

# SCCER-SoE/NRP70 PhD School 2015



© Grimselwelt

## Reaching the Swiss Energy Strategy 2050 targets for HydroPower and GeoEnergy

13 - 16 October 2015

Grimsel Hospiz

The Swiss Competence Center on Supply of Electricity (SCCER-SoE), with support of the National Research Programme „Energy Turnaround“ (NRP 70), is organizing a PhD School focusing on HydroPower and GeoEnergy.

Join the PhD School in the middle of Grimsel to experience four days full of interdisciplinary discussions, presentations, group work, and excursions to the Nagra Grimsel underground test site as well as the power house and the dam of Grimsel 2.

It is the goal of the PhD School to present you a profound overview of the Swiss Energy Strategy 2050 and the latest developments and future prospects of HydroPower and GeoEnergy.

## Tuesday, October 13, 2015

<b>Introduction</b>
KWO Kraftwerke Oberhasli AG, Swiss Energy Strategy 2050, SCCER-SoE
GeoEnergy
HydroPower

## Wednesday, October 14, 2015

<b>GeoEnergy</b>	<b>HydroPower</b>
<p>Geothermal resources in the Swiss underground: fundamental concepts and specific problems</p> <p>Coupled thermo-hydro-mechanical processes in deep, fractured geothermal reservoirs</p>	<p>Water and sediment inflows: estimation, modelling, and forecasting</p> <p>Electricity market: opportunities, threats, and development perspectives</p> <p>Enhancing hydro machinery</p> <p>Innovative measures to maintain and further increase electricity production and revenues</p>

## Thursday, October 15, 2015

<b>GeoEnergy</b>	<b>HydroPower</b>
<p>Seismicity during hydraulic stimulation of geothermal reservoirs</p> <p>Concepts for geothermal reservoir creation and operation</p>	<p>Recent and ongoing research in hydropower civil engineering, infrastructure, and hydro-mechanics</p>
<b>Integrative Topics</b>	
<p>Comparative risk assessment in the energy sector: safe, secure, and sustainable energy supply</p> <p>Social acceptance and risk governance</p> <p>Environmental impacts of energy technologies</p> <p>Scenario analysis in energy economic modeling</p> <p>Integrated sustainability assessment</p>	

## Friday, October 16, 2015

<b>Excursions</b>
Nagra Grimsel underground test site
Power house and dam of Grimsel 2

## Who can participate?

The SCCER-SoE/NRP70 PhD School addresses PhD students and postdocs of ETH institutions, Swiss universities, and universities of applied sciences who are working in the field of HydroPower and Geo-Energy.

The number of participants is limited to 45. PhDs, postdocs, and scientists funded by the SCCER-SoE and NRP 70 are particularly encouraged to apply and will be prioritized.

## How to apply

Application on the [PhD School website](#).

Deadline: August 15, 2015

## Credits

PhDs will obtain 1 ECTS for the SCCER-SoE/NRP70 PhD School. The knowledge acquisition will be evaluated based on a personal student report and a test.

## Costs

Thanks to generous sponsors, the SCCER-SoE/NRP70 PhD School can be offered for free. Only the travel costs have to be borne by the participants.

## Organization

The SCCER-SoE is organizing the PhD School with support of the NRP 70 and in cooperation with KWO Kraftwerke Oberhasli AG as well as Nagra.

## Location

Grimsel Hospiz, Historic Alpine Hotel  
3864 Guttannen



## Contact

Ueli Wieland  
[uwieland@ethz.ch](mailto:uwieland@ethz.ch)

Anton Schleiss  
[anton.schleiss@epfl.ch](mailto:anton.schleiss@epfl.ch)

Thomas Driesner  
[thomas.driesner@erdw.ethz.ch](mailto:thomas.driesner@erdw.ethz.ch)

## Academic Research Partners



## Cooperation Partners

