

Geo-Microbiology and Bio-Geochemistry in Alpine Environments

**A 3-day Field Trip to geobiologically and geohydrochemically interesting
Ecosystems in the Eastern Swiss Alps**

**for Geology and Environmental Science Students of the Bachelor and
the Master Level, and Guests**

Monday, August 29 to Wednesday, August 31, 2011

Guided by

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ETHZ, Dept. for Earth Sciences, Climate Geology / Geomicrobiology

Locations:

Day 1: Iron mine Gonzen and Weissfluhjoch – Totalpsee – Davos.
Day 2: Davos Dorf – Wägerhus - Jöri Lakes - Davos Dorf.
Day 3: Scuol-Tarasp - Ftan - Fuschna - Nairs – Rablönch.

Topics:

Iron dominated microbial habitats in former mine shafts; alpine water resources, geology of the Lower Engadin Window, organics in periglacial shale deposits, low temperature geobiochemistry in mineral springs, evolution of mountain lakes, modern and ancient nutrient sequestration and cycling in high altitude aquatic ecosystems, soil formation in glacier flood plains, coupling of Fe-Mn-P-cycling, erosion patterns in carbonate, gneiss and serpentine contact zones, travertine and carbonate ice formation in CO₂ outgassing zones

Accommodation:

Youthpalace, Davos Dorf, 2 nights, breakfast and dinner included

Meeting points:

Monday, August 29, 09.35: Sargans railroad station (train arr. 09.32)
Tuesday, August 30, departure by bus at 07.55 from Davos-Dorf, RhB station
Wednesday, August 31, 08.05, train from Davos Dorf to Scuol (arr. 09.16) via Klosters

Costs:

CHF 170 (CHF 120 for geology students enrolled at ETH-Z)
included are accommodations for 2 nights, 2 breakfasts, 2 dinners, local transports: Klosters – Davos - Parsenn. Field trip preparations.
Not included: back pack lunches, travel to Davos / Scuol and back, local bus trips.

Fitness:

Walking on rough mountainous terrain and work in the field for 6-9 hrs daily

Clothing:

Good mountain walking boots, layers of cloths for warm, sunny as well as for rainy, cold weather. The temperature in the mine is 13°C

Insurance:

Is the responsibility of each participant, incl. REGA.

Preparation:

Pre-excursion meeting on May 23, 3-6 pm at Sonnegstr. 5, NO building, room D-11.
Post-excursion meeting tbd.

Enrolment:

via ETH geology excursion booking <http://www.conference.ethz.ch/erdw/>

Participants:

15 + 10 guests

Information:

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