

MEMORANDUM OF UNDERSTANDING

BETWEEN



Punjabi University, Patiala

Punjab-147002, India

Established under the Punjab Act No. 35 of 1961

AND



CSIR- Central Scientific Instruments Organisation

Sector- 30 C, CHANDIGARH - 160030

18th February, 2022

This Memorandum of Understanding (MoU) is entered into on **18th Day of February Two Thousand and Twenty Two** at Chandigarh. This Memorandum of Understanding (MoU) sets for the terms and understanding between:

BY and BETWEEN

: (i) **Council of Scientific & Industrial Research**

(CSIR), a Society registered under the Societies Registration Act (XXI of 1860) having its Registered Office at Anusandhan Bhawan, 2, Rafi Marg, New Delhi-110 001 through its constituent laboratory Central Scientific Instruments Organization (here-in- after referred to as '**CSIR-CSIO**') represented by the Director, having its office at Sector 30 C, Chandigarh-160030.

(ii) **Punjabi University, Patiala (here- in-after referred to as 'PUP' or 'PUP, Punjab')**, Punjab, a state University, is a premier Academic Institute of National Importance functions under the control of the Government of Punjab. It is engaged in the field of education and research in multiple disciplines such as humanities, social sciences, arts & culture, sports, basic & applied sciences, and engineering & technology.

1. Preamble

- **CSIR-CSIO**

CSIR-CSIO is a premier R&D organisation engaged in undertaking research, design and development of scientific & industrial instruments. CSIR-CSIO is also a participating lab for M.Tech. and Ph.D programme under Academy of Scientific & Innovative Research (AcSIR). CSIR-CSIO also runs skill development programs in the area of Precision Manufacturing and Mechatronics and Industrial Automation at CSIO-Indo-swiss training centre, since 1963.

- **PUP, Punjab**

PUP, Punjab is one of the premier Institutions of Higher Learning since 1962, Now the university caters to the educational needs of nine Districts of Punjab. Over the time since its inception, the University has evolved into a multi-faceted and multi-faculty educational institution for the promotion of higher education and research in Sciences, Engineering & Technology,

Humanities, Arts, Languages, Technology and many more.

Areas of Common Interest

Both the Institutes have agreed today, i.e. on 18th February 2022 to enter into a scientific collaborative understanding on the terms and conditions enumerated in this MoU.

For the purpose of this MoU, the general areas of interest common to both organizations are mentioned below. CSIR-CSIO and PUP, Punjab (both also referred as institutes/institutions) shall seek to promote:

- i. Exchange of Staff members, Research Scholars, Postgraduate Students (PG), Undergraduate Students (UG), Post Graduate Diploma Students (PGD) and Research Fellows etc.) in relation to pursuing academic and research programs for the mutual benefit of both the institutions. This includes joint supervision of B. Tech., M. Tech. and Ph.D. scholars as per the governing rules of both the Institutes.
- ii. Sharing of expertise, domain knowledge and available facilities in mutually agreed research areas (viz. COE's, IoT, IIoT, Product Design, Renewable Energy, Prototyping, Mechatronics and Industrial Automation, Physics, Photonics, Optics, Chemistry, Agrionics, Biomedical, Material Science, Nano science and Nano technology, Electronics, Computer Science, Cyber Security, Data Science, Human Biomechanics, Rehabilitation, Physiotherapy and Mechanical Engineering and any other areas of common interest in Engineering and Technology and applied Sciences for basic research as well as for research and development of techniques, instrumentation etc.
- iii. Promoting interaction among the scientists, faculty members and research scholars of both the organizations by exchange visits and/or organizing brainstorming sessions to identify, formulate and pursue joint research programs including externally funded schemes, consultancy activities in emerging thrust areas of mutual interest.
- iv. Promoting cooperation among working groups on mutually agreed research areas and collaboration in Teaching under AcSIR (Academy of Scientific & Innovative Research).
- v. Exchange of Academic and Research Material for joint publications and Intellectual Property (IP) rights. Such IP would acknowledge joint inventorship of personnel/ students of both the institutions, as applicable.
- vi. Exchange of students for Summer/Winter Internships for UG students and dissertation work of PG and Ph.D students.
- vii. Technology Management and Technology Transfer.

any other area of mutual interest.

- ix. Provision of cultural and intellectual enrichment opportunities for staff and students of both the institutions.
- x. Any other areas of mutual interest.

2 Areas of Cooperation

The areas of cooperation will be defined and modified from time to time by the Coordination Committee set up for the purpose.

The identified areas of cooperation / activities under this MoU will include:

- (A) Staff exchange activities covering visits to either institution for any of the following purposes:
 - i. Undertaking joint research projects.
 - ii. Sharing of facilities in the existing Centre of Excellences (COE's) / Laboratories/ Libraries for mutual benefits
 - iii. Attachment of staff for the purpose of curriculum development & review, attending courses and upgradation of teaching & research skills.
 - iv. Participation in seminars, colloquia and other academic discussions
 - v. Contributions to teaching programs
 - vi. Co-supervision of UG projects, PG and PhD research work.
 - vii. Conduct of study tours and joint consultancy and research work.
 - viii. Facilitation for pursuing academic courses (Under graduate, postgraduate, doctoral.) for CSIR-CSIO employees at Punjabi University Patiala, Punjab.
 - ix. Skill upgradation training programmes.
 - x. Faculty development programmes.
- (B) Student exchange activities (for UG, PG and Ph.D. programmes), covering visits to either institution for any of the following purposes:
 - i. Participation in Research
 - ii. Internship for PUP, Punjab Students at CSIR-CSIO
 - iii. Internship for AcSIR students at PUP, Punjab
 - iv. Internship for CSIO-ISTC students at PUP, Punjab
 - v. Carrying out experiments by the students across the laboratories of both the institutes
- (C) Exchange of relevant Academic Materials will be carried out subject to mutual agreement of the institutions.

3. Implementation of Cooperation / Coordination Committee

Implementation of cooperation based on this MOU shall be dealt with between the relevant staff and Divisions/Departments of both the Institutions. Wherever necessary, a specific plan shall be worked out for each activity setting forth

detailed arrangements for collaboration. Such plans shall be subject to approval of the appropriate authorities of each institution. To facilitate development of such plans, each institution shall nominate its staff to coordinate activities arising under this agreement.

The following will constitute the Coordination Committee to monitor and review the collaborative program between the two institutions:

- i. Director, CSIR-CSIO or his nominee(s)
- ii. Vice Chancellor, Punjabi University Patiala or his nominee(s)
- iii. Dr. Neelesh Kumar, Coordinator from CSIR-CSIO
- iv., Coordinator from Punjabi University Patiala

The coordination committee shall do the following:

- Consider new R&D proposals for joint collaboration, their implementation, financial arrangements etc.
- Review the identified programmes and consider the modification in the areas of co-operation between both the Institutes.
- Consider continuance of the MoU.

4. Protection of IPR

In broad terms, the IPR issues will be based on the following:

1. All research results and foreground information as well as foreground intellectual property rights, generated during the joint research work, whether or not legally projected, shall be owned jointly by CSIR-CSIO and PUP, Punjab.
2. CSIR-CSIO and PUP, Punjab shall consult each other before publishing any research results and foreground information generated during the joint research to ensure that no proprietary information is released and that foreground intellectual property rights are not jeopardized. Post consultation, any such publication proposal, shall be deemed approved in the event there is no objection from the party seeking to oppose within a period of thirty (30) days of receipt of a content(s) of such a publication, both the parties agree to suitably modify/ amend the content thereof in order to avoid disclosure of confidential information or patentable material. In any case, a party may delay publication till a period of ninety (90) days or the filing of a provisional application, whichever is earlier. CSIR-CSIO and PUP, Punjab shall confer and consult each other regarding preparing, filing prosecuting, maintaining of Intellectual Property Rights applications

including patent applications covering research results and foreground information generated during the joint work.

3. CSIR-CSIO and PUP, Punjab shall not disclose any research result and foreground information, generated during the joint research, to any third party without seeking prior written permission from each other. Any scientific information exchanged / shared between the parties for joint research / supervision will not be transferred to a third party in any form without the consent of the parties.

5. Terms of Collaboration

- i. The Parties agree that the consideration for entering into this MOU and engaging in Areas of Cooperation shall not be monetary in nature but the mutual benefits arising in terms of learning and research.
- ii. Each Party shall bear its own costs in connection with the execution of this MOU and in relation to the fulfillment of its obligations hereunder, unless otherwise agreed upon.
- iii. CSIR-CSIO and PUP, Punjab agree to enter into collaboration on research & development; faculty, staff and student exchange with pre-defined objectives, scope of work and mutual obligations, terms & conditions, financial arrangements, Intellectual Property Rights and similar contractual obligations.
- iv. In so far as any third party is concerned, this MoU will be valid only when a letter from both the parties is enclosed specifically expressing concurrence and an officer identified by name, representing the respective institutes and responsible for the specified project.
- v. In case either party wins a joint consultancy project by projecting this MoU, a liability is created immediately in respect to royalty/premium due to either party. Either party shall concur with the liability. The exact amount of liability will be arrived at after mutual consent by both the parties based on the guidelines of the project granting agency i.e. DST/DSIR/CSIR/MHRD/UGC etc.
- vi. In case either party decides to permit use of its equipment, facilities and/or manpower to the other for executing a project, the scope of such a project, cost estimates of the project, modalities of payment and all other related aspects would be worked out jointly by CSIR-CSIO and PUP, Punjab through separate proposals as per the guidelines of the project granting agency i.e. DST/DSIR/CSIR/MHRD/UGC etc.
- vii. Participating Staff and Students involved in any activities under this MoU must adhere to laws of the country and rules & regulations of the host

institutions.

- viii. Ownership of any research findings shall be vested in both the parties through this MoU and any publications regarding the same shall only be possible after prior approval from both the parties.

6. Disclaimer

This MoU is not intended by CSIR-CSIO and PUP, Punjab to constitute, create, give effect to, or otherwise recognize a joint venture, agency, partnership or formal business organization of any kind. Each party hereto shall act as an independent entity and neither shall act as an agent of either organization for other purposes. Neither party has the authority to bind the other party.

7. Non-exclusive

The agreement reflected by the provisions of this MoU is non-exclusive in nature and both the parties can enter into cooperative arrangements with other parties to suit their organisational needs.

8. Confidentiality

The parties understand that in the course of their association, they shall have access to confidential information provided by the other party. Accordingly, the parties agree that such information shall be maintained in the strictest confidence and trust, except such information which, by its nature, is not confidential or which is in the public domain or which the party comes to know about other, without violation of any law or legal obligation, provided that such party may be entitled to disclose such information, if legally required to be disclosed to a Competent Authority. Failure to maintain confidentiality shall entitle the affected party to terminate the MoU.

9. Period of Validity

The MoU would be valid for a period of **Ten (10) years** from the date of signing by the parties. At the end of validity period of the MoU, a fresh MoU with similar/modified terms may be considered for the renewal.

10. Reviews

The MoU shall be reviewed periodically by both the parties and additions/deletions can be done with mutual consent.



11. Termination

The MoU can be terminated by either party after giving one month's written notice to the other party, subject to fulfilment of commitments already agreed upon. Provisions of this MoU shall continue to apply to ongoing activities until their completion.


12. Understanding

The MoU constitutes the understanding between the parties hereto. Except as otherwise provided herein, no addition, amendment or modification of this MoU shall be effective unless it is in writing and signed by both parties by their respective authorized signatories.


13. Resolution of disputes

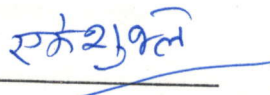
In the event any dispute or conflict of interest arising in the implementation of the MOU endeavor shall be made to resolve such dispute by way of mutual discussion between the parties.

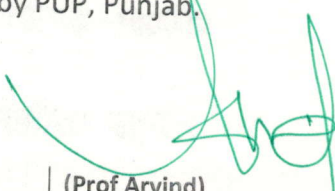
The undersigned, duly authorized, have signed this Memorandum of Understanding on **18th February 2022**. It has been executed in two copies, which are equally valid. One copy is retained by CSIR-CSIO and the other by PUP, Punjab.


 (Prof. Anantha Ramakrishna)
 Director
 Central Scientific Instruments Organisation
 (Council of Scientific and Industrial Research)
 Sector 30-C, Chandigarh - 160 030

Witness

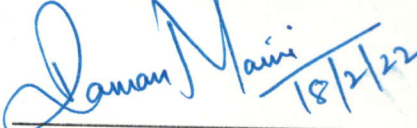
1. 


2. 


 (Prof Arvind)
 Vice Chancellor,
 Punjabi University, Patiala



Witness

1.  18/2/22

2.  18/2/22