

Participants: Viktor Boutellier (PSI), Roland Brütsch (PSI), Stefano Corradetti (INFN), Pierre Delahaye (GANIL), Said Essabaa (IPNO), Hanna Frånberg-Delahaye (GANIL), Alexander Gottberg (CERN), Daniel Grolimund (from 10:00 to 11:30)(PSI), Ines Günther-Leopold (PSI), Christophe Lau (IPNO), Gianfranco Prete (INFN), Joao Pedro Ramos (CERN), Thierry Stora (CERN), Marco Streit (PSI)

10:00 am: start

*Thierry Stora: JRA 2 "ActILab"*

- ActILab program, milestones, deliverables, tasks, leads, person months per participating institute
- Report was send to 3<sup>rd</sup> PCC
- Next steering committee meeting in May-June 2012 at INFN

CERN hires PostDoc (Alexander Gottberg) for ActILab in 2012/2013 for approx. 13 month. HD online tests were performed outside of ActILab framework, the data analysis is included, results should be published soon

*Hanna Frånberg-Delahaye: Contribution GANIL*

- GANIL will participate in task 4: Online tests of actinide targets, subtasks 1+2
- Purchase of portable GENIE 2000 system foreseen
- 8 month of PostDoc for data analysis (not yet chosen)
- People participating to ActILab in GANIL are: Hanna Frånberg-Delahaye, Pierre Delahaye, Marie-Genevieve Saint Laurent, PostDocX

Progress should be made on the publication of the HD-UC results even before the dedicated PostDoc for data analysis will be hired.

*Stefano Coradetti: Contribution INFN*

- Activity within ActILab will start in September 2012, before: preparation work
- One active lab in Padova University for UC<sub>x</sub> production existing: license limited to 30g of UO<sub>2</sub> (due to new restrictive legal regulations)
- Investigation of UC<sub>x</sub> density vs. pressing pressure ongoing, 6g/cm<sup>3</sup> UC<sub>x</sub> density are planed
- LNL lab will be operational in September 2012, equipped with glove box, furnace from Padova lab. Fume hood and work station to be purchased. Authorization ongoing, fire authorities asking for minor modifications, license for 300g UO<sub>2</sub> foreseen.

Request for PostDoc ongoing, Stefano Coradetti is planning to apply.

Radioactive ion beam tests on 3g/cm<sup>3</sup> UC<sub>x</sub> pellets done in October 2011 in Oak Ridge.

Two publications submitted about ongoing work on UC<sub>x</sub>.

*Christophe Lau: Contribution IPNO*

- The protocol for pellet production has been optimized
- A variety of different UC<sub>x</sub> samples have been prepared using different stoichiometry of varying starting materials resulting in a well tunable effective phase distribution.
- XRD, hydrostatic weighing, helium pycnometry, Hg porosimetry, BET, SEM available and in regular use, partly in house, partly within a collaboration with Université de Rennes
- Some irradiation tests had to be postponed to 1<sup>st</sup> semester 2012 because of administrative issues within safety approval

Minutes by Alexander Gottberg

- More systematic investigations of the influence of heating cycles are foreseen

For online tests within target R&D a certain capacity is reserved at ALTO, which doesn't need written proposals but only need to be presented to the committee.

*Alexander Gottberg: Contribution CERN*

- Recent online tests performed of a nanostructured CaO target material at ISOLDE have emphasized the importance of well defined structures in the sub micro meter regime for isotope release
- Results of online tests on high density UC were presented at ARIS 2011
- A planetary mill and a laser diffraction particle size measurement will be set up in the hot lab within the next months aiming for UC<sub>x</sub> production of sub micrometer grain size
- collaboration with the CERN material's laboratory is established (SEM, EDX, XRD)
- The shipping of an ISOLDE irradiated UC<sub>x</sub> target unit to PSI is being prepared for PIE using the microXAS beamline of SLS
- MicroXAS experiments have been successfully performed on the HD-UC material for proofing the value of this method
- A Letter of Intent has been transmitted to the INTC in October 2011.

The beamtime at SLS is granted for the first semester 2012

The hot cell availability at PSI sample preparation is very unlikely before the end of 2012.

A full proposal to the INTC has to be submitted before January 2012.

*12:45 pm: lunch break*

*Ines Günther-Leopold: Contribution PSI*

- Participation in task 3
- Transport from CERN to PSI has to be organized
- The use of a hot cell or a shielded fume hood can be organized after activities / dose rates are provided for the particular target unit from CERN

*Marco Streit: Research Activities at PSI / NES*

Discussion:

- A video conference in January will be held to discuss which material will be chosen for first online tests.
- A closer interaction between IPNO and CERN for material developments / tests should be pursued
- Publication on results of high-density UC tests should be done until mid 2012.
- Issues for shipment and dismantling of an ISOLDE UC<sub>x</sub> target at PSI should be solved soon.
- A test shipment from CERN to IPNO should be organized in order to evaluate the feasibility.
- An ActILab report has to be issued from each participating institute by March 2012.
- The next ActILab Steering Committee Meeting shall be held after the EURORIB conference May 25, 2012 in Padova.

*Finish 15:30 pm*

All presentations will soon be made available on INDICO.

Minutes by Alexander Gottberg