

POSITION PROFILE

□ **Contract type**

15 month fixed term contract

□ **Context**

The position is funded by the European Integrated Infrastructure Initiative: EFNUDAT “European Facilities for Nuclear DATA measurements” as part of the EURATOM FP6 programme for radioactive nuclear waste management.

EFNUDAT is a consortium of ten European experimental facilities for nuclear data measurements. The objective of this consortium is to provide a convenient platform to integrate all scientific efforts needed for high-quality nuclear data measurements in support of waste transmutation studies as well as design studies for specific GEN IV systems that include an objective of producing less waste.

The position is proposed in the JRA2 activity, one of the various scientific and technical activities of the consortium.

□ **JRA2 objective**

The Joint Research Activity 2 focuses on improving the characterisation of neutron beam facilities participating in the Infrastructure Initiative EFNUDAT. This will be attained by a careful comparison of the different measurement capabilities. This inter comparison will be supported by improvements of the facility modelling capabilities.

□ **Candidate task**

The applicant will work in the CENBG group: ACEN.

He will contribute to simulations using Monte Carlo radiation transport codes (MCNP, MCNPX, GEANT). The focus will be on the development of special techniques for the simulation of complex geometries and neutron detectors used for the characterisation of neutron beam.

□ **Expertise**

The position is proposed to a nuclear physicist. The candidate is supposed to have a good knowledge of the Monte Carlo codes used to describe particle transport and interaction of ionising radiation with matter, to be familiar with C++ language and LINUX environment..

A knowledge of detector instrumentation will be appreciated

Knowledge of English language is requested.

□ **Contact**

Send Cover Letter to

Gérard BARREAU

CENBG

Le Haut Vigneau

Route du solarium

33175 Gradignan

barreau@cenbg.in2p3.fr

tel : + 33557120885