

COST ACTION CA18219 Geothermal-DHC

Summer school

Coupling
technologies
to use low and
medium depth
hydrogeothermal
energy

SLOVENIA, CROATIA
9TH - 16TH JULY 2021

<https://www.geothermal-dhc.eu/>



DESCRIPTION

This summer school aims to highlight research and practice - based knowledge from international trainers in order to present best practice to international trainees and increase the use of geothermal technology in near future.

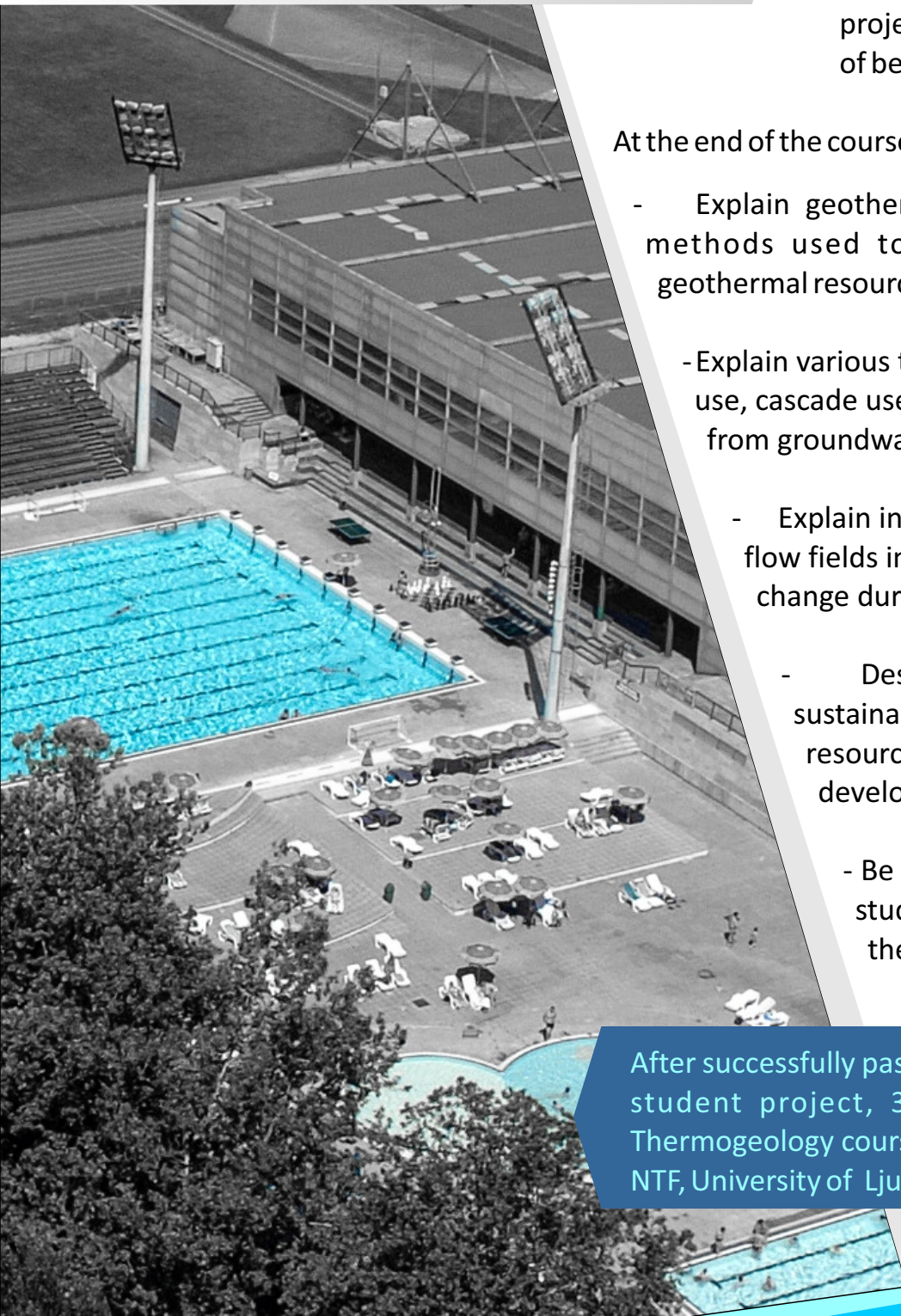
AIMS AND LEARNING OUTCOMES

Attendees will use geothermal concepts to learn utilization of the available geothermal potential. Geothermal energy utilization can be applied almost anywhere, we just need a sound knowledge of proper project development and application of best possible technical solutions.

At the end of the course, the participants should:

- Explain geothermal concepts and exploration methods used to characterize low enthalpy geothermal resources.
- Explain various technologies for geothermal use, cascade use, and heat or cold production from groundwaters.
- Explain interactions between heat and flow fields in the subsurface and their change during the project lifetime.
- Describe the concept of sustainable exploitation of renewable resources and proper project development.
- Be able to illustratively present the student project prepared during the course.

After successfully passing the exam and presenting the student project, 3 ECTS will be granted for a Thermogeology course at the MSc programme level at NTF, University of Ljubljana.



VENUE

Department of Geology, Faculty of Natural Sciences and Engineering, University of Ljubljana, Aškerčeva cesta 12, SI-1000 Ljubljana, Slovenia.

Laboratory and field work will be performed at the Geological Survey of Slovenia, Dimičeva ulica 14, SI-1000 Ljubljana, and several sites during the field trip in SE Slovenia and W Croatia.

COURSE ORGANIZERS

- COST action CA18219 Geothermal-DHC
- Geological Survey of Slovenia (GeoZS)
- Faculty of Natural Sciences and Engineering University of Ljubljana (NTF UL)
- Faculty of Mining, Geology and Petroleum Engineering of University of Zagreb (RGN UZ)
- Croatian Geological Survey (HGI-CGS)

The courses are given by engineers and researchers involved in the CA18219 and invited speakers: assoc. prof. dr. Mihael Brenčič (NTF UL, GeoZS) and assist. dr. Nina Rman (GeoZS) from Slovenia; assoc. prof. dr. Tomislav Kurevija, dr. Marija Macenić and assist. prof. dr. Iva Kolenković Močilac (RGN UZ), dr. Staša Borović (HGI-CGS) and MSc Hrvoje Dorotić (FSB UZ) from Croatia; assoc. prof. dr. Philip Vardon (TU Delft) from the Netherlands, and dr. Tine Compennolle (UA, RBINS-GSB) from Belgium.

SELECTION PROCEDURE

The course is available for:

- PhD and postdoc students in geosciences, geothermal, mechanical and energy engineering, environmental sciences, mining, economics and project development.
- MSc students interested in geothermal energy use.
- Professionals which deal with any aspect of geothermal within their work.

There will be a pre-selection of applicants with the aim of reaching background balance (e.g. geologists, mechanical engineers, environmental specialists, social or economy sciences...), gender balance, country and institutional spread.



FUNDINGS

Scholarships are available to cover part of your costs for long-distance travel (up to 250 €) and daily allowance (800 € in total), according to general COST rules. Msc students are NOT eligible.

IMPORTANT DATES

31st May 2021:

Deadline for submission of your e-application

15th June 2021:

First selection of candidates announced

PROGRAMME OUTLINE 9th to 16th July 2021

DAY 1: Field trip: Geothermal anomalies in karst at Kostanjevica, cascade use of thermal water at Terme Čatež, Slovenia

DAY 2: Field trip: Geothermal doublet in Zagreb, geothermal power plant in Velika Ciglena and field methods for exploration

DAY 3: Student conference and best presentation award, hydrocultural trip through Ljubljana

DAY 4: Geothermal concepts & Exploration methods

DAY 5: Drilling, utilization technologies and integration of heating and cooling networks

DAY 6: Numerical modeling and reservoir engineering; Student projects

DAY 7: Development and management of geothermal projects; Student projects

DAY 8: Presentation of student projects and exam