



**The Union for Compact Accelerator-driven
Neutron Sources
UCANS-III
July 31st to 3rd August,
Bilbao, Spain**

February 14, 2012

Call for papers

Although the field of neutron scattering has been flourishing for many decades now, advances in science and technology in this field have been dominated by a fruitful combination of major international facilities (based on reactors as at the ILL, HBIR, NCNR, JRR or large accelerators such as at IPNS, ISIS, SNS and JSNS) supported by networks of smaller research reactor facilities (e.g. those at Berlin, Vienna, Budapest, Missouri and many others). Recent advances in accelerator technology and neutronic design have made possible the construction of small-scale accelerator-driven neutron facilities that will be able to play a significant role in future advancements in neutron technology and science.

This opens up new opportunities for organizations to enter the field of neutron physics with modest investments and without the proliferation and safety concerns associated with building a new research reactor. Such facilities can be used in fields as diverse as materials science, nuclear physics, medical physics, engineering, and cultural heritage. A satellite meeting to the ICANS-XIX Meeting (March 2010, Grindelwald, Switzerland) offered an opportune occasion to consolidate an alliance among institutions interested in constructing and operating such facilities. At this meeting participants unanimously acceded to the establishment of the

Union for Compact Accelerator-driven Neutron Sources (UCANS). The eight initial members?those in attendance at this initial meeting were: from the USA, Argonne National Lab (ANL) and Indiana University, from Japan, the High Energy Accelerator Research Organization (KEK), Hokkaido University, Kyoto University and RIKEN, from China, Peking University and Tsinghua University, with additional potential members from elsewhere. Jack Carpenter of ANL serves as the initial spokesperson of UCANS. The participants of this new collaboration are united in their firm believe that UCANS is complementary to ICANS membership in both collaborations is encouraged.

The commissioning of the facilities in Indiana (LENS) proved the technical viability and the scientific importance of medium intensity sources based on accelerators. The impact of the scientific work performed at LENS in the area of moderators and the growing interest of the international scientific community in these advances are an evidence of the potential of this kind of facilities.

After two successful meetings, the next UCANS event will take place at the Accelerator Site in Bilbao, in summer 2012.

UCANS history

The first meeting was held at Tsinghua University in Beijing, August 15-18, 2010, and involved 80 participants from 13 institutions.

The second meeting (UCANS-II) was held at Indiana University in Bloomington, Indiana, USA, July 5-8, 2011.

The third meeting (UCANS-III) will be held at ESS-BILBAO in Bilbao, País Vasco, Spain, July 31th to 3th August,

Topics

- Accelerator & Beam optics
- Target engineering & heat removal
- Moderator neutronics
- Optic devices & detectors
- Innovative instrumentation
- Emerging science and novel applications relevant to long-pulse and/or medium flux sources.

Important deadlines

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| Abstract Submission | June 1 th , 2012 |
| Author acceptance | June 15 th, 2012 |
| Early Registration & hotel reservation | June 1 th , 2012 |
| Submission of full paper | September 30 th , 2012 |
| Revision communicated to authors | November 30 th , 2012 |
| Final papers due | January 30 th, 2013 |

Registration fees

- Early registration: 325 €(before June 1, 2011)
- Late registration: 375 €(after June 1, 2011)

Travel grants

Some travel grants are expected to be available for students, post-doctoral researchers, and young faculty. To apply for a travel grant please email the Conference Coordinator (fernando.sordo@essbilbao.org) to request an application form.

Cooperating Institutions

