

Dissemination of Geothermal Knowledge



Final Conference - Vilnius, Lithuania
12 - 15 February 2008

Iceland GeoSurvey (ÍSOR)

University

Lecturing

ÍSOR has established cooperation contracts with Icelandic academic institutions, and members of ÍSOR's staff hold visiting professorships at the University of Iceland and ÍSOR specialists act as part-time lecturers in various fields of geothermal knowledge at the University of Iceland and Reykjavik University.

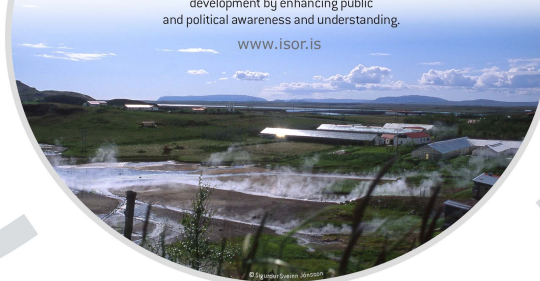
ÍSOR vinnur öll sín verk samkvæmt með verksamningum við orkufyrirtæki, Orkustofnun og aðra á fjálsam markaði.



Geothermal energy utilization is widespread in Iceland. Almost 90% of houses are geothermally heated. Almost 17% of the electricity generated. Half of the country's primary energy supply comes from geothermal sources.

ÍSOR and its predecessors have played a major role in this development by providing scientific service to the geothermal industry and advice to the government of Iceland. ÍSOR has been active in promoting geothermal development by enhancing public and political awareness and understanding.

www.isor.is

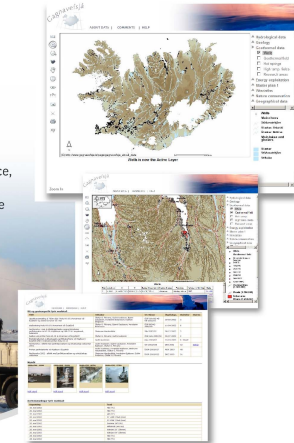


Public Database Internet

ÍSOR and its predecessor have the most comprehensive set of data on research and exploration of geothermal areas in Iceland as well as on their exploitation, well drilling, monitoring and geothermal reservoir management.

A part of this data is available on an interactive map interface, "Gagnavefsja" which is accessible over the internet. This webservice is meant to serve different user groups, the public as well as power companies and contractors. It is presented in Icelandic and English.

www.gagnavefsja.is



The United Nations University Geothermal Training Programme

Training and lecturing

The most comprehensive dissemination activity is ÍSOR contribution to the United Nations University Geothermal Training Programme (UNU-GTP). About 60% of all its training is provided by ÍSOR. The trainees work along with our professionals, and acquire knowledge in various aspects of geothermal research, exploration, and development. The UNU-GTP has been very successful in world-wide capacity building in the field of geothermal energy.

Geothermal Training Programme (GTP), since 1979

- 6 months annual courses
- Mainly for professionals from developing countries
- Each trainee attends only one specialized course
- Participants approx. 20 per year
- Financed by the Government of Iceland and the UNU
- Administered by Orkustofnun

MSc programme, since 2000

- 2 year
- Cooperation between the UNU-GTP and the University of Iceland
- Participants approx. 6-9 per year

Short courses and workshops

- In Africa, Central America and Asia
- The government of Iceland is funding direction towards the Millennium Development Goals of the UN

www.unugtp.is

Workshop for Decision Makers on Geothermal Projects in Central America

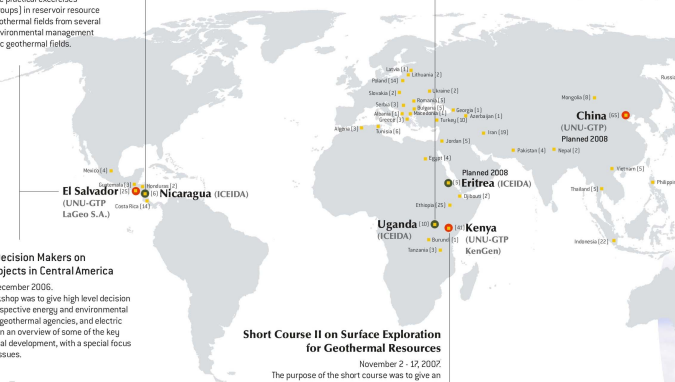
25 November - 2 December 2005. The aim of the Workshop was to give high level decision makers from the respective energy and environmental ministries, leading geothermal agencies, and electric utilities in the region an overview of some of the key issues of geothermal development, with a special focus on environmental issues.

Development collaboration

Contract between ÍSOR and ICEIDA. A 5-year project is underway. It implies the dissemination of knowledge as well as technical assistance and capacity building under the auspices of the Ministries of Energy and the Environment.

Development collaboration

Contract between ÍSOR and ICEIDA. Geothermal explorations of two geothermal areas, Kilbiria and Katwe. Field studies consisted of geological mapping with emphasis on the location of (open) fractures and faults. TEM resistivity and gravity surveys were also carried out as well as geochemical sampling of the geothermal water.



The Icelandic International Development Agency

Training and lecturing

ÍSOR has participated in development collaboration projects financed by the Icelandic International Development Agency (ICEIDA) involving training and lecturing as well as geothermal exploration. The geothermal training involves technical assistance and capacity building in collaboration with local technical people under the auspices of government institutions in the host countries.



Time schedule for the 6 month Geothermal Training Programme

Geological Exploration	Reservoir Development	Geophysical Exploration	Reservoir Characterization	Reservoir Engineering	Chemistry of Geothermal Fluids	Geothermal Utilization	Drilling Technology
21	33	35	21	34	30	38	75

Specialized courses of the participants during 1979-2007

Workshop for Decision Makers on Geothermal Projects and their Management

November 2005. The aim of the Workshop was to make high-level decision makers from the respective energy ministries, national electric power companies, geological surveys, and finance ministries, better informed about the main phases of geothermal development and what kind of manpower, equipment, and financing is needed for each phase.