

Friday's program is dedicated to the highlights of the hydropower and geo-energy research as well as of the pilot and demonstration projects.

In cooperation with the CTI



Energy funding programme
Swiss Competence Centers for Energy Research



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Commission for Technology and Innovation CTI

Thursday, 14 September 2017

| | |
|-------|---|
| 09:00 | Registration |
| 10:00 | Welcome address <i>K. Steffen, WSL</i> |
| 10:10 | SCCER-SoE phase II <i>D. Giardini, ETHZ</i> |
| 10:30 | Geo-energy: roadmap, status, and transition to phase II <i>T. Driesner, ETHZ</i> |
| 10:55 | Hydropower: roadmap, status, and transition to phase II <i>R. Boes, ETHZ</i> |
| 11:20 | Joint activity: scenario and modeling <i>G. Guidati, ETHZ</i> |
| 11:30 | Joint activity: regulatory, political, and participatory perspectives of integrated development processes for hydropower and deep geothermal energy <i>O. Ejderyan, ETHZ</i> |
| 11:40 | Lunch and poster session |
| 13:00 | Hydropower: view from the industry <i>D. Fischlin, KWO</i> |
| 13:20 | Geo-energy: view from the industry <i>F. Bärlocher, ewb</i> |
| 13:40 | View from the federal office <i>R. Schmitz, SFOE</i> |
| 14:00 | View from politics <i>S. Müller-Altermatt, National Council</i> |
| 14:20 | Round table: is Switzerland on track towards the supply goals of the Energy Strategy 2050? <i>Moderated by D. Giardini, ETHZ</i> |
| 15:00 | Coffee and interactive poster tour Highlights from WP 4 and 3 |
| 16:15 | Sensitivity of residual load variability to renewables siting and demand response <i>A. Patt, ETHZ</i> |
| 16:30 | Modeling of electricity markets and hydropower dispatch <i>M. Densing, PSI</i> |
| 16:45 | Induced seismicity risk mitigation: an actuarial approach <i>A. Mignan, ETHZ</i> |
| 17:00 | Development of methods and tools responding to the needs of energy transition: PSI perspective <i>S. Hirschberg, PSI</i> |
| 17:15 | Outcomes of HYPERBOLE research project <i>F. Avellan, EPFL</i> |
| 17:30 | Aperitif and poster session |
| 18:30 | Dinner |

Friday, 15 September 2017

| | |
|-------|---|
| 07:45 | Registration |
| 08:30 | Welcome address <i>M. Stähli, WSL</i> |
| | Status of WP 5 |
| 08:35 | Findings from the stimulation experiment in the deep underground laboratory <i>J. Doetsch, ETHZ</i> |
| 08:55 | Petrothermal projects <i>P. Meier, Geo-Energie Suisse</i> |
| 09:05 | First results from Geothermie 2020 <i>L. Guglielmetti, UNIGE</i> |
| 09:20 | CCS geological storage pilot <i>A. Zappone, ETHZ</i> |
| 09:30 | Small hydropower pilot <i>C. Münch-Alligné, HES-SO</i> |
| 09:40 | Controlled fine sediment release <i>A. Schleiss, EPFL</i> |
| | Highlights from WP 2 and 3 |
| 09:50 | Data management - what else <i>L. Glaus, ETHZ</i> |
| 10:00 | Robust and flexible design of hydropower under uncertainties <i>F. Oberrauch, EPFL</i> |
| 10:15 | Coffee and poster session |
| 10:45 | WP 5: results from the complex large hydropower scheme project <i>P. Manso, EPFL</i> |
| 11:05 | Trading off energy production from small hydropower with biodiversity conservation <i>K. Lange, Eawag</i> |
| 11:20 | Fine sediment management at hydropower schemes considering turbine erosion <i>D. Felix, ETHZ</i> |
| 11:35 | Challenging onboard measurements in a 100 MW high-head Francis turbine prototype <i>V. Hasmatuchi, HES-SO</i> |
| 11:50 | Integrated simulation of HP system operation <i>P. Burlando, ETHZ</i> |
| 12:05 | The role of mountain PV and wind installations in a fully renewable Swiss energy world <i>M. Lehning, EPFL</i> |
| 12:20 | Harsh environment sensors for geo-energy and water reservoir monitoring <i>J. Moerschell, HES-SO</i> |
| 12:35 | Poster award |
| 12:40 | Lunch and poster session |

Friday, 15 September 2017

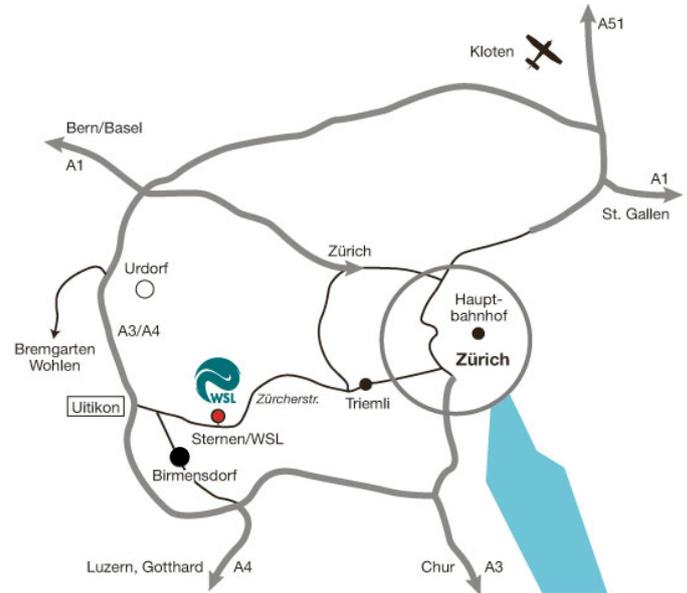
Highlights from WP 1 and 3

- 14:05 Characteristics of seismic wavefields in fluid-saturated fractured rocks
E. Caspari, UNIL
 - 14:20 Rock and fluid thermodynamics control the dynamics of induced earthquakes
M. Acosta, EPFL
 - 14:35 Natural thermal convection patterns in deep fracture networks
J. Patterson, ETHZ
 - 14:50 Quantification of the 3D thermal anomaly in the orogenic geothermal system at Grimsel Pass
C. Wanner, UNIBE
 - 15:05 Workflow for managing borehole stability
A. Dahrabou, UNINE
 - 15:20 Efficient Finite Element Simulation Methods for Fracture Networks
M. Favino, USI
 - 15:35 An immersed boundary method for fluid structure interaction
M. Nestola, USI
-
- 15:50 Post 2020 and closing
D. Giardini, ETHZ
 - 16:00 Closure

Location

Swiss Federal Research Institute WSL
Zürcherstrasse 111
8903 Birmensdorf

Next public transport station:
Birmensdorf ZH, Sternen/WSL



Academic Research Partners



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