

JRA3:

Nuclear target upgrade for improved nuclear data measurements

This JRA concentrates on two fields:

1. neutron radiators (the primary target for the accelerator beam)
2. the (secondary) targets to be irradiated by the neutrons generated in the radiator.

Participant number	5	1	2	3	4	6			
Participant short name	FZD	CNRS/ IN2P3	JRC	IKI	FZK	PTB			Total
Total Person-months	20	12	12	5	10	5			64

1. n-radiators

FZD

The liquid lead neutron radiator was installed at the electron linac ELBE, started operation during the last months and produced first data (talk Junghans). An ionisation chamber with ^{235}U was delivered by PTB Braunschweig within JRA2, it was used for the neutron intensity measurement.

CNRS

The neutron source at CENBG is presently being improved by installing additional radiation shielding.

JRC

At the IRMM it is discussed to improve the neutron yield by changing the radiator according to MC-simulations by Flaska (thesis 2007).

FZK

The neutron source LOLITA at FZ Karlsruhe will be decommissioned in 2008. As presented in detail on Wed., the new installation FRANZ is well under way.

PTB+IRMM

Successful measurements for the preparation of a new n-source will be presented (talk).

2. Targets

CNRS/IPNO

A project of creation of a hot laboratory dedicated to thin radioactive samples is under construction at CNRS/IN2P3/IPNO, as presented on Wed.

IKI

Concerning the targets for neutron induced cross section measurements the materials already available at the institutions belonging to EFNUDAT have been listed by T. Belgya in 2007 (talk on Fr.)

IRMM

New thin target support foils (talk)

Deliverables and Milestones

An annual report was delivered by JRA3 for the 1st year.

List of target material as compiled by T.Belgya (IKI) will be presented on Fr.

The Installation of Pb_{liq} -converter at ELBE and
on-site tests without and with electron beam were completed at FZD.

