MEMORANDUM OF UNDERSTANDING (MoU)

BETWEEN



CSIR-INSTITUTE OF HIMALAYAN BIORESOURCE TECHNOLOGY PALAMPUR (H.P.)- 176 061

AND



INDIAN INSTITUTE OF TECHNOLOGY KAMAND, DISTRICT MANDI (H.P.)- 175 005

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is made on 13th April, 2021.

Between

CSIR-Institute of Himalayan Bioresource Technology, Palampur (Himachal Pradesh)- 176 061, hereinafter called "CSIR-IHBT" which expression, unless otherwise provided, shall include its successors and assignees, as the one part.

And

Indian Institute of Technology, Kamand, District Mandi (H.P.)- 175 005, hereinafter called "IIT Mandi" which expression, unless otherwise provided, shall include its successor of assignees, as the other part.

PREAMBLE:

The MoU is made between CSIR- Institute of Himalayan Bioresource Technology (hereinafter called as CSIR-IHBT) Palampur, a constituent establishment of Council of Scientific and Industrial Research, a society registered under its Societies Registration Act XXI 1860 and having its registered office at Anusandhan Bhawan, 2, Rafi Marg, New Delhi as one party, and Indian Institute of Technology, Mandi est ablished under Institute of Technology Act 1963, is a national institute of higher education and research in generic areas of technology (hereinafter called as IIT Mandi) with its headquarter at Mandi (H.P.) as the other party. Both parties (CSIR-IHBT and IIT Mandi) through their authorized representatives which expression shall unless it be repugnant to the context or meaning thereof be deemed to means and include its successors administrators' executors assigns representatives and permitted assigns of one party / other party.

The need of close cooperation in research and academic activities has been realized by the University Grants Commission, Indian Council of Agricultural Research, Council of Scientific and Industrial Research and other Public or private organizations between Universities and premier National Laboratories or institutes of the country. In order to enhance the level of cooperation between the two institutes (CSIR-IHBT, Palampur and IIT Mandi) and to raise the standards of research and academic activities at each of these institutes, the need for sharing the laboratory and field facilities, faculty expertise, dissemination of technology in general and students research in particular is being actively felt between the two institutes. To accomplish these goals, both the, CSIR-IHBT and IIT Mandi, have agreed to enter into an MOU for collaborative research and academic activities of mutual interest on the terms and conditions specified below:

1. General:

1.1 The scope of the MoU will be to collaborate for research and teaching in the designated subjects of Biotechnology, Bioinformatics, Chemistry, Dietetics & Nutrition, Environmental Sciences, Molecular Biology, Chemical Sciences or any other field / discipline of mutual interest.

1.2 IIT Mandi will recognize CSIR-IHBT as an accredited centre for pursuing research leading to Ph.D. degree in the subjects given under para 1.1. For the purpose, students eligible for Ph.D. enrollment under the Ordinances of the university would be allowed to register for Ph.D. in the respective faculties. Students pursuing joint Ph.D. programs from CSIR-IHBT would be allowed to

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work under Prime Minister's Research Fellows (PMRF) Scheme (Annexure-I).

1.3 CSIR-IHBT scientists and faculty members of the concerned departments of IIT Mandi will work towards joint research projects, thereby mutually using research facilities at CSIR-HBT and IIT Mandi.

1.4 IIT Mandi shall bestow upon the Director, CSIR-IHBT or his nominee, the states and powers of the Head of the Department (HOD) of the University for academic and research purposes.

1.5 IIT Mandi will recognize and accredit CSIR-IHBT scientists for guiding research leading to Ph.D. degrees. If need be Board of Control / Research Degree Committee shall recommend a supervisor from the IIT Mandi.

1.6 In case of any academic lapses, IIT Mandi will bring the matter to the notice of

the Director, CSIR-IHBT for initiating necessary action.

The faculty and students of the concerned departments of IIT Mandi shall be enrolled as ad-hoc members of the library of the CSIR-IHBT. While using CSIR-IHBT library facilities they shall be governed by the rules and regulations as operative in CSIR-IHBT. Scientists and Ph.D. students of CSIR-IHBT shall likewise be given ad-hoc membership of the IIT Mandi library.

- The faculty and students of the concerned departments of IIT Mandi shall be issued temporary identity cards by CSIR-IHBT as per CSIR rules/ guidelines, so as to provide them an unhindered access to lab and other facilities of the Institute. Similarly, faculty and students of the CSIR-IHBT shall be issued temporary identity cards by IIT Mandi as per rules/ guidelines to provide unhindered access to their lab and other facilities.
- The aforesaid faculty and students of respective organization shall be provided Photostat facilities on the same terms and conditions as are provided to their staff and research fellows.
- 1.10 As per the availability, CSIR-IHBT/ IIT Mandi shall arrange Hostel/ Guest House accommodation for students/ faculty coming to respective institute for training/teaching.
- 1.11 In all cases related to work under this MoU, T.A./ D.A. for scientists/ faculty and research scholars will be borne by the respective organizations.

2. Academic Programmes:

2.1 For the mutual benefit of the two Institutions i.e. CSIR-IHBT and IIT Mandi, there will be exchange of CSIR-IHBT scientists and faculty members of the concerned departments of IIT Mandi.

2.2 While registering CSIR-IHBT scientists/ staff for Ph.D. degree, the ordinances related to Ph.D. of IIT Mandi will be valid including the appointment of supervisors

and co-supervisors.

2.3 CSIR-IHBT and IIT Mandi will work closely to generate appropriately trained manpower in the areas of Science & Technology through organization of formal academic curricula, symposia, short-term training courses etc.

2.4 CSIR-IHBT will provide summer training facilities to students (not more than 10 at a time) and CSIR-IHBT scientists will help in the preparation of teaching material for these students.

2.5 CSIR-IHBT scientists/ IIT Mandi faculty will assist in the evaluation of student's performance of respective institutes in theory as well as practical classes.

Director, CSIR-IHBT will nominate one member each on various Research Degree 2.6 Committees (RDC) and two members on Research Degree Board (RDB)/ or Committee of IIT Mandi.

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2.7 During RDC meetings, external guides of candidates working in CSIR-IHBT shall be invited.

3. Protection & Disposition of Ownership of Intellectual Property Rights

3.1 The ownership of all Background Information and Background Intellectual Property Rights generated by the parties prior to the MoU shall rest with the respective parties. However, parties shall have right to use such Background Information and Background Intellectual Property Rights for the purposes of the R&D work performed under the MoU.

3.2 All Foreground Information and Foreground Intellectual Property Rights created during the joint R&D work performed under the MoU shall be owned jointly by both

the parties.

3.3 Parties to this MoU shall confer and consult each other regarding filing of Intellectual Property Rights applications including patent applications covering Foreground Information and share equally the attendant expenditure related to filing, prosecution, grant, maintenance etc. of the same.

3.4 In the event of any extraordinary situation including infringement suits filed by third parties, parties shall initiate any action in mutual consultation and agreement.

4. Patent & Patent Infringement

4.1 If the know-how developed as a result of a study undertaken under this MoU leads to a patent or patents being taken, the parties hereto shall mutually agree whether or not to apply for a patent/s and if so in which country. Patents taken, if any, will be in joint names of the two parties and the cost of taking out a patent shall be borne by CSIR-IHBT and IIT Mandi.

4.2 In the event of any claim or action being brought against either party to this MoU alleging infringement of a patent of a third party, the parties hereto shall mutually decide whether to defend the claim or not. The cost of defense against any such

claims or action shall be borne by the two parties hereto.

4.3 In the event of patents being filed, out of the research work of a student working at CSIR-IHBT for Ph.D. thesis under the sole supervision of scientist(s) from the CSIR-IHBT, the IIT Mandi shall have no claim to IPRs.

4.4 In the event of patents being filed, out of the research work of a student working at IIT Mandi for Ph.D. thesis under the sole supervision of faculty member(s) of the

IIT Mandi, the CSIR-IHBT shall have no claim to IPRs.

4.5 In the event of a patent being filed, out of the research work of a student working at CSIR-IHBT for Ph.D. thesis under the joint supervision of the scientist(s) and faculty member(s) of the IIT Mandi, the cost of patenting and any monetary benefits accruing subsequent of filing and maintaining the patents will be shared by CSIR-IHBT and IIT Mandi on equal basis.

4.6 In the event of a patent being filed out of the collaborative research work between the faculty members of IIT Mandi and the scientists of CSIR-IHBT the cost of patenting and monetary benefits accruing subsequent to filing and maintaining of the patents will be shared by IIT Mandi and CSIR-IHBT on equal basis.

5. Arbitration: Except as herein before provided, any dispute arising out of this MoU, the same shall be referred to Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi and the decision of such (DIAC), as the case may be, shall be final and binding on both parties. The venue of arbitration shall be at New Delhi

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and the arbitration proceedings shall take place under the Indian Arbitration and Conciliation Act, 1996.

It is agreed that the progress of this MoU shall be monitored by the Review Committee comprising of Vice-Chancellor, IIT Mandi and Director, CSIR-IHBT through periodic meetings.

This MoU is valid for a period of 5 (five) years starting from 13.04.2021 subject to further extension on mutually agreed upon terms and conditions. Any mid-term change/alteration in the terms and conditions of MoU as suggested by the Review Committee shall also be deemed to be valid for both the Institutions. The MoU may be terminated if any of the parties wants to withdraw from it. However, the Ph.D. students admitted under the MoU shall be governed by the same terms and conditions as prevailing at the time of signing of this MoU, till the completion of their degrees under the ordinances of IIT MANDI.

In witness whereof the parties hereto have duly executed the MoU on this 13th day of April, 2021.

Signed for and on behalf of CSIR-IHBT, Palampur

(Dr. Sukhjinder Singh) हिमालय जैवसंपदा प्रौद्योगिकी संस्थान
Coordinator, BD (शि. P.-Institute of Himalayan Bioresource (Dr. Nefikata Krishnan)
CSIR-IHBT, Palampur

(H.P.)

Dean (SRIC & IR)

Signed for and on behalf of **IIT Mandi**

IIT Mandi Kamand - 175005, TUTE OF

H.P., India

Witness

(Dr. Arnav Bhavsar)

Assiciate Dean (SRIC)

IIT Mandi, H.P.

Witness

(Dr. Ram Kumar Sharma) Coordinator Academic/Research

Affairs Studies

CSIR-IHBT, Palampur

(Alok Sharma)

Controller of Administration CSIR-IHBT, Palampur

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Prime Minister's Research Fellows (PMRF) Scheme:

The Prime Minister's Research Fellows (PMRF) Scheme has been designed for improving the quality of research in various higher educational institutions in the country. With attractive fellowships, the scheme seeks to attract the best talent into research thereby realizing the vision of development through innovation. The scheme was announced in the Budget 2018-19. The institutes which can offer PMRF include all the IITs, all the IISERs, Indian Institute of Science, Bengaluru and some of the top Central Universities/NITs that offer science and/or technology degrees. The candidates will be selected through a rigorous selection process and their performance will be reviewed suitably through a national convention.

PMRF Granting Institutes:

- 1. Aligarh Muslim University
- Banaras Hindu University
- 3. IISc Bangalore
- 4. IISER Berhampur
- 5. IISER Bhopal
- 6. IISER Kolkata
- IISER Mohali
- IISER Pune
- 9. IISER Thiruvananthapuram
- 10. IISER Tirupati
- 11. IIT Bhilai
- 12. IIT BHU
- 13. IIT Bhubaneswar

- 14. IIT Bombay 15. IIT Delhi 16. IIT Dharwad
- 17. IIT(ISM) Dhanbad
- 18 IIT Gandhinagar 19 IIT Goa
- 20. IIT Guwahati
- 21. IIT Hyderabad
- 22. IIT Indore

- 23. IIT Jodhpur 24. IIT Kanpur 25. IIT Kharagpur 26. IIT Madras
- 27. IIT Mandi
- 28. IIT Patna 29. IIT Roorkee
- 30. IIT Ropar 31. IIT Jammu
- 32. IIT Palakkad 33. IIT Tirupati
- 34. Jamia Millia Islamia
- 35. Jawaharlal Nehru University
- 36. National Institute of Technology, Tiruchirappalli
- 37. University of Delhi
- 38. University of Hyderabad

Eligibility and Application Procedure:

Completed or be pursuing the final year of four (or five) year undergraduate or five year integrated M.Tech. or five year integrated M.Sc. or 2 year M.Sc. or five year

undergraduate-postgraduate dual degree programs in Science and Technology streams from any other Institute/University recognized in India. These candidates should have secured a minimum CGPA of 8 or equivalent apart from a minimum score of 650 in the respective GATE subject.

They apply for Ph.D. programme in one the PMRF granting institutes and get selected in the programme.

The PMRF granting institute, which has admitted the student in the Ph.D. programme
makes a strong recommendation, and uploads the relevant information at the PMRF
web-portal. Student can only get admission in those institutes where he/she has got
selected and wishes to seek admission

 The metrics on which the candidates will be judged will include (but not restricted to): research exposure, publications, performance in international competitions (like Math. Olympiad, ACM ICPC Programming Contest), grades and recommendation letters.

Within 12-18 months of admission into the PhD programme, the progress of the candidate will be reviewed by the PMRF panel, and continuation of PMRF will be subject to candidate's satisfactory performance. A strong research proposal is mandatory, and a clear assessment from the host institution in support of continuation of PMRF status. Due weightage would be given to publication in reputed journals/conferences.

Deliverables:

At the time of joining, each Fellow shall be given deliverables to be achieved each year. This will be decided by the assigned guide and the department which the fellow is joining.

The deliverables are to be designed keeping in view the topic selected by the fellow.

There shall be an annual review of PMRF fellows. The candidates would continue to avail the fellowship in the next year only if their performance is found satisfactory by the review committee. The review will be a rigorous process, and can be done in the form of a national convention (for each discipline). The nodal institute for the discipline may form multiple expert panels to evaluate the progress of the PMRF fellows. Each such panel can have 3-4 members, with at most 2 members from the host institution

Each fellow is expected to teach once a week in a neighbourhood ITI/Polytechnic/Engineering College, as per modalities approved by the Government.

If the deliverables are not achieved, the fellowship could be brought down to the institutional fellowship level or even discontinued.

Fellowship:

The following would be the fellowship for the PMRFs:

Year	Amount (Rs
Year 1	70,000
Year 2	70,000
Year 3	75,000
Year 4	80,000
Year 5	80.000

Apart from this, each Fellow would be eligible for a research grant of Rs. 2 Lakhs per year (total of Rs 10 Lakhs for five years).

The tenure of fellowship will be till the end of the 4th year of PhD for students from integrated courses and till the end of the 5th year of PhD for B. Tech. (or equivalent) students. For students selected through the lateral entry channel, the PMRF scholarship and obligations will continue only for the remainder of the student's stay in the doctoral program. No retrospective payment will be made.

Industry participation in the PMRF program would be explored through CSR funding or otherwise to enable industry to sponsor Fellows.