



# 2<sup>nd</sup> Annual Workshop of the SKIN Project

November 21<sup>th</sup> - 22<sup>th</sup>, 2012

## Location:

Paul Scherrer Institut, OFLG/402  
East entrance, 5232 Villigen, Switzerland

## Accommodation:

Schlosshotel Böttstein, 5315 Böttstein  
<http://www.schlossboettstein.ch>

Registration via website

<http://www.psi.ch/skin-workshop>

from September 10<sup>th</sup> 2012 until October 4<sup>th</sup> 2012

## Contact persons at PSI:

*Dr. Bruno Thien* (program, organization): [bruno.thien@psi.ch](mailto:bruno.thien@psi.ch)

*Mrs. Beatrice Gschwend* (secretariate): [beatrice.gschwend@psi.ch](mailto:beatrice.gschwend@psi.ch)

Organized by  
Paul Scherrer Institut  
5232 Villigen PSI  
Switzerland

## Objectives

SKIN is an acronym for the Collaborative Project focused on studies of slow processes in close-to-equilibrium conditions that can influence mobility of radionuclides in water/solid systems of relevance to radioactive waste repository sites. This Workshop is an opportunity for presentation and discussion of scientific and technical project results obtained to date, as well as their dissemination and future planning on all topics related to SKIN, both for project collaborators and for a broader community.

## General Information

The program consists of sessions aimed at communicating research task results and needs from different work packages, plus an invited lecture. After the Workshop, short meetings of SKIN General Assembly, End-User Group, and Executive Committee will commence.

## Optional training event

is scheduled for the following day (Friday, November 23<sup>th</sup>) at the same location. The aim is to learn how to model (meta)stable aqueous - solid solution systems with account for trace element uptake using the new version 3 of the GEM-Selektor geochemical modeling code. The training is open also for the participants external to the SKIN Project. Please, bring your own laptop with you.

## Costs

Participation fee for the **Workshop**: 200 EUR, including:

- Lunch and Coffee breaks
- Workshop Dinner
- Accommodation overnight (check-in: November 21<sup>th</sup> 2012), breakfast included

Additional participation fee for the **optional training**: 120 EUR, including:

- Lunch and Coffee breaks
- Accommodation overnight (November 22<sup>th</sup> 2012), breakfast included

Participants wishing to stay longer (before or after the event) must arrange this on their own with Schlosshotel Böttstein (<http://www.schlossboettstein.ch>)

## Wednesday, November 21<sup>th</sup>

**14:00-14:30 Welcome and Introduction**

**14:30-16:00 WP2: Experimental Programme 1**

Study of solid-solution formation for selected host solids (carbonates, sulfates, silicates, cements) and radionuclides of interest in the near/far field of a radioactive waste repository

**16:00-16:30 *Coffee break***

**16:30-18:00 WP3: Experimental Programme 2**

Assessment of the kinetics of dissolution of tetravalent oxides under quasi-equilibrium conditions, and the impact of major factors on the rate of retention and release of radionuclides

***Workshop Dinner***: Böttstein Castle, from 19:30

## Thursday, November 22<sup>th</sup>

**08:30-10:00 WP4: Modeling and Theory**

Development of a new partial equilibrium approach to geochemical modelling of the slow uptake of radionuclides in host solid solutions, applied to the experimental and literature data

**10:00-10:30 *Coffee break***

**10:30-11:15 Invited lecture**: Prof. B. Fritz, University of Strasbourg

Geochemical modelling of nucleation and growth of mineral particles in water-rock interaction processes: the code Nanokin

**11:15-12:00 WP5: Synthesis and Safety Assessment**:

Overall synthesis of the project results together with previous studies and its impact on the uncertainties for safety assessment

**12:00-12:30 WP6: Dissemination activities**

***Lunch***

***End of the Workshop***

**14:00-14:30 SKIN Project General Assembly**

**14:30-15:30 End-user Group Meeting**

**15:30-16:30 Executive Committee Meeting**

## Friday, November 23<sup>th</sup>

**09:00-16:00 Optional Training** in thermodynamic modelling of trace element uptake using the GEM-Selektor v.3 code package (<http://gems.web.psi.ch/>)