All students under this scheme are absorbed in relevant DAE programmes after they complete the fellowship programme.

The recently established Homi Bhabha National Institute will nurture both research-education as well as research-technology linkages. Under the Fellowship Scheme, applicable here, a student would work on areas at the interface between research and technology under two guides covering research side as well as the technology side and would eventually be absorbed in a technology oriented institution. We are now working towards enhancing the student strength in all our R&D institutions.

I feel these initiatives would strengthen our self-reliance in pursuing new technologies. The challenge of meeting national energy requirements through new technologies of relevance to India is in my view a great opportunity to work on areas no one has worked before and thus scale up to global leadership. With large human resource available with us, I think this challenge is within our reach.

Sometimes, I wonder that the varnashram that has crept in very deep in our psyche has also crept in our scientific system. We must dismantle it because without working together spanning the entire RD3 chain, realisation of challenging technologies is not possible. The education system, the R&D system and the society or industry need to work together in a manner where a student right from the primary level all the way upto the professional career is put through our enjoyable experience of learning, exploring and contributing to our society. If we are able to do this, I am sure we can empower the nation through nuclear energy much more comprehensively than we have done so far.

Homi Bhabha National Institute

R.B. Grover
Director, Homi Bhabha National Institute

On June 4, 2005, Prime Minister Manmohan Singh visited Bhabha Atomic Research Centre and announced the approval of the government for setting up of Homi Bhabha National Institute (HBNI) under the aegis of DAE, with the status of a 'deemed to be university' under the UGC Act. This landmark announcement will help in accelerating the pace of basic research as well translation of basic research into technology development. HBNI will have the following as its Constituent Institutions (CIs).

R&D Centres

- 1. Bhabha Atomic Research Centre (BARC), Mumbai, Maharashtra
- Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Tamil Nadu
- 3. Centre for Advanced Research (CAT), Indore, Madhya Pradesh
- 4. Variable Energy Cyclotron Centre (VECC), Kolkata, West Bengal

Grant-in-aid Institutions

- 1. Saha Institute of Nuclear Physics (SINP), Kolkata, West Bengal
- 2. Institute of Plasma Research (IPR), Ahmedabad, Gujarat
- 3. Institute of Physics (IOP), Bhubaneshwar, Orissa
- 4. Harish-Chandra Research Institute (HRI), Allahabad, Uttar Pradesh
- Tata Memorial Centre (TMC), Mumbai, Maharashtra
- 6. Institute of Mathematical Science (IMSc), Chennai, Tamil Nadu

Tata Institute of Fundamental Research (TIFR), Mumbai is also a grant-in-aid institution of DAE. It is not included as a part of HBNI as it is a deemed university by itself.

Officers of the institute such as Director, Dean and others have been appointed. Authorities like council of management, academic council, boards of studies have also been constituted. All the officers of HBNI will hold office concurrently with their positions in the CIs and thus are adjunct appointments. Framework for initiating academic programmes is being evolved in a manner that aims at maintaining excellent academic standards and at the same time provides for flexibility implementation.

Right from its inception in 1954, the Department of Atomic Energy has laid strong emphasis on human resource development and this emphasis has been a very important contributor towards the success of the programmes pursued by the Department. A key element of the success achieved in the human resource development is the visionary initiative of Dr. Homi Bhabha who set up the prestigious Training School BARC in the year 1957, just within three years of setting up of the department. This has helped the department in pursuing basic research as well as technology development with equal rigour. Over the years, a robust institutional framework has been put in place. Today, apart from the industrial units, DAE runs 4 major research centres and 7 grant-in-aid institutions.

While in the research centers, the focus is more sharply on technology and product development, the grantin-aid institutions concentrate relatively more on basic research. In the process, the research centres and