





Eleventh International Topical Meeting on Nuclear Applications of Accelerators



5 - 8 August 2013, Bruges, Belgium

ANNOUNCEMENT AND CALL FOR PAPERS

1. INTRODUCTION

AccApp'13 is the eleventh in a series of international topical meetings organized by SCK•CEN in cooperation with the Accelerator Applications Division of the American Nuclear Society.

The purpose of the AccApp meetings is to present a world stage for discussing nuclear applications of particle accelerators. Meetings are focused on the production and utilization of accelerator-produced neutrons and other particles for scientific and industrial purposes; production or destruction of radionuclides significant for energy, medicine, defense, or other endeavors; homeland security applications; imaging, diagnostics and therapeutic treatment.

One of the great strengths of the AccApp set of conferences is providing an international forum for disseminating knowledge on the applications of accelerators.

With the transition of the SNS to an operational facility, the commissioning of the Japan Particle Accelerator Research Complex (JPARC), and the design update by the European Spallation Source (ESS), investment in accelerator complexes for condensed matter research is at an all-time high. The continued development of the Accelerator Driven System in the form of the Multi-purpose hYbrid Research Reactor for High-tech Applications (MYRRHA) in Europe and significant projects in India and China show international support for using accelerators to address nuclear fuel cycle issues. With this background, the AccApp conference series provides a great opportunity for international experts to discuss the latest research and form collaborations to attack common issues.

Applications of particle accelerators cover a number of areas, from strategic and applied research, safety and security, environmental applications, materials research and analytical sciences, to radioisotope production and radiation processing. Accelerator based techniques and pulsed neutron sources are expected to lead to new initiatives in materials research of relevance for both the nuclear and non-nuclear fields. Material science studies with the use of accelerators, neutron beams and other nuclear analytical methods are relevant to the development of advanced reactors, nuclear fuel cycle needs and fusion research. In this regard, a better understanding of the irradiation effects in materials for energy and non-energy applications is needed, and is reflected in accelerator techniques for modification and analysis of materials for nuclear technologies. Accelerator applications for innovative nuclear systems aiming at radwaste transmutation (e.g., accelerator driven systems) are being pursued in many countries.

2. ORGANIZING COMMITTEE

General Chair

General Co-Chair

Technical Program Co-chair

Technical Program Co-chair

Technical Program Co-chair

Technical Program Co-chair

Finance Chair

Hamid Aït Abderrahim – SCK•CEN

Phil Cole – Idaho State University

Dirk Vandeplassche – SCK•CEN

Stuart Henderson - FNAL

Christian Legrain – SCK•CEN

Assitant Mgr of AccApp'2013 Annita Joos − SCK•CEN

Congress Handling Els Vertriest - Medicongress

Registration & Accommodation Veerle Vande Steene - Medicongress

3. TOPIC ORGANIZERS (TBC for some members)

Alexander Ryazanov, Kurchatov Institute - CERN

Andrew Hutton, Jefferson Lab (JLab)

Bob Hamm (R&M Technical Enterprises, Inc. -R&M Tech)

David Koltick (Purdue) Concetta Fazio (KIT)

François Plewinski (ESS)

Giuseppe Viesti (Università degli Studi di Padova)

Jean-Michel Lagniel (Spiral 2)

John Galambos (SNS)

Maud Baylac (IN2P3-LPSC)

Michel Abs (IBA)

Peter Schillebeeckx (IRMM)

Rod Gerig (ANL)

Stéphane Lucas (FUNDP)

Yujiro Ikeda (J-Parc)

Yuri Titarenko (ITEP)

Xia Haihong, State Nuclear Power Research Institute (CIAE)

4. MAIN TOPICS

- Accelerator Facilities
- Accelerator Design & Technology
 - o Codes
 - Models
 - Reliability analyses
 - Prototyping
- Material Research with Accelerators
- Accelerators in Life Sciences
 - Hadrontherapy
 - Radiobiology
 - o BNCT
 - Medical Isotope Production
 - o Biology with synchrotron radiation
 - o Environmental
- Accelerators for ADS and ADS experiments
- High Power Proton Accelerators and High Power Spallation Targets
 - Incl. window and beam dump technologies
- Accelerators for Safety and Security
- Industrial Applications

- o Electron irradiation
- X-ray conversion
- o Sterilization
- o Wear analyses
- Nuclear Data

5. PROGRAMME STRUCTURE

The conference programme will consist of oral plenary sessions, oral parallel sessions and an interactive poster session.

6. PARTICIPATION

The conference is dedicated to the worldwide accelerator and nuclear science communities, including operators, designers, users and technologists. Attendance by young professionals is strongly encouraged. Representation from the industrial sector will be sought.

7. KEY DATES OF THE CONFERENCE

Call for papers, Abstract submission Notification Authors Final Program Deadline 31 January 2013 15 March 2013 15 April 2013

www.AccApp13.org