

2010/1/22: Neutron Program Advisory Committee

Program ID: 2010S01

Title: "Studies on Dynamics in Condensed Matters by using the High Resolution Chopper Spectrometer "

Principal Investigator: Shinichi Itoh and Taku J. Sato

Decision: accepted (as a new proposal)

Beam allocation: Not yet fixed because the commissioning is still continuing.

Approval and suggestion(s) to IMSS: budget and resources:

Their proposal is reasonable.

Comments:

The purpose of this project is to study the dynamics in materials with high resolutions by utilizing neutrons in an energy range of about 0.1-1eV on the High Resolution Chopper Spectrometer (HRC) installed at BL12. For this purpose, the team proposes some experimental techniques: (a) high resolution experiments in a conventional energy-momentum space, (b) an access to the 1st Brillouin zone, and (c) a challenge to sub-eV neutron spectroscopy. These will be realized dependently on the improvement of the performance of HRC as well as the beam power.

The construction and commissioning stage is still continuing and some of important problems should be solved before the spectrometer is opened for users. In 2010A, some of the proposed topics will be done with the commissioning. The beam allocation in 2010B will be discussed until the end of June.

In this proposal, many scientific topics are included. The committee recommends the team to reconsider to decide priorities, because the number of topics is too many for the limited beam time. This point should be discussed in the next PAC meeting.