



MEMORANDUM OF UNDERSTANDING FOR ACADEMIC COOPERATION BETWEEN

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

AND

HOMI BHABHA NATIONAL INSTITUTE, MUMBAI

Indian Institute of Technology Roorkee (referred as IITR henceforth), Uttarakhand, India, and Homi Bhabha National Institute (referred as HBNI henceforth), Mumbai, Maharashtra, India, a newly established institute under the aegis of the Department of Atomic Energy (referred as DAE henceforth), Government of India recognize their strengths in research and education in one or more disciplines of Science and Engineering and their mutual interest in engaging themselves in academic cooperation. 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).

Therefore, IITR and HBNI, collectively referred to as "partner Institutes" to establish a programme for academic cooperation in areas of mutual interest, and in accordance with terms and conditions set forth in this memorandum of understanding (MoU).

A. OBJECTIVES

The goal of this cooperation is to foster collaboration, and to facilitate advancement of knowledge on the basis of reciprocity, best effort, mutual benefit, and frequent interactions, ITTR and HBNI agree:

- a) to exchange information on research and educational programmes,
- b) to exchange information on teaching, learning material and other literature relevant to their educational and research programmes,
- to jointly organize short-term continuing education programmes, seminars, conferences, workshops on topics of mutual interest to invite each other's faculty / scientists to participate therein,
- d) to jointly propose and engage in research or training programmes sponsored by funding agencies, and to invite each other's faculty to participate therein,
- e) to exchange on a reciprocal basis, students for limited periods of time for purpose of education and/or research.

IITR and HBNI agree that detailed terms and conditions that guide each activity identified above will be separately determined and agreed upon by the two institutions. These terms shall include a technical description of proposed activity, financial arrangements, and person(s) responsible for its implementation, etc.

B. JOINT SPONSORED RESEARCH, DEVELOPMENT AND CONSULTANCY

IITR and HBNI agree to help identify and invite faculty members / Scientists from the other institution to participate in research or development programmes already sponsored by external funding agencies. The terms and conditions for such participation will be worked by mutual agreement between the faculty member(s) and the institution extending such an invitation.

HBNI agrees to host scientific instrument(s) from IITR on the best effort basis for mutual benefits of faculties and students of both the institutions.

IITR also agrees to host scientific instrument(s) from HBNI on the best effort basis for mutual benefits of faculties and students of both the institutions.

C. EXCHANGE OF FACULTY, SCIENTISTS AND STUDENT

IITR and HBNI agree to encourage collaboration between faculty and scientists from the two institutions. The terms and conditions for each visit or an assignment, including those concerning stipend, travel, and housing, will be worked out between the concerned faculty member and the institution extending an invitation.

Notwithstanding the above, IITR and HBNI will examine ways to identify financial resources to fund international travel by their faculty/scientists/students.

IITR and HBNI agree that student exchange will be guided by principles listed below. A home institution refers to the institution where a student is a full-time student, and from where he/she is expected to graduate. A host institution refers to an institution that receives a student for a brief period of time to undertake a pre-determined programme of study or research.

- a) The period of study of the exchange students shall be a maximum of one (1) year in principle.
- b) Exchange students will be selected by mutual agreement between the home institution and the host institution.
- c) If an exchange student has undertaken research, then the host institution will evaluate the exchange student's performance in the research, and issue a letter to that effect, together with a technical "report" of the research carried out.
- d) If an exchange student has undertaken research, then the home institution will take note of the performance evaluation and the technical report, and take steps in accordance with its own procedures.
- e) A student registered under a supervisor for M. Tech. / Ph.D. in one partner Institute (hereinafter referred to as parent Institute) should 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.
- f) The PhD students in one partner institute may carry a part of the course work in the other partner institute with credit transfer. In particular, 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. 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, Academic Affairs (IITR) / Dean (HBNI) as the case may be.
- g) The students shall pay the tuition fee, if any, either in the parent or the partner Institute.

D. EXCHANGE OF SCIENTIFIC AND TECHNICAL MATERIAL

IITR and HBNI exchange information on research and educational programmes and teaching/learning material and other literature relevant to their educational and research programmes. Further, IITR and HBNI agree to explore ways to share teaching/learning material, and other relevant literature, while respecting each other's intellectual property and other rights.

E. JOINT CONFERENCES, WORKSHOPS AND SHORT-TERM COURSES

IITR and HBNI agree to help identify and invite faculty members from the other institution to participate in conferences, workshops and short-term courses. The terms and conditions for such participation will be worked out by mutual agreement between the invited faculty member(s) and the institution extending such an invitation.

When a faculty member visits the other institution on invitation or as part of such joint activity, then such a visit will be classified as such, and handled as per rules of individual institution.

F. INTELLECTUAL PROPERTY

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IITR and HBNI agree to respect each other's rights to intellectual property. Further, the Intellectual Property Rights (IPR) that arises as a result of any collaborative research or activity under this MoU will be worked out on a case-to-case basis, and will be consistent with officially laid down IPR policies of the two institutions.

G. CO-ORDINATION

Each institution shall appoint one member of its teaching/research faculty to coordinate the programme on its behalf. Further, a coordination committee, consisting of (a) Director, IIT Roorkee, or his/her nominee, (b) Vice-Chancellor, HBNI or his/her nominee, (c) Program coordinator from the side of IITR, and (d) Programme Coordinator from the side of HBNI, will periodically review and identify ways to strengthen cooperation between the two institutions.

H. TENURE AND TERMINATION

This MoU will take effect from the date it is signed by representatives of the two institutions. It will remain valid for five years, and may be continued thereafter after suitable review and agreement.

Either institution may terminate the MoU by giving written notice to the other institution three (03) months in advance. Once terminated, neither IITR nor HBNI will be responsible for any losses, financial or otherwise, which the other institutions may suffer. However, IITR and HBNI will ensure that all activities in progress are allowed to complete successfully.

I. ARBITRATION CLAUSE

Should there be a dispute relating to any aspect of academic cooperation, Director, IITR and Vice-Chancellor, HBNI will jointly resolve the dispute in a spirit of independence, mutual respect, and shared responsibility.

- (i) The Agreement shall be executed in two counterparts, each of which shall be deemed as original but all of this together shall constitute one and the same instrument.
- (ii) These terms and conditions and the Agreement shall be governed by the laws of India with Courts in New Delhi having jurisdiction. All disputes arising out of or in connection with this Agreement shall be resolved by arbitration, to be conducted by a sole arbitrator mutually selected by the Parties. If the Parties are unable to agree on a single arbitrator, then each Party shall choose one arbitrator, both of whom shall together choose a third arbitrator. The arbitration proceedings shall be conducted as per the provisions of the Indian Arbitration and Conciliation Act, 1996. The venue for such arbitration shall be New Delhi.
- (iii) These terms and conditions and the Agreement shall be governed by the laws of India with Courts in **New Delhi** having jurisdiction to hear and resolve any disputes under the Agreement.

Signed for

Indian Institute of Technology Roorkee, Uttarakhand, India

PROF. AJIT K. CHATURVEDI

Director

Witness: PROF APURBBAK, SHARMA

্রারা Institute of Technology Roorkee কৰ্কী / Roorkee - 247 667 (U.K.)

Witness: PROF. MANISH SHRIKHANDE

कुलशासक/Dean प्राचीजित शोघ एवं औद्योगिक परामर्श Sponsored Research & Ind. Consultanty भार प्रोर संर राङ्की/I.I.T. Roorkee-247667

(श्रेक्षणिक अफेयर्स)

Date: 16-Dec- 2021

Signed for

Homi Bhabha National Institute, Mumbai, Maharashra, India

PROF. P. R. VASUDEVA RAO

Vice-chancellor

Witness:

ा. पी. डी. नाईक / Prof. P. D. Naik डीन, होमी भाभा राष्ट्रीय संस्थान

Dean, Homi Bhabha National Institute प्रशिक्षण विद्यालय भवन, अणुशक्तीनगर, मुंबई - 400 094

Training School Complex, Anushaktinagar, Mumbai - 400 094

Witness:

सह डीन/ Associate Dean

होमी भाभा राष्ट्रीय संस्थान

Homi Bhabha National Institute पालय परिसर अणुगवितनगर, मुंबई—४०००९४.

Date:

ning School Complex, Anushaktinagar, Mumbai - 400 094