MEMORANDUM OF UNDERSTANDING

BETWEEN

HOMI BHABHA NATIONAL INSTITUTE

AND

PANJAB UNIVERSITY CHANDIGARH

This MEMORANDUM OF UNDERSTANDING is hereby made BETWEEN HOMI BHABHA NATIONAL INSTITUTE, a deemed to be University under the aegis of the Department of Atomic Energy, Government of India, having registered office at Training School Complex, Anushaktinagar, Mumbai-400094, hereinafter referred to as the 'HBNI' (which expression unless excluded by or repugnant to the subject shall mean and include its successor- in-office and assign) of the ONE PART

AND

PANJAB UNIVERSITY CHANDIGARH having its Campus at Sectors 14 and 25, Chandigarh – 160014, hereinafter referred to as Panjab University (which expression shall where the context so admit include its successors and permitted assigns) of the OTHER PART.

For the purpose of academic programmes, the following units of DAE are the Constituent Institutions (Cls) and Off Campus Centre (OCC) of HBNI:

Constituent Institutions:-

- 1. Bhabha Atomic Research Centre (BARC), Mumbai
- 2. Indira Gandhi Centre of 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 for Plasma Research (IPR), Gandhinagar
- 7. Institute of Physics (IOP), Bhubaneswar
- 8. Harish Chandra Research Institute (HRI), Allahabad
- 9. Tata Memorial Centre (TMC), Mumbai
- 10. The Institute of Mathematical Science (IMSc), Chennai

Off Campus Centre:-

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

RECOGNISING the long-standing collaboration and cooperation between Panjab University and some of the CIs & OCC of HBNI and 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 Panjab University and HBNI, collectively referred to as "Partner Institutes".

HEREBY agree to create a long-term institutional partnership in education and research according to the broad framework set forth in this Memorandum of Understanding (MoU).

1. 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.

2. Modalities of Co-operation

- 2.1 A student registered under a supervisor for M.Sc./M.E/M.Tech/Ph.D. (Sc.)/Ph.D.(Engg.) in one Partner Institute (hereinafter referred to as Parent Institute) may 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.
- 2.2 The students in one Partner Institute may carry a part of course work in the other Partner Institute with credit transfer if applicable and in vogue. In particular,
 - a) The credits to be awarded to the student for attending a course in the Partner Institute will be determined by the Parent Institute of the student in consultation with the Partner Institute.
 - b) To facilitate the process of a student attending a course in the Partner Institute, the supervisor of the student will put up the proposal (in consultation with appropriate academic bodies of the Department) to Panjab University Authorities/Dean (HBNI) as the case may be. This will be as per Ph.D. Regulations in vogue in the Partner Institute.
- 2.3 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, as per rules.
- 2.4 The exchange of faculty for lectures and research for short periods shall be strengthened.
- 2.5 A mechanism shall be formulated to identify the research areas of mutual interest of Partner Institutes.
- 2.6 The issues related to the Intellectual Property Right (IPR) with regard to the outcomes of the collaborative research and the outcomes of project/thesis work carried under the joint supervision of the faculty from the Partner Institutes shall be governed by the IPR regulations of the Government of India.

2.7 In case of dispute arising out of this MoU to the parties, they will be settled through a grievances handling mechanism by way of mutual discussions, otherwise law of the land will prevail.

3. Implementation

- 3.1 This MoU becomes effective from the later of the dates on which it is signed by the Partner Institutes and will be valid for an initial period of five years. This MoU may be extended for subsequent five years term by mutual consent. In case one Partner Institute wishes to cancel the MoU, written intent to that effect will have to be communicated by the month of June of that year. The MoU in that event will cease to be operative from the end of the year i.e. from December 31 of the year in question. However, the commitments already made under this MoU before its lapse or termination will be fulfilled.
- 3.2 For implementation of this MoU, the following will be the contact persons:
 - From HBNI
- (1) Dean, HBNI
- (2) Dean Academic of the CI/OCC
- From Panjab University
- (1) Chairperson, Department of Physics
- (2) Dr. Lokesh Kumar, Assist. Prof., Dept. of Physics

Signed on day of November 2017

For and on behalf of

Homi Bhabha National Institute

(Signature)

(Name)

Wordingerm

PRIVASUDEVA RAG

कुलपति / Vice Chancellor होमी भाभा राष्ट्रीय संस्थान Homi Bhabha National Institute प्रशिक्षण विद्यालय परिसर, अणुशक्तिनगर, मुंबई - 400 094. Training School Complex, Anushaktinagar, Mumbai - 400 094.

Witnessed by:

(Signature):

(Name)

के. स्वामीनाथन / K. Swaminathan

me) : के. स्वामीनाधन / K. Swaminathan प्रशासन अधिकारी-III/Adm. Officer-III भारत सरकार / Govt of India

(Designatiस्प्राप्त्रे): ऊर्जा विभाग / Dept of Atomic Energy होमी मामा राष्ट्रीय संस्या / Homi Bhabha National Institute प्रशिक्षण विद्यालय भवन, द्वितीय मंजिल, अणुशक्तिनगर, मुंबई-४०० ०९४. Training School Complex, 2^{No}Floor, Anushaktinagar, Mumbai-400 094. For and on behalf of

Panjab University

(Signature): Au kum Some

(Name) : Prof Aryn K. Groves

Vice Chancellor Panjab University Chandigarh-160014

(Signature):

(Name) : Prof. O. P. Katore

(Designation):

Research Promotion Cell

Panjaballajyessity, Chandigarh.