

## 28<sup>th</sup> MEETING OF THE ACADEMIC COUNCIL

# Minutes of Meeting

**Meeting Date: 3<sup>rd</sup> DECEMBER 2021**

**Venue: HBNI Council Hall & ONLINE**

**Time: 14.30 hrs**



## HOMI BHABHA NATIONAL INSTITUTE

*(A Deemed to be University u/s 3 of UGC Act, MHRD & an Aided Institution of the DAE, Govt. of India)*

## HOMI BHABHA NATIONAL INSTITUTE

Training School Complex  
Anushaktinagar, Mumbai-400094

The following members were present during the meeting held in hybrid mode at HBNI Council Hall and online on Webex platform on 3<sup>rd</sup> December 2021 at 14:30 hrs:

### Members:

Prof. P.R. Vasudeva Rao, Vice Chancellor	<b>Chairman</b>
Prof. P.D. Naik, Dean, HBNI	Member
Prof. Indranil Manna, Vice Chancellor, BITS Ranchi	Member
Prof. J. B. Udgaonkar, Director, IISER, Pune	Member
Prof. E. D. Jemmis, Professor, IISc, Bangalore	Member
Prof. B. Venkatraman, Director, IGCAR	Member
Shri S. V. Nakhe, Director, RRCAT	Member
Prof. Sumit Som, Director, VECC	Member
Prof. Gautam Bhattacharyya, Director, SINP	Member
Prof. Shashank Chaturvedi, Director, IPR	Member
Prof. V. Ravindran, Director, IMSc	Member
Prof. Sudhakar Panda, Director, NISER	Member
Prof. K. K. Nanda, Director, IoP	Member
Prof. V. Kain, Director, Material Science Group, BARC	Member
Prof. B. Mohanty, Convenor, BoS (Integrated Masters Prog)	Member
Prof. R.B. Grover, Convenor, BoS (Applied Systems Analysis)	Member
Prof. S.M. Yusuf, Convenor BoS (Physical Sci.)	Member
Prof. A.P. Tiwari, Convenor, BoS (Engineering Sci.)	Member
Prof. S. Kannan, Convenor, BoS (Chemical Sci.)	Member
Prof. Meena Mahajan, Convenor, BoS (Mathematical Sci.)	Member
Prof. S. D. Banavali, Convenor, BoS (Medical & Health Sci.)	Member
Prof. Prasanna Venkatraman, Convenor, BoS (Life Sci.)	Member
Prof. D. K. Maity, Associate Dean & Officiating Registrar	Secretary

### Permanent Invitees:

Prof. A.K. Dureja, Associate Dean, HBNI  
 Prof. B.K. Dutta, Institute Chair Professor, HBNI  
 Prof. B. S. Tomar, Institute Chair Professor, HBNI  
 Prof. S. K. Ghosh, Associate Dean, HBNI  
 Prof. G Ravikumar, Associate Dean, HBNI  
 Prof. T. K. Ghanty, Dean Academic, Chemical Sci., BARC  
 Prof. Hema Rajaram, Dean Academic, Life Sci., BARC  
 Prof. R. Tewari, Dean Academic, Engg Sci.-I, BARC  
 Prof. S. Mukhopadhyay, Dean Academic, Engg Sci.-II, BARC  
 Prof. Sandip Basu, Dean Academic, Health Sciences, BARC  
 Prof. A. Mani, Dean Academic, Physical Sciences, IGCAR

After deliberations, it was decided that Option-1 can be used without any changes. However, in Option-2, in place of abbreviation 'HBNI', full name of the institute, i.e., 'Homi Bhabha National Institute' should be used as shown below.

'Indira Gandhi Centre for Atomic Research, A CI of Homi Bhabha National Institute, Kalpakkam'

## **2.6 Proposal of a minor change in format of Ph.D. Certificate**

Prof. Naik informed that UGC has issued guidelines on 'Minimum standards and procedures for award of M.Phil/Ph.D. degree, Regulation in the year 2009 & 2016. Recently, many former doctoral students have faced difficulty for employment in academic institutions as the employer expects that adherence of the above regulations is mentioned in the final certificate. Thus, a minor change in the certificate has become essential. He also mentioned that such information is already given in the provisional degree certificate. He also mentioned that for students enrolled on or after 1<sup>st</sup> August 2016, certificate will refer to 2016 and for earlier students it will be 2009.

Council approved the proposal and suggested the exact position of the information in the certificate (Annexure-5).

## **3. AGENDA ITEMS FOR RATIFICATION**

### **3.1 Newly recognized Faculty Members**

Prof. Maity informed the Council that in HBNI system, two types of applications are received for recognition as HBNI faculty members. Scientific Officers from four R&D centres under HBNI apply for award of the title of faculty and their applications are forwarded to respective BoS for recommendation. After receiving appropriate recommendation from BoS, an applicant is recognized as HBNI faculty member if the applicant goes through faculty induction process as per UGC guidelines. Another set of applicants are from aided institutions and those are appointed as a faculty member in the CI/OCC. Such applicants are recognized as HBNI faculty member once they go through faculty induction process organized by HBNI. A list of such newly recognized faculty members by HBNI was shown in Annexure-6. Prof. Udgaonkar emphasized the need of taking classroom lectures by every HBNI faculty in addition to provide guidance for research.

Council ratified the list of newly recognized faculty members.

### **3.2 New Course works for Ph.D. and M.Sc.(Engg) program**

Prof. Maity sought permission of the chair for this agenda item for ratification as it was not included in the circulated agenda. He informed that recently BoS (Engg Sciences) has recommended acceptance of proposed course works for Ph.D. and M.Sc.(Engg) programs

by VECC. Details syllabi of the course works and assigned credits were displayed for suggestions of the council.

Council approved introduction of the new course works at VECC.

#### **4. ACADEMIC ACTIVITIES IN CI/ OCC DURING ACADEMIC SESSION 2021-22**

Prof. Vasudeva Rao stated that UGC, AICTE, MHRD through various communications are seeking information regarding the conduct of academic sessions, students admitted for academic years, conduct of classes, examinations etc. during this pandemic situation. He requested all Head of the CIs/OCC to brief the Council regarding the above aspects and highlight any aspect where Institutions are facing serious issues in conducting academic programs due to pandemic. Director, SINP and Director NISER mentioned that DAE should grant fellowship to doctoral students when they get an academic extension due to Covid-19 pandemic.

After, a long deliberation, Prof. Grover suggested that a note could be prepared jointly by all the CI/OCC and submitted to the higher authority like AEC for approval.

#### **5. ANALYSIS OF GRADUATED Ph.D. STUDENTS DURING 2015-16**

Prof. Maity informed the council that Council of Management sought the information on the present status of doctoral students those graduated five years back i.e. during 2015-16. Such data are expected to illustrate the performance of HBNI doctoral students as after 5 years of graduation, students are expected to settle in the career path. He presented data and mentioned that 45% students were already employed in DAE and 10% of the rest could not be contacted due to change of their contact details. He also informed that 35 students were working as faculty members in Indian Institutes/ Universities, 13 were working as Research Scientists in International Laboratories, 21 were working in Industry/ self-employed and 27 students were working as post-doctoral researchers.

Council noted the report and expressed satisfaction.

#### **6. BRIEFING BY THE CONVENERS OF BOARDS OF STUDIES (BoS)**

Prof. Maity requested all the conveners of Board of Studies to brief the council regarding new course, new program, Ph.D. theses submitted, academic extension, recommended faculty members etc. since June 2021. Prof. Kannan, Convener, BoS-Chemical Sciences made a power point presentation highlighting the key points. He mentioned that online processing of synopsis and shortlisting of reviewers has become very handy. Prof. Dureja presented by power point on behalf of Convener, BoS-Engineering Sciences. Similarly, Prof. Prasanna, Convener, BoS-Life Sciences, Prof. Mahajan, Convener, BoS-Mathematical Sciences, Prof. Yusuf, Convener, BoS-Physical Sciences and Prof. Grover, Convener, BoS-Applied Systems Analysis presented about the BoS specific data. Prof. Banavali, Convener, BoS-Medical & Health Sciences informed that several new academic programs are being initiated and some are first time in India. He also intimated that a

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2<sup>nd</sup> Floor, Training School

Anushaktinagar, Mumbai – 400094

Website: [www.hbni.ac.in](http://www.hbni.ac.in)

Phone Nos.: 022-25597554, 25597626

## MINUTES OF 27<sup>th</sup> MEETING of the Academic Council

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The following members were present during the meeting held on 17<sup>th</sup> June 2021.

Prof. P.R. Vasudeva Rao, Vice Chancellor, **Chairman**  
Prof. P.D. Naik, Dean, HBNI  
Prof. A.K. Mohanty, Director, BARC  
Prof. A. K. Bhaduri, Director, IGCAR  
Shri Debashis Das, Director, RRCAT  
Dr. Sumit Som, Director, VECC  
Prof. Gautam Bhattacharyya, Director, SINP  
Sh. Shashank Chaturvedi, Director, IPR  
Prof. S.M. Yusuf, Director, IoP, Convenor, BoS (Phy. Sci.), & Dean Student Affairs, BARC  
Prof. V. Arvind, Director, IMSc  
Prof. Pinaki Majumdar, Director HRI  
Dr. R.A. Badwe, Director, TMC  
Prof. Sudhakar Panda, Director, NISER  
Prof. E.D. Jemmis, IISc, Bangalore  
Prof. Indranil Manna, IITKharagpur  
Prof. J.B. Udgaonkar, IISER, Pune  
Prof. B. Venkatraman, IGCAR  
Prof. V. Kain, OS, MP&CD, & Dean Academic, Engg. Science Stream-I, BARC  
Prof. S. Kannan, Convenor, BoS (Chemical Sciences)  
Prof. A.P. Tiwari, Convenor, BoS (Engineering Sciences)  
Prof. R.B. Grover, Convenor, BoS (Applied Systems Analysis)  
Prof. S.D. Banavali, Convenor, BoS Medical & Health Sciences, & Dean, TMC  
Prof. (Mrs.) Prasanna Venkatraman, Convenor, BoS (Life Sciences)  
Prof. Meena Mahajan, Convenor, BoS (Mathematical Sciences)  
Prof. Bedangadas Mohanty, Convenor, BoS Integrated Masters Programme  
Prof. B.K. Dutta, Institute Chair Professor, HBNI  
Prof. B.S. Tomar, Institute Chair Professor, HBNI  
Prof. D.K. Maity, Assoc. Dean, HBNI  
Prof. A.K. Dureja, Assoc. Dean, HBNI  
Prof. Saibal Basu, Assoc. Dean, HBNI  
Prof. A.K. Bhattacharjee, Dean Academic, Engg. Sciences Stream-II, BARC  
Prof. Tapan Kumar Ghanty, Dean Academic, Chemical Sciences, BARC  
Prof. (Ms.) Hema Rajaram, Dean Academic, Life Sci., BARC  
Prof. R. Rajaraman, Dean Academic, Physical Sciences, IGCAR  
Prof. Anish Kumar, Dean Academic, Engineering Sciences, IGCAR  
Prof. Vidhya Sunderajan, Dean, Student Affairs, IGCAR  
Prof. CVS Brahmananda Rao, Dean Academic, Chemical Sciences, IGCAR  
Prof. Arup Banerjee, Dean Academic, RRCAT  
Prof. C.P. Paul, Dean Student Affairs, RRCAT  
Prof. Parnika Das, Dean Academic, Physical Sciences, VECC  
Prof. Sarabjit Pal, Dean Academic, Engineering Sciences, VECC  
Prof. Tilak Ghosh, Dean Student Affairs, VECC  
Prof. Partha Saha, Dean Academic, Chemical/ Life Sciences, SINP  
Prof. Pranay Swain, Dean Academic, NISER  
Prof. Renjit Mathew, Dean Student Affairs, NISER

- (xiv) Advanced Accelerator Physics-II: (Credit :4)
- (xv) Advance Materials Science (Credit 4 )

## II. Engineering Sciences

Prof. A.P. Tiwari presented activities of the BoS Engineering Sciences. The BoS recommended 6 faculty and 11 MTech guides. The academic extension of PhD/ DDFS students were recommended for 3 candidates. From the period of Dec. 2020 to June 2021 the BoS has reviewed 27 synopsis and it was informed that shortlisting of examiners was completed for the 21 shortlisted synopses.

The Board has introduced five value added courses at BARC and eleven courses for PhD/MSc(engg) at VECC.

### (a) Introduction of Value added courses at BARC

S. No.	Course Title	Lecture Hours	Credits
1.	Advanced Mass Transfer	45	6
2.	Advanced Chemical Reaction Engineering	45	6
3.	Membrane Technology	45	6
4.	Theory of Plasticity	45	6
5.	Advanced Concepts in Finite Element Methods	45	6

### (b) Introduction of courses at VECC for PhD/MSc(engg) programs

S. No.	Course Title	Lecture Hours	Credits
1.	Artificial Intelligence & Machine Learning	48	6
2.	Computer Architecture	42	5
3.	Advanced RF System	42	5
4.	Advanced Power Electronics	48	6
5.	Cryogenic Engineering	48	6

6.	Introduction to Nuclear Physics, Nuclear Radiation Detection and Applications	27	3
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### III. Chemical Sciences

Prof. S. Kannan presented the major highlights and outcomes from the activities of BoS Chemical Sciences for the period December 2020 to June. 2021.

The Board recommended six new faculty five from BARC and one from IGCAR. The board also considered and recommended 16 synopses during the period. There was no candidate recommended for extension of PhD programmes from Chemical Sciences.

### IV. Mathematical Sciences

Prof. Meena Majan, Convener, BoS (Mathematical Sciences) presented the activities of BoS in Mathematical Sciences.

### V. Life Sciences

Prof. Prasanna, Convener, BoS (Life Sciences Sciences) presented the activities of BoS in Life Sciences.

### M5.A5.0 Any Other items

NIL

The meeting ended with thanks to the Chair and Greetings to the members.

