

**3.1.1 - The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented**

Response:

The CIs/OCC of HBNI are organizations with a long tradition of research in frontier areas of science and technology, particularly related to nuclear energy. All CIs/OCC have a strong component of research in addition to education and training. A significant fraction of students of HBNI are in fact, research scholars pursuing Ph.D and other research-based programs. Research is pursued with sophisticated instruments and complex experimental facilities set up in-house for specific research programs. Being at the forefront of research in the country as well as globally, the organizations under the umbrella of HBNI update their experimental facilities on a regular basis, based on the research needs. The research problems selected are all based on the mission of the individual CIs/OCC; however, since all funding is given by DAE, the broad contour of programs is also approved by DAE. Thus, the overall research promotion policy is decided by DAE. Within this envelope, the individual CIs/OCC articulate their research goals, consistent with their mission and strengths. Adequate funding is provided by DAE to all the institutions under its umbrella, and therefore, the institutions do not face constraints for upgrading the research facilities periodically. Such up gradation is done through capital projects, which enable both addition of new facilities, as well as refurbishing or updating existing facilities. For the promotion of research, an organizational incentive scheme is implemented, which encourages multidisciplinary mission-oriented research.

The core function of HBNI is to integrate the academic activities at the CIs and OCC under one framework, provide faculty opportunities for academic collaborations, and provide students opportunities to work on multidisciplinary problems and utilize the state-of-art research facilities available across the CIs/OCC. As a result of this policy, HBNI students are able to undertake research using sophisticated state-of-the art instruments, and unique facilities such as neutron beams at reactor, synchrotron radiation facility, high temperature loops, high performance computers, etc. HBNI also provides a strong mechanism for enhancing the quality of research and synergizing basic research strengths of some of the CIs/OCC with the technology development efforts at other CIs. For example, Ph.D programs can be co-guided by faculty from science and engineering disciplines, or faculty with specialization in different branches of science (eg. Maths and biology). The ordinances and guidelines of HBNI enable mobility of

students and faculty across the CIs/OCC, and empower students to choose guides, problems and facilities. The thesis evaluation schemes also ensure high standards in the research work as well as publications, adherence to high ethical standards and promotion of the spirit of inquiry among employee students.

The research promotion policy of HBNI has been framed to focus on its vision, mission and core values, and has been outlined in the policy document displayed on HBNI website. This document was approved by the Council of Management, the Apex body of HBNI chaired by Secretary, DAE.