

ICARO2010

Intensive Course on Accelerator and Reactor Operation

De 1 a 13 de Março de 2010 vai ter lugar na Sicília, Itália, um curso intensivo sobre “Aceleradores e Reactores” organizado pela rede de universidades europeias CHERNE (Cooperation for Higher Education on Radiological and Nuclear Engineering) à qual a Universidade de Coimbra pertence. Trata-se de um curso essencialmente prático que se destina a alunos do mestrado em Engenharia Física ou Física. Estudantes de doutoramento podem igualmente participar.

O curso é parcialmente financiado pela Comissão Europeia. Cada aluno é reembolsado de 75% das despesas de viagem (com excepção de táxis). A organização disponibiliza dormida em quartos duplos a título gratuito.

Os interessados deverão enviar carta de manifestação de interesse e CV (incluindo as classificações por disciplina obtidas até ao momento) para isabel@lipc.fis.uc.pt até ao dia 2 de Novembro de 2009.

Mais informações sobre o curso podem ser encontradas no texto em anexo.

Intensive Course on Accelerator and Reactor Operation

1-13 March 2010

Total number of students: 26

Participating Institutions:

ITN (PT), University of Coimbra (PT), Politecnico de Milano (IT), Aachen University of Applied Sciences (DE), Haute Ecole Paul-Henri Spaak (BE), XIOS - Technical University Limburg (BE), Polytechnical University of Valencia (ES), Università degli Studi di Catania (IT), Alma Mater Studiorum Università di Bologna (IT), Universitat Politècnica de Catalunya (ES), Czech Technical University in Prague (CZ)

SUMMARY

Nuclear techniques are essential in energy production, industry, research, and medicine. The statement of the European Commission of sustainable development clearly shows the importance to preserve and enhance competence in the field of nuclear technology. The main objective of this practical course is to give students the opportunity to practically study the application of nuclear techniques in the environment of an actual working situation, with an access to large equipments (reactor and accelerator) which are not available in most of the partner institutions. The beneficiaries are students in nuclear and radiological engineering or closely related fields of the master level. PhD students may also be admitted. They will be selected at their home institution according to their willingness to participate, to their academic results, and to their knowledge of the teaching language (English).

The main activities are practical exercises using the facilities of the research at the Università degli Studi di Palermo and at LNS - Laboratorio Nazionale del Sud in Catania. There will be introductory lectures and round table discussions too. Moreover, the participants will learn to include safety aspects and quality culture of applying ionizing radiation in their future work, and will incorporate a consciousness on radiation hygiene. The practical exercises will be organized in international subgroups, allowing

the participants to communicate and interact with students of different countries and cultural background.

The course will be organized in Sicilia, Italy, the first week at the Università degli Studi di Palermo, Dipartimento di Ingegneria Nucleare, where a reactor is operated for research, education and training; the second week will be developed at the LNS - Laboratorio Nazionale del Sud (INFN - Istituto Nazionale di Fisica Nucleare) under the organization of Università degli Studi di Catania. At LNS there are several accelerators where practical exercises can be performed. The Università degli Studi di Palermo and the Università degli Studi di Catania through the LNS operate rather unique infrastructures that they make available to the community, namely the Research Reactor AGN 201 "Costanza", a superconductive cyclotron and a Tandem accelerator.