

Homi Bhabha National Institute

INTRODUCTION

and

ANNUAL REPORT

2005-2006

Constituent Institutions

Bhabha Atomic Research Centre, Mumbai
Indira Gandhi Centre for Atomic Research, Kalpakkam
Raja Ramanna Centre for Advanced Technology, Indore
Variable Energy Cyclotron Centre, Kolkata
Saha Institute of Nuclear Physics, Kolkata
Institute for Plasma Research, Gandhinagar
Institute of Physics, Bhubaneswar
Harish-Chandra Research Institute, Allahabad
Tata Memorial Centre, Mumbai
Institute of Mathematical Science, Chennai

Regd. Office: Knowledge Management Group

Bhabha Atomic Research Centre

Central Complex, Mumbai-400085.

INTRODUCTION

Since its inception in 1954, The Department of Atomic Energy (DAE) has been 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 industrial units, DAE runs four major research centres and seven grant-in-aid institutions, which are:

R&D Centres

1. Bhabha Atomic Research Centre (BARC)
2. Indira Gandhi Centre for Atomic Research (IGCAR)
3. Raja Ramanna Centre for Advanced Technology (RRCAT), and
4. Variable Energy Cyclotron Centre (VECC)

Grant-in-aid Institutions

1. Tata Institute of Fundamental Research (TIFR)
2. Saha Institute of Nuclear Physics (SINP)
3. Institute for Plasma Research (IPR)
4. Institute of Physics (IOP)
5. Harish-Chandra Research Institute (HRI)
6. Tata Memorial Centre (TMC) and
7. Institute of Mathematical Science (IMSc)

While in the research centres the focus is more sharply on technology and product development, the grant-in-aid institutions concentrate relatively more on basic research. In the process, the research centres and the grant-in-aid institutions have together provided high calibre technologists as well as scientists to the Department but for which India's spectacular strides in the field of nuclear sciences and their applications would not have been possible. A key element of the success achieved in the manpower development is the visionary initiative of Dr. Homi Bhabha who set up the prestigious BARC *training school* in the year 1956. To meet the increasing demand of qualified manpower, in addition to the training school at Trombay, training schools have been set up at other places. The BARC training school has been running a remarkably successful Orientation Course for Engineering graduates and Science post-graduates (OCES). The grant-in-aid institutions, apart from carrying out research, have been running pre-doctoral and doctoral programmes, which have helped in

producing high quality scientific research personnel. It is in this respect of an in-house human resource development programme that the DAE has been unique.

The DAE has not only trained manpower for running its own programmes, it has also made significant contributions to the national scene. It has strengthened the research programmes at universities by providing grants for well defined projects. All grants are channelized through the Board of Research in Nuclear Sciences (BRNS), which has the distinction of being the first agency in the country for funding extra-mural research. In the recent years, funding through BRNS has been significantly stepped up and the Department is planning to further expand its activities.

Yet another visionary and uniquely DAE centered initiative is the institutional arrangement whereby advanced and major research facilities such as research reactors and accelerators of the Department are made available to the academic institutions. This is the strongest link, which the University Grants Commission (UGC) and the DAE have established and nurtured for over a decade. There is no parallel for such an arrangement in the country. This successful arrangement hitherto called the Inter-University Consortium for DAE facilities (IUC-DAEF), is being refashioned and expanded under a new MoU signed on December 10, 2003 and has been renamed as 'UGC-DAE Consortium for Scientific Research'.

Research Centres and grant-in-aid institutions of Department of Atomic Energy have also established and nurtured direct linkages with several universities. Students from universities come to the research centres of the Department for training and for their thesis work in significant numbers. BARC also conducts year-long training courses for equipping science post-graduates to work as medical physicists and radiological safety officers, doctors to practice nuclear medicine and science graduates to work as technologists in nuclear medicine centres.

Along with massive in-house basic research and technology development programme as well as support to such programmes in academic institutions and other national laboratories, the Department has thus been exceptional in having variously contributed to human resource development. Self-reliance of our atomic energy programme and world-class excellence realized in commercial performance of our indigenously built nuclear plants testify to the soundness of the approach. However, the demands for self-reliance on the DAE

have been rendered even more arduous to fulfil because the Department is the target for technology control regimes imposed by some of the technologically advanced nations. In this scenario, the country and, in particular, the DAE have to necessarily take innovative steps to consolidate the gains achieved so far and take fresh initiatives for enhancing the capabilities to meet the imminent and future challenges.

It has, therefore, become imperative that DAE conceives of novel ways through which in-depth capabilities in nuclear science and nuclear engineering are unabatedly nurtured within our institutions. It is in this context that the idea of establishing a University under the DAE has been engaging the attention of scientists and engineers for quite some time. This issue was discussed in various fora including in the meeting of the DAE Science Research Council held on 26 June 2003 in Mumbai, when Dr. Raja Ramanna was in the Chair. After examining all aspects, the Council recommended that the DAE may establish the Homi Bhabha National Institute (HBNI) having the status of a deemed university after getting permission from the appropriate authorities such as the Ministry of Human Resource Development and University Grants Commission.

This issue was further discussed in the meeting of the Chairman's Advisory Committee on 15 February 2003, wherein it was decided that the Department could proceed further in the setting up of the HBNI. To advise the Department on all aspects of the setting up of the HBNI, a Steering Committee with the following composition was set up by the Department in April 2003 (Annex-1).

1) Prof. P. Rama Rao	Chairman
Distinguished Professor	
2) Prof. S.P. Sukhatme, Chairman, AERB	Member
3) Prof. S. Bhattacharya, Director, TIFR	Member
4) Dr. Baldev Raj, Director, MCRG, IGCAR, Kalpakkam	Member
5) Dr. V.C. Sahni, Director, Physics Group, BARC.	Member
6) Dr. R.B. Grover, Director, SPG, DAE	Member Secretary

The Committee started work on drafting a proposal for submission to the University Grants Commission and sought the opinion of all possible constituent institutions. At this point of time, TIFR had already become a deemed university. All the remaining grant-in-aid institutions and R&D Centres concurred with the idea of setting up of the HBNI and therefore

a proposal was submitted to the Atomic Energy Commission (AEC) for obtaining in-principle approval which was obtained in July 2003. All documentation for submission to the MHRD and the UGC was completed and submitted to Chairman, AEC on 29 December 2003 (Annex-2). The proposal was finally submitted to the MHRD and UGC by Secretary, DAE on January 14, 2004 (Annex 3).

Before examining the proposal further, the UGC desired that the HBNI be registered as a Society. To comply with this, a Council of Management was constituted and a Director and a Dean for the HBNI were appointed (Annex 4) and the necessary papers were submitted to the Office of the Registrar of Societies in Mumbai. The HBNI was registered as a Society under the Societies Registration Act 1860 on November 18, 2004 (Annex 6).

The UGC appointed a Screening Committee, to examine all applications received by them for getting the status of a Deemed University. A team from the HBNI made a presentation in New Delhi on 22.11.2004 to the Screening Committee.

After getting encouraging response from the Screening Committee, it was decided to proceed further with the development of the organisational structure for the HBNI. The first meeting of the Academic Council was held on January 7, 2005 wherein detailed deliberations were held with regard to programmes to be pursued by the HBNI, presentations to be made by the HBNI to the visiting Expert Committee appointed by the UGC and other operational details of the programmes to be taken up by the HBNI were discussed. The various Board of Studies were also constituted during this meeting.

An Expert Committee chaired by Prof. S.K. Joshi was appointed by the UGC and visited Trombay on March 28, 2005 to interact with the team from the HBNI and day-long deliberations were held. The team from the HBNI was Chaired by Dr. Anil Kakodkar, Chairman, Council of Management, HBNI and Secretary, DAE. The Expert team expressed satisfaction with the details of the HBNI presented to them and advised that HBNI could consider constituting an Advisory Committee to be Chaired by Secretary, DAE and also consider setting up a Board of Strategic Studies under the HBNI.

Based on the report of the Expert Committee, University Grants Commission advised the Government to declare the HBNI, Mumbai as a Deemed-to-be University under the UGC Act. The recommendation was accepted by the Government and an announcement in this

regard was made by the Prime Minister during his visit to BARC on June 4, 2005. The Prime Minister said, “I am happy to announce today that the Department’s proposal to set up Dr. Homi Bhabha National Institute has been approved. This will bring together ten premier institutions all over the country under a single research-driven framework. This will help ensure that our scientists and our scientific establishments remain at the forefront of the pursuit of excellence, comparable with the best global standards.” The notification issued by the Government is placed as Annex 6.

The activities of HBNI in the year 2005-06 after its recognition as a Deemed to be University are summarized in this report.

Annual Report

2005-2006

The year under report was utilized for making preparations for the launch of HBNI. The main activities to that end included formulating Ordinances, putting together coordination plans, recognition of faculty, and review of the selection procedures for admission to various programmes. Also, following the advice of the expert committee of the UGC, an Advisory Committee (Annex-7) was constituted on June 27, 2005 with a view to bring together all the stake holders for in-depth discussions.

The Boards of Studies in Chemical, Engineering, Life, Mathematical and Physical Sciences were constituted to monitor the academic programmes, to assess suitability of individuals for bestowing academic title and other purposes outlined in the Rules.

The selection procedures at the CIs were found to be adequately rigorous. It was, however, noted that there is no national level screening examination for admission to post graduate programmes in Science disciplines at par with the Graduate Aptitude Test for Engineers (GATE). Joint Entrance Screening Test being the only national level examination for screening candidates for admission to post graduate programmes in Physics discipline, some CIs had acquired the membership of JEST. HBNI decided to seek and subsequently acquired the membership of JEST for all of its CIs.

The activities were guided by the deliberations in the meetings of various bodies of HBNI. Composition of the bodies is given in Annex-8 (Council of Management and Academic Council) and Annex-9 (Composition of Board of Studies).

A brief summary of important decisions in the meetings follows.

A. The first meeting of the Advisory Committee

August 24, 2005

1. It discussed the notification issued by Ministry of Human Resource Development recognizing HBNI as a Deemed to be University. It advised that,
 - a. as required by the notification, the Constituent Institutions (CIs) of HBNI should take steps to de-affiliate/de-recognize/de-link themselves from the universities as the case may be as per a timetable to be evolved by the Academic Council (AC);
 - b. steps should be taken to amend the MoA and Rules of HBNI as suggested by the notification.
2. It suggested names of eminent scientists, engineers and academicians from outside DAE for the consideration of Chairman, Council of Management as his nominees in the Council of Management and the Academic Council as per the Rules of HBNI.
3. It considered the draft ordinances of HBNI and proposed guidelines for their revision.
4. It advised that the students in the CIs of HBNI already registered for PhD degree programmes of other universities would continue working with the same teachers and universities till the completion of their degree.
5. It advised that admission to PhD programme of HBNI be through All India level screening examinations followed by interview.
6. It recommended that M.Tech./M.Phil. degrees of HBNI be named as:
M.Tech. in {name of engineering discipline} with specialization in Nuclear Engineering.
M.Phil. in {Name of Science discipline} with specialization in Nuclear ScienceIt advised guidelines for recognition of individuals as PhD supervisors.
8. It advised that HBNI could enter into a MoU with a university or reputed institute for academic collaboration.
9. It was agreed that the monetary incentives as offered by the Department of Science and Technology (DST) for teaching and organizing short duration schools may be offered by HBNI for the short duration schools organized by it.

B. The second meeting of the Academic Council

September 23, 2005

1. On the recommendations of the Conveners of respective Boards of Studies, the Council accepted the syllabi of the BARC training school in Physics, Chemistry, Biosciences and of all Engineering disciplines as suitable for the award of Post Graduate Diploma of HBNI and worthy of course requirements of M.Tech./M.Phil.
2. The Council agreed to adopt as the programmes of HBNI the following ongoing programmes at BARC, IoP and HRI in affiliation with local universities.
 - a. The ongoing Mumbai University recognized Ph.D. and Diploma programmes at BARC.
 - b. The ongoing Utkal University, Behrampur University and Sambalpur University recognized Ph.D. programme at IOP.
 - c. The ongoing Allahabad University recognized Ph.D. programme and the Indira Gandhi National Open University (IGNOU) recognized integrated M.Sc.-Ph.D. programme at HRI
3. Rules were framed for recognizing scientists and engineers of Cis as faculty.

C. The first meeting of the CoM

November 18, 2005

1. Amendments to MoA and Rules of HBNI were carried based on the changes suggested by the MHRD notification and accepted by the Advisory Committee.
2. Procedure to be followed for disaffiliation of the Constituent Institutions from the Universities was laid down.
3. It was decided that academic programmes of HBNI should be launched from the academic year 2006.
4. It was decided that the coordinator of the academic programmes at a CI would be designated Dean Academic (name of the CI).

Annex-1

**D.O. letter No. DAE/DSPG/E-3.6/2003/94 dated 21st April 2003 from
Chairman, AEC constituting a Steering Committee to advise the
Department on all aspects of setting up of HBNI.**



सत्यमेव जयते
भारत सरकार

Government of India

अध्यक्ष, परमाणु ऊर्जा आयोग

व

सचिव, परमाणु ऊर्जा विभाग

Chairman, Atomic Energy Commission

&

Secretary, Department of Atomic Energy

डॉ. अनिल काकोडकर

Dr. Anil Kakodkar

D.O.No. DAE/DSPG/E-3.6/2003/44

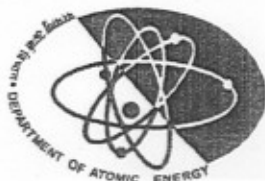
April 21, 2003

Dear

In DAE, we have perhaps, the unique advantage of strong emphasis both on research as well as on technology development in the formulation of our programmes. While the relative emphasis may vary between the institutions, between groups in an institution and even between individuals in a group, it is clear that the global leadership in technology is realisable only through strong linkages between new knowledge out of basic research and new innovative technology development driven to meet the national objectives. It is also reasonable to expect, given the successes achieved so far, that we should now aim at charting new technology routes best suited to meet our needs regardless of what others might choose to do. It is felt in this context, that a Ph.D. programme run primarily at the autonomous institutions of DAE, where the emphasis on basic research is high, to train scientists in areas with significant technological ramifications of interest to DAE R&D centres, would serve the twin objective of getting students motivated for Ph.D level research on the basis of assured career in R&D centres and strengthening of the research technology linkage within DAE.

At present, for the award of degrees, research centers and autonomous units of DAE are affiliated to various universities. To formulate a uniform scheme for building linkages between research centers and autonomous units is well nigh impossible. To make a composite scheme, it is necessary to create a homogeneous structure to manage all the academic programmes. To achieve these objectives, it is proposed to set up a new institution called Homi Bhabha National Institute (HBNI) with deemed to be university status. HBNI will be a virtual institution drawing upon the resources of DAE institutions and external expertise. It will provide a framework for building linkages between DAE research centers and DAE grant-in-aid institutions. The BARC Training School and its affiliates have been running a very successful Orientation Course for Engineering Graduates and Science Post Graduates (OCES). HBNI will also provide a framework to convert BARC training school programmes into Post Graduate Degree/ Diploma programme.

For setting up of the Homi Bhabha National Institute, it is necessary to prepare documentation to guide its functioning and also for submission to UGC/MHRD to get it



अणुशक्तिभवन, छत्रपति शिवाजी महाराज मार्ग, मुंबई - 400 001, भारत

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E-mail: chmn@dae.gov.in

recognised with a deemed University status. To advise the Department on all aspects of setting up of HBNI, it is proposed to set up the following Steering Committee:


- | | | |
|----|---|------------------|
| 1) | Prof. P. Rama Rao,
Distinguished Professor,
International Advance Research Centre (ARCI)
for Powder Metallurgy & New Minerals, Hyderabad | Chairman |
| 2) | Prof. S.P. Sukhatme, Chairman, AERB | Member |
| 3) | Prof. S. Bhattacharya, Director, TIFR | Member |
| 4) | Dr. Baldev Raj, Director, MCRG, IGCAR, Kalpakkam | Member |
| 5) | Dr. V.C. Sahni, Director, Physics Group, BARC | Member |
| 6) | Dr R.B. Grover, Director, SPG, DAE | Member Secretary |

I would be grateful for your help and involvement in the above Committee. The Committee may decide its own modalities for carrying out its work including interaction with all stakeholders, formation of task-forces for detailing specific issues etc. It would be nice if the required documentation for submission to UGC is completed by around July 2003 and the academic activities begin by August 2004 to coincide with completion of 50 years of DAE.

I look forward to your kind help, involvement and support to this important activity.

With warm regards,

Yours sincerely


(Aril Kakodkar)

Chairman & Members of the Steering Committee

Copy to :

Director, BARC
Director, IGCAR
Director, VECC
Director, CAT
Director, TIFR
Director, IOP
Director, SINP
Director, IPR
Director, HRI
Director, IMS

c.c. to : JS/ R&D

Annex-2

**Letter No.DAE/DSPG/E-3.6/2003/232 dated 29th December 2003 from
Director, SPG to Chairman, AEC forwarding documentation to be
submitted to MHRD for setting up of HBNI.**

Government of India
Department of Atomic Energy
Strategic Planning Group

R.B Grover
Director

Anushakti Bhavan
CSM Marg
Mumbai-400 001.

No.DAE/DSPG/E-3.6/2003/ 32

December 29, 2003

Dear Sir,

In April 2003, a Steering Committee was constituted to advise the Department on all aspects of setting up of the Homi Bhabha National Institute (HBNI) with a 'deemed university' status, with the following constitution.

Prof. P. Rama Rao	-	Chairman
Prof. S.P. Sukhatme	-	Member
Prof. S. Bhattacharya	-	Member
Dr. Baldev Raj	-	Member
Dr. V.C. Sahni	-	Member
Dr. R.B. Grover	-	Member-Secretary

Contact with the University Grants Commission (UGC) was established and their guidelines with regard to setting up of an Institute having the status of a deemed university were studied. Submission by TIFR to the UGC, while seeking the 'deemed university' status was also studied. As a first step, programmes to be taken up by the HBNI were finalised and incorporated in a document. Also a Memorandum of Understanding was drafted as per the guidelines of the UGC.

The first meeting of the Steering Committee was held on 23rd May, 2003 and based on the discussions during the meeting, the two drafts were revised and mailed to all possible constituent institutions of the HBNI.

Responses from some of the constituent institutions were received and discussed in a meeting held at Anushakti Bhavan on the 4th July 2003. All concurred with the idea of setting up the HBNI and therefore, in-principle approval for setting up the HBNI was obtained from the Atomic Energy Commission in July 2003.

Based on inputs received from the constituent institutions and informal discussions with the officials of UGC, further documents were prepared and a meeting of the Steering Committee was held on 9th September, 2003 wherein you also participated. All documents were further improved and mailed to the constituent institutions on September 15, 2003 seeking their comments and detailed inputs for the preparation of the submission to the UGC.

Some of the constituent institutions desired to have a meeting to discuss all aspects of the HBNI. Accordingly, a meeting was convened on 15 November, 2003 wherein I, on behalf of the Steering Committee and the representatives of the constituent institutions participated. There was discussion on several aspects and certain changes were agreed. All were requested to furnish the necessary information for incorporating in the submission to be made to the UGC. All documents were finalised and a final meeting was held on 3rd December 2003 in Delhi wherein the Chairman of the Steering Committee and I participated. Throughout the preparation of the documents for submission to the UGC, I have kept in touch with the Chairman, Steering Committee and several others having an opinion about HBNI. Documentation for submission to UGC has been completed and I present it to you, on behalf of the Steering Committee.

With best regards,

Yours sincerely,


(R.B. Grover)

Encls.

Dr. Anil Kakodkar
Chairman
Atomic Energy Commission
Mumbai.

Copy to: Prof. S.P. Sukhatme)Documents are being sent by
Prof. S. Bhattacharya)email.
Dr. Baldev Raj.)Further, comments, if any,
Dr. V.C. Sahni)are welcome
JS(R&D))

Prof. P. Rama Rao

Annex-3

Letter No.8-2004 dated 14th January 2004 from Chairman, AEC to Secretary, Secondary & Higher Education, Ministry of Human Resource Development, New Delhi submitting proposal of the Department for setting up of HBNI.



परमाणु ऊर्जा विभाग - स्वर्ण जयंती वर्ष
अगस्त 2003 - अगस्त 2004
Department of Atomic Energy
Golden Jubilee Year
August 2003 - August 2004



सत्यमेव जयते

भारत सरकार

परमाणु ऊर्जा विभाग

GOVERNMENT OF INDIA

DEPARTMENT OF ATOMIC ENERGY

डॉ. अनिल काकोडकर

Dr. Anil Kakodkar

अध्यक्ष, परमाणु ऊर्जा आयोग
एवं

सचिव, परमाणु ऊर्जा विभाग

Chairman, Atomic Energy Commission

&

Secretary, Department of Atomic Energy

No. 8-2004

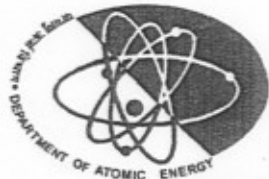
January 14, 2004.

Dear Shri Tripathi,

I am submitting herewith our proposal to establish the "Homi Bhabha National Institute" having the status of a deemed-to be-University under section 3 of the UGC Act.

The Department of Atomic Energy (DAE) is in its Golden Jubilee year, having been set up in 1954. Since its inception, DAE has been pursuing basic research as well as technology development with equal rigour. Over the years, a robust institutional framework for pursuing basic research and technology development has been put in place. Today, DAE runs 4 major research centres, 3 industrial units, 5 public sector corporations and 7 grant-in-aid institutions. It is thus that self-reliance of our atomic energy programme was realized. World-class performance of our indigenously built nuclear plants testify to the soundness of the prevailing DAE system. However, demands for self-reliance on the DAE have been rendered even more arduous to fulfill, because the Department is the target for technology control regimes imposed by some of the technologically advanced nations.

In this scenario, the country and, in particular, the DAE have to necessarily conceive of innovative steps to consolidate the gains achieved so far and take fresh initiatives for enhancing the capabilities to meet the imminent and future challenges. It has, therefore, become imperative that DAE charts novel ways through which in-depth capabilities in nuclear science and nuclear engineering are unabatedly nurtured within our institutions. It is in this context that the idea of establishing the Homi Bhabha National Institute (HBNI) with a deemed-



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E-mail: chmn@dae.gov.in

to-be- university status is being proposed to MHRD, after obtaining 'in-principle' approval of the Atomic Energy Commission.

HBNI is primarily aimed at strengthening DAE-relevant-programme-based linkages among the R&D centres and grant-in-aid institutions through the medium of academically oriented higher education and research. The following research centres and grant-in-aid institutions (their dates of establishment are given within brackets) will be the Constituent Institutions of the Homi Bhabha National Institute (HBNI)

R&D Centres

Bhabha Atomic Research Centre (BARC), Trombay (1957)
Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam (1969)
Centre for Advanced Research (CAT), Indore (1984) and
Variable Energy Cyclotron Centre (VECC), Kolkata (Cyclotron became operational in 1977, when VECC was still a part of BARC)

Grant-in-aid Institutions.

Saha Institute of Nuclear Physics (SINP), Kolkata (1950)
Institute of Plasma Research (IPR), Gandhinagar (1986)
Institute of Physics (IOP), Bhubaneswar (1972)
Harish-Chandra Research Institute (HRI), Allahabad (1966)
Tata Memorial Centre (TMC), Mumbai (1941), and
Institute of Mathematical Sciences (IMSc.), Chennai (1962)


While details as needed by the UGC are given in the enclosed document, let me emphasize that DAE has all along nurtured a close relationship with the universities and the academic institutions. You may be aware that the Board of Research in Nuclear Sciences, set up in 1945, was the first agency in the country to fund extra-mural research in the universities. The policy enunciated by Bhabha that "**fundamental research and teaching should be fostered in the universities and research institutes**" has continued to guide the functioning of DAE and BRNS. A fresh MoU was signed between UGC and DAE on Dec. 10, 2003 to broaden the arrangements agreed to in the 1989 MoU to make available the facilities of the DAE to the student and teaching community of the university system. This recent move, intended to

enlarge the academia DAE cooperation, is a testimony to our growing commitment to fulfil the Bhabha policy. The present proposal to establish Homi Bhabha National Institute is only an elaboration of the earlier approaches and will signify stronger nexus between the MHRD (UGC) and DAE institutions for mutual benefit.

My senior colleague Dr. R.B. Grover (Tel. : 022-22043041/25505333) will be the contact person at our end for responding to all queries. I am, of course, always available to you and the Chairman, UGC for providing any clarifications that may be required.

Looking forward to an early consideration of the proposal and with best regards,

Yours sincerely,


(Anil Kakodkar) 14.1.0

Encl : Proposal (3 copies)
with 1 set of reports.

Shri S.K. Tripathi,
Secretary,
Secondary & Higher Education
Ministry of Human Resource Development
Sastry Bhavan,
NEW DELHI.

Copy to :

Dr. Arun Nigavekar (20 copies) with 1 set of
Chairman reports
University Grants Commission
Bahadur Shah Zafar Marg
NEW DELHI - 110 002.

Annex-4

Office Memorandum No.15/15/2003-R&D-II/8063 dated 18th November 2004 from Joint Secretary (R&D) constituting a council of Management and appointing a Director and a Dean for HBNI.

Government of India
Department of Atomic Energy

Anushakti Bhavan,
C.S.M. Marg,
Mumbai - 400 001.

No.15/15/2003-R&D-II/ 8063

November 18, 2004

OFFICE MEMORANDUM

The Department is in the process setting up of the "Homi Bhabha National Institute (HBNI) as a deemed to be University to achieve the aims mentioned hereunder:-

- (i) To nurture and encourage pursuit of excellence in sciences (including engineering sciences) and mathematics which has major significance for the progress of indigenous nuclear technological capability.
- (ii) To provide an academic framework for integrating basic research being done at the grant-in-aid intuitions and the research centres of DAE with technology development at the research centres.
- (iii) To encourage inter-disciplinary research carried out within an institution or inter-institutionally which has been the hallmark of the research and development programmes of the Constituent Institutions.
- (iv) To provide a frame work for enabling the scientific / technical personnel of DAE for sharpening and updating their knowledge base while in service,

Contd../-

2. The main concept underlying the HBNI is to promote advanced degrees viz. Masters and Ph.D. degrees largely with the help of the research centres and grant-in-aid institutions of DAE. Presently the grant-in-aid institutions of DAE, with the exception of TIFR have to seek recognition for their researchers to be awarded degrees by one or other universities. The inception of HBNI would offer a uniform scheme for research activities in education and research and such a scheme will concomitantly result in strengthening linkages between grant-in-aid institutions and research centres for the benefit of advancing the pace of research through the medium of new generation of researchers and research problems and also accelerate the process of translating R&D into technology projects and their applications. The emphasis on collaboration between research centres and grant-in-aid institutions will be a distinguishing feature of the doctoral programmes to be launched through the HBNI.

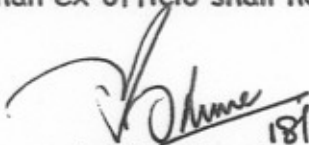
3. Dr. R.B. Grover, Director, Knowledge Management Group, BARC and Dr. R.R. Puri, Scientific (H^{*}), Human Resources Development Division, BARC are designated as Director and Dean of the HBNI respectively, so as to enable them to proceed with the registration of the Institute under the Societies' Registration Act, 1860 and to coordinate with University Grants Commission (UGC).

4. A Council of Management consisting of the following members is hereby constituted to manage the affairs of the HBNI and also to oversee the functions of the institute:

- | | | | |
|-----|----------------------------------|---|----------------------------------|
| 1. | Dr. Anil Kakodkar, Chairman, AEC | : | Chairman (Ex-officio) |
| 2. | Member (Finance), AEC | : | Member (Ex-officio) |
| 3. | Dr. S. Banerjee, Director, BARC | : | Member (Ex-officio) |
| 4. | Dr. Baldev Raj, Director, IGCAR | : | Member |
| 5. | Dr. Bikash sinha, Director, SINP | : | Member |
| 6. | Dr. K.A. Dinshaw, Director, TMC | : | Member |
| ✓7. | Dr. R.B. Grover, Director, HBNI | : | Member (Ex-Officio) |
| 8. | Dr. R. R. Puri, Dean, HBNI | : | Member Secretary
(Ex-Officio) |

Additional members from outside DAE and nominee of UGC will be appointed after obtaining recognition from UGC.

5. All the members of the above body other than ex-officio shall hold office for a term of three years.


(Sudha Bhawe) 18/11/04
Joint Secretary (R&D)
Tel. No.(022) 2202 2816

Chairman & Members of the Council of Management of HBNI

All Heads of R&D Units and Aided Institutions

Copy to: DAE

- (i) Office of Secretary
- (ii) Additional Secretary
- (iii) Joint Secretary (I&M)
- (iv) Joint Secretary (Finance)
- (v) Office of Joint Secretary (R&D)
- (iv) All Directors / Dy. Secretaries

Annex-5

**Registration certificate No.2071 dated 18th November 2004 issued by
Assistant Registrar of Societies, Greater Bombay Region.**

विशेष-अ.जा./मुं. सा. वि./५० म.

क्रमांक



नोंदणी प्रमाणपत्र

संस्था नोंदणी अधिनियम, १८६०

(१८६० चा अधिनियम २१)

नोंदणी क्रमांक

२०७१
बहासदर राज्य, मुंबई

२००४
सी. वी. वी. एच. डी.

याद्वारे असे प्रमाणित करण्यात येते की,

होमी भाभा नॅशनल इन्स्टीट्यूट

खालील तारखेस संस्था नोंदणी अधिनियम, १८६० (सन १८६० चा अधिनियम २१) अन्वये योग्यरीत्या नोंदणी करण्यात आली.

तारीख १८ नोव्हेंबर २००४ रोजी माझ्या सहीनिशी दिले.



१८-११-२००४

संस्थांचे सहायक निबंधक,

विभाग.

सहायक संस्था निबंधक
मुंबई विभाग, मुंबई

Annex-6

Notification No.F.9-5/2004-U.3 dated 3rd June 2005 issued by Joint Secretary, Ministry of Human Resource Development, New Delhi declaring HBNI to be a Deemed to be University.

No. F. 9-5/2004-U.3

Government of India

Ministry of Human Resource Development
Department of Secondary and Higher Education

Shastri Bhawan, New Delhi
dated the 3rd June 2005.

NOTIFICATION

In exercise of the powers conferred by Section 3 of the University Grants Commission Act, 1956 (3 of 1956), the Central Government, on the advice of the University Grants Commission, hereby declare that Homi Bhabha National Institute (HBNI), Mumbai along with its following ten constituent units

1. Bhabha Atomic Research Centre (BARC), Trombay
2. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam.
3. Centre for Advanced Technology (CAT), Indore
4. Variable Energy Cyclotron Centre (VECC), Kolkata
5. Saha Institute of Nuclear Physics (SINP), Kolkata
6. Institute of Plasma Research (IPR), Gandhinagar
7. Institute of Physics (IOP), Bhubaneswar
8. Harish Chandra Research Institute (HRI), Allahabad
9. Tata Memorial Centre (TMC), Mumbai
10. Institute of Mathematical Sciences (IMSc), Chennai

as Deemed to be University for the purpose of the aforesaid Act with immediate effect subject to the following conditions:

- a. That the institutions listed above which are presently affiliated with or recognized by or constituent part of any university shall become constituent unit of the HBNI only with effect from the date they stand disaffiliated / de-recognized / de-linked, as the case may be, from the relevant university.
- b. That the HBNI shall adhere to the guidelines / instructions issued by the UGC and the AICTE from time to time as applicable to institutions Deemed to be Universities.
- c. That appropriate provision in the Memorandum of Association (MOA) and / or Rules of the HBNI, as the case may be, shall be made to:
 - (i) nominate a representative of the Ministry of Human Resource Development on Council of Management of the HBNI;
 - (ii) putting in place a grievance redressal machinery;
 - (iii) maintain a Seniority List;

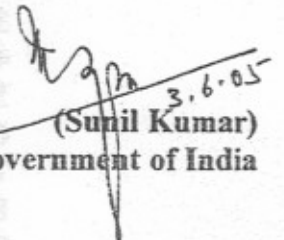
Contd....2/

File
D.K. Pathak
JS/RD
AL
14.6

D.K. Pathak
(D.K. Pathak)
Special Educational Advisor

PJFI
14/6/05

- (iv) seek approval of Council of Management for the award of Degrees / Diplomas.
- (v) specify the name of interpreter in Clause (5) of MOA.
- (vi) define the constituent unit / institution.
- (vii) define the Chairman and the Director as officers of HBNI.
- (viii) remove the Chairman and the Director from the list of authorities of the HBNI.
- (ix) specify mode of appointment of the officers of the HBNI along with their terms of appointment, duties and powers.
- (x) empower the Director of the HBNI to exercise the power of authorities of the HBNI in case of emergency / exigency and thereafter, get actions ratified in the next meeting of the concerned authority.

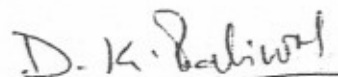

 3.6.05
 (Sunil Kumar)

Joint Secretary to the Government of India

The Manager,
 Government of India Press,
 Faridabad (Haryana).

Copy forwarded for information to: -

1. The Secretary, University Grants Commission, New Delhi.
2. Director, Homi Bhabha National Institute, Regd. Office: Knowledge Management Group, Bhabha Atomic Research Centre, Central Complex, Mumbai-400 085
3. Secretary, Department of Atomic Energy, Anushakti Bhawan, Chhatrapati Shivaji Maharaj Marg, Mumbai - 400 001
4. Member Secretary, All India Council for Technical Education, IG Sports Complex, I.P. Estate, New Delhi.
5. Principal Secretary, Technical & Higher Education, Government of Maharashtra, Mantralaya, Mumbai-400 032
6. All Ministries / Departments of the Government of India.
7. All State Governments and Union Territories.
8. Registrars of all Universities and Deemed to be Universities.
9. Press Information Bureau, Shastri Bhawan, New Delhi.
10. The Secretary General, Association of Indian Universities, AIU House, 16, Kotla Marg, New Delhi - 110002
11. All Officer and Sections in the Department of Secondary and Higher Education.
12. Guard File/Coordination Assistant/Notification File/ NIC/NIEPA


 (D. K. Paliwal)
 Deputy Educational Advisor

1764
 14/6/05

Annex-7

**Office Memorandum No.Dean/05/44 dated 27th June 2005 issued by Dean,
HBNI constituting an Advisory Committee of HBNI.**

HOMI BHABHA NATIONAL INSTITUTE

(Deemed University)

Regd. Office: Knowledge Management Group , Bhabha Atomic Research Centre
Central Complex, Trombay, Mumbai – 400 085

No. Dean/05/44

June 27, 2005

OFFICE MEMORANDUM

Ministry of Human Resource Development has given approval for the setting up of Homi Bhabha National Institute (HBNI) as a deemed to be University under the Section 3 of the UGC Act, 1956. Prior to this approval an expert Committee appointed by the UGC visited BARC for inspection of HBNI. The team was headed by Prof. S.K. Joshi and during discussions they advised us to set up an Advisory Committee with a view to bring together all the stake holders for in-depth consultations. Such consultations will be particularly useful during formative stages of HBNI.

Accordingly, HBNI Advisory Committee (HAC) is hereby constituted. It will have the following Composition:-

- | | | |
|---|---|------------------|
| 1. Chairman, AEC | - | Chairman |
| 2. Director, BARC | - | Member |
| 3. Director, TIFR | - | Member |
| 4. Director, IGCAR | - | Member |
| 5. Director, VECC | - | Member |
| 6. Director, CAT | - | Member |
| 7. Director, SINP | - | Member |
| 8. Director, IPR | - | Member |
| 9. Director, IOP | - | Member |
| 10. Director, HRI | - | Member |
| 11. Director, TMC | - | Member |
| 12. Director, IMSc | - | Member |
| 13. Chairman , BARC Training
School Apex Committee | - | Member |
| 14. Director, HBNI | - | Member |
| 15. ✓ Dean, HBNI | - | Member Secretary |

HRD 348
29/6/05

This Committee will meet as often as necessary and provide overall guidelines for the functioning of HBNI.

Navinder Puri

(R.R.PURI)
DEAN

TO:

Chairman, Atomic Energy Commission
Director, Bhabha Atomic Research Centre
Director, Tata Institute of Fundamental Research
Director, Indira Gandhi Centre for Advanced Research
Director, Variable Energy Cyclotron Centre
Director, Centre for Advanced Training
Director, Saha Institute of Nuclear Physics
Director, Institute of Plasma Research
Director, Institute of Physics
Director, Harish Chandra Research Institute
Director, Tata Memorial Centre
Director, Institute of Mathematic Sciences
Chairman, BARC Training School Apex Committee
Director, Homi Bhabha National Institute
✓ Dean, Homi Bhabha National Institute
Joint Secretary, R&D, DAE
Finance Officer, Homi Bhabha National Institute

Annex-8

Composition of the Council of Management and the Academic Council.

Composition of the Council of Management

Dr. Anil Kakodkar	Chairman, AEC	Chairman
Dr. S.K. Das	Member(F), AEC	Member
Dr. Baldev Raj	Director, IGCAR	Member
Dr. S. Banerjee	Director, BARC	Member
Prof. V.G. Bhide	Emeritus Professor, University of Pune	Member (Nominee of UGC)
Dr. K.A. Dinshaw	Director, TMC	Member
Dr. R.B. Grover	Director, HBNI	Member
Dr. Bikash Sinha	Director, SINP	Member
Dr. R.R. Puri	Dean, HBNI	Member Secretary

Composition of the Academic Council

Dr. R.B. Grover	Director, HBNI	Chairman
Prof.R. Balasubramanian	Director, IMSc. Chennai	Member
Dr. Baldev Raj	Director, IGCAR	Member
Dr. S. Banerjee	Director, BARC	Member
Dr. R.K. Choudhury	Director, IOP	Member
Dr. K.A. Dinshaw	Director, TMC	Member
Prof. A. Raychowdhary	Director, HRI	Member
Dr. V.C. Sahani	Director, RRCAT	Member
Dr. Bikash Sinha	Director, SINP & VECC	Member
Dr. Abhijit Sen	Convener, Physical Sciences	Member
Dr. S.K. Kulshreshtha	Convener, Chemical Sciences	Member
Dr. S.K. Apte	Convener, Life Sciences	Member
Dr. V.S. Raghunathan	Convener, Engineering Sciences	Member
Prof. V.S. Sunder	Convener, Mathematical Sciences	Member
Dr. R.R. Puri	Dean, HBNI	Member

Annex-9

Composition of the Board of Studies.

HOMI BHABHA NATIONAL INSTITUTE

(Proposed Deemed University)

Regd. Office: Knowledge Management Group, Bhabha Atomic Research Centre
Central Complex, Trombay, Mumbai-400 085

Ref.:Dean/05/

January 27, 2005

Office Order No. 1/05

In exercise of the powers conferred by the 'Rules of HBNI' the Academic Council of HBNI in its first meeting, held on January 7, 2005 constituted the Boards of studies of HBNI in Physical, Chemical, Life, Engineering and Mathematical Sciences as follows.

BOARDS OF STUDIES of HBNI

Physical Sciences

1. Dr. Abhijit Sen (IPR) - **Convener**
2. Dr. Praveen Chaddah (CAT)
3. Dr. B.K.Godwal (BARC)
4. Dr. C.S.Sunder (IGCAR)
5. Dr. Dinesh Shrivastava (VECC)
6. Dr. Avinash Khare (IOP)

Chemical Sciences

1. Dr. S.K.Kulshreshtha (BARC) - **Convener**
2. Dr. J.V.Yakhmi (BARC)
3. Dr. V.K.Manchanda (BARC)
4. Dr. Swapan Ghosh (BARC)
5. Dr. K.S. Viswanathan (IGCAR)
6. Dr. T.Gnanasekaran (IGCAR)

Life Sciences

1. Dr. S.K.Apte (BARC) - **Convener**
2. Dr. K.Mohandas (TMC)
3. Dr. (Mrs.) S.M. Zingde (TMC)
4. Dr. S.F.D'Souza (BARC)
5. Dr. N.Nair (RMC)
6. Prof. J.K.Dattagupta (SINP)

Engineering Sciences

1. Dr. V.S.Raghunathan (IGCAR) - **Convener**
2. Dr. S.B. Koganti (IGCAR)
3. Dr. B.K.Dutta (BARC)
4. Dr. V.K.Suri (BARC)
5. Dr. D. Sathiyamoorthy (BARC)
6. Dr. A.P.Tiwari (BARC)

Mathematical Sciences

1. Prof. V.S.Sunder (IMSc) - **Convener**
2. Prof. S.Kesavan (IMSc)
3. Prof. S.D.Adhikari (HRI)
4. Dr. R.R.Puri (BARC)
5. Prof. R. Ramanujam (IMSc)

The Conveners shall be members of the Academic Council.

The functioning and the tenure of the Boards of Studies shall be as per the Rules of the Institute.

Ravinder Puri

(R.R.Puri)

Dean

Chairman and Members of the Council of Management

Chairman and members of the Academic Council

Conveners and Members of Board of Studies

Copy to: DAE

1. Office of Secretary
2. Joint Secretary (R&D)



LOGO