

**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN**  
**HOMI BHABHA NATIONAL INSTITUTE**  
**AND**  
**INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY**

**1. Preamble**

The Indian Institute of Technology, Bombay( hereafter referred to as IITB) is a premier educational institution in science and technology and the Homi Bhabha National Institute ( hereafter referred to as HBNI), a Deemed to be University, is newly established institute under the aegis of the Department of Atomic Energy ( hereafter referred to as DAE), Government of India. For the purpose of academic programmes, the following units of DAE are the Constituent Institutions (CIs)/Off Campus Centre (OCC) of HBNI:

**Constituent Institutions (CIs)**

1. Bhabha Atomic Research Centre (BARC), Mumbai
2. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam
3. Raja Ramanna Centre for Advanced Technology (RRCAT), 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 Science (IMSc), Chennai

**Off Campus Centre (OCC)**

1. National Institute of Science Education and Research (NISER), Bhubaneswar.

RECOGNISING the long-standing collaboration and cooperation between IITB and some of the CIs of HBNI through programmes such as collaborative research supported by extra-mural funding through the Board of Research in Nuclear Sciences (BRNS), a body under DAE, or directly through allocation under five year plans; pursuit of M.Tech. provided they fulfill eligibility criteria set by IITB under the DAE Graduate Fellowship Scheme (DGFS) wherein the candidates assigned for employment in some of the CIs of HBNI study in IIT, including IITB, and carry the projects under the joint supervision of the faculty from the IITs and the scientists from the CIs/OCC of HBNI; lectures by IITB faculty at BARC Training School and by BARC scientists at IITB, and

RECOGNISING that certain collaborative programmes are ongoing because of individual initiative such as pursuit of research leading to Ph.D. by employees of BARC and some other CIs/OCC under the external registration programme of IITB and co-supervision of Ph.D. students at IITB by the scientists of BARC and the faculty of IITB, and

RECOGNISING that, in view of the establishment of HBNI, while continuing the existing programmes as of present, there is scope of further expansion of the existing collaboration and cooperation, the IITB and HBNI, collectively referred to as "Partner Institutes".

HEREBY agree to create a long-term institutional partnership in education and research, including the possibility of enhanced funding from Board of Research in Nuclear Sciences (BRNS), a body under DAE, in the areas of mutual interest according to the broad framework set forth in this Memorandum of Understanding (MoU).

## **2. Objective**

To enhance collaborative research in the areas of mutual interest, both in extent and scope by using the medium of research students enrolled in the Partner Institutes.

## **3. Modalities of Cooperation**

- 3.1 A student registered under a supervisor for M.Tech. /Ph.D. in one Partner Institute (hereinafter referred to as Parent Institute) can have a co-supervisor from the other Partner Institute. To that end, the Supervisor from the Parent Institute of the student will identify and seek concurrence of a faculty member from the Partner Institute to take up the responsibility of being a co-supervisor. The arrangement will come into effect after the supervisor and the co-supervisor obtain approval for the same from their respective institute.
- 3.2 The Ph.D. students in one Partner Institute may carry a part of the course work in the other Partner Institute with credit transfer. In particular,
  - 1) The courses to be credited to the student for attending a course in the partner Institute will be determined by the Parent Institute of the student.
  - 2) To facilitate the process of a student attending a course in the Partner Institute, the supervisor of the student in the Parent Institute will put up the proposal( in consultation with appropriate academic bodies of the Department) to the Dean, AP(IITB)/ Dean(HBNI)- as the case may be.
- 3.3 The Parent Institute shall be responsible for paying to the Partner Institute the tuition fee, if any, for participation of its students in the course work conducted at the Partner Institute.
- 3.4 The ongoing exchange of faculty for lectures and research for short periods shall be further strengthened.
- 3.5 A mechanism shall be formulated to identify the research areas of mutual interest and for possible funding for the same from BRNS.