

Memorandum of Understanding (MoU)

For

Joint Research & Academic Collaboration

between

PUNJABI UNIVERSITY,
Patiala- 147002, Punjab

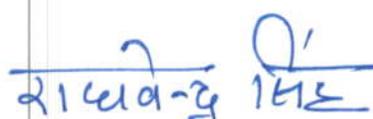
and

INDIAN INSTITUTE OF REMOTE SENSING
Indian Space Research Organization (ISRO)
Dept. of Space, Govt. of India,
4, Kalidas Road, Dehradun, 248001
Uttarakhand

Signed on this day of



Prof. Arvind
Vice-Chancellor,
Punjabi University, Patiala
Patiala-147002



Dr. Raghavendra Pratap Singh
Director
Indian Institute of Remote Sensing,
Indian Space Research Organization
Dehradun - 248001

1. PREAMBLE

NOTING that the Indian Institute of Remote Sensing (IIRS) and Punjabi University, Patiala (PUP), having an abiding interest in the capacity building to perform cutting-edge research in the science and its applications, has agreed to set up a research and academic exchange program. This collaboration involves all departments of PUP and IIRS, and the focus can be extended to other areas based on mutual interest.

2. PARTIES

2.1 Executing party:

Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO) under Dept. of Space, Govt. of India, Dehradun, Uttarakhand.

2.2 Collaborating party:

Punjabi University, Patiala (PUP)

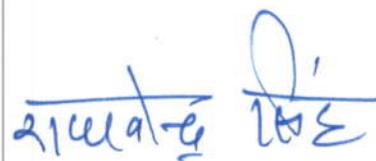
3. AUTHORIZED SIGNATORIES

The authorized signatory for IIRS is the Director, IIRS, and for the PUP, it shall be the Dean Academic Affairs.

4. FUNCTIONARIES AND CONTACT ADDRESSES

4.1 Indian Institute of Remote Sensing

S.no.	Name	Contact address	Phone	E-mail
4.1.1	Dr. Raghavendra Pratap Singh	Director, IIRS	0135-2744583	director@iirs.gov.in
4.1.2	Dr. Pramod Kumar	Dean Academics IIRS	0135-2524135	dean@iirs.gov.in
4.1.3	Dr. Hari Shankar Srivastava	Group Head, PPEG IIRS	0135-2524106	ppeg@iirs.gov.in



4.2 PUNJABI UNIVERSITY, PATIALA (PUP):

S.no.	Name	Contact address	Phone	E-mail
4.2.1	Dr. Ashok K. Tiwary	Dean Academic Affairs, Punjabi University, Patiala, 147002	0175-5136150	daapup@pbi.ac.in
4.2.2	Dr. Anup Thakur	Head, Department of Physics Punjabi University, Patiala, 147002	0175-5136163 (O) 9417110095(M)	head_physics@pbi.ac.in
4.2.3	Dr. Karamjit Singh	Assistant Professor, Department of Physics Punjabi University, Patiala, 147002	9464077434	dhaliwalkaramjit@pbi.ac.in

All the correspondence on day-to-day matters during the MoU will be between respective focal points identified in the above tables, as per the rules of both organizations.

5. EFFECTIVE DATE

5.1 Commencement:

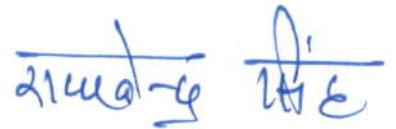
The effective date of commencement of the MoU will be the date of signing the MoU by IIRS and PUP.

5.2 Duration:

This MoU is valid for five years from the date of commencement. If further extensions are required, both parties shall have mutual consent.

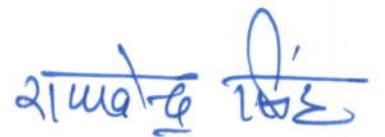
6. SCOPE OF COLLABORATION

6.1 IIRS and PUP shall collaborate in joint research areas in science and its applications. Interested faculty members/ researchers from either institute can identify the research problem. It is envisaged that there will not be any transfer of funds under the purview of the collaboration. However, PIs and individual scientists may seek any financial support to students/researchers



from either institute for field visits or other academic causes only for the intended collaborative research from their resources as per their respective host institute rules.

- 6.2 IIRS and PUP shall exchange students/researchers for training/education/research at respective centres subject to the rules and regulations of the host institute.
- 6.3 IIRS students/researchers/staff working at IIRS, Dehradun, who wish to register for Ph.D. at Punjabi University, Patiala should be eligible for Ph.D. program according to Ph.D. ordinances of Punjabi University, Patiala.
- 6.4 IIRS students/researchers/staff shall register for Ph.D. in departments relevant to areas of research interest, hence they will have to clear the Ph.D. coursework examination conducted by the relevant department of Punjabi University, Patiala. The candidate is free to attend coursework classes either at Punjabi University, Patiala or at IIRS, Dehradun.
- 6.5 Syllabus (also including research methodology paper) for Ph.D. coursework shall be provided by the relevant Head of department of Punjabi University, Patiala, where candidate wants to register for Ph.D.
- 6.6 Evaluation of internal examination shall be conducted by IIRS, Dehradun and submitted to the relevant department of Punjabi University, Patiala as per rules of Punjabi University, Patiala. Coursework final examination will be conducted by Punjabi University, Patiala at Patiala.
- 6.7 As per Ph.D. Ordinances of Punjabi University, Patiala, "*If there is a collaborative research work being carried out by any Department of the University and an outside institution and if the major work of the collaborative research work is being done in the outside institution, then the Supervisor shall be from that Institution and the Co-supervisor shall be from the relevant Department of the University*". This condition will also be applicable on present MoU.
- 6.8 Ph.D. students working at Punjabi University, Patiala, may also be allowed to work at IIRS, Dehradun, through joint supervision with IIRS scientists (as per the policies and norms of IIRS, Dehradun).
- 6.9 UG/PG students of Punjabi University, Patiala, will be allowed a 3-10 months internship at IIRS, Dehradun (per the policies and norms of IIRS, Dehradun).
- 6.10 Both institutes, with mutual understanding, can start new research initiatives without any financial implications.



7. DELIVERABLES

As described in the scope of the respective academic and research collaboration, attempts will be made to publish the research output in reputed Indian and foreign journals, seminars, reports, and atlases, as the case may be.

8. ROLE AND RESPONSIBILITIES OF EACH PARTY

8.1 Role and Responsibilities of IIRS:

8.1.1 To provide the necessary support to carry out research and academic work at IIRS and provide essential guidance to the faculty or students of PUP.

8.1.2 To invite faculty and students of PUP to participate in the User Meet of IIRS.

8.2 Role and Responsibilities of PUP:

8.2.1 To provide the necessary support to carry out research and academic work at PUP and provide essential guidance to the faculty/researchers/students of IIRS.

8.2.2 To permit IIRS students/researchers/staff to register for Ph.D. in the PUP with the exemption of residential requirements. IIRS, Dehradun shall monitor the attendance of IIRS students/researchers/staff during the coursework, and the same will be recognized by PUP.

9. SCHEDULE OF PRICE/FUNDS TRANSFERS

It is envisaged not to transfer any funds from either side.

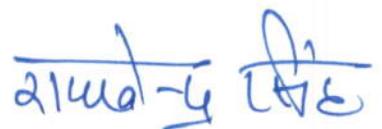
10. RESEARCH MONITORING

From time to time, the collaborative research will be monitored by a joint team consisting of the following officials

- 1) Dean (Academics), IIRS,
- 2) Group Head, Programme Planning and Evaluation Group (PPEG)
- 3) Group Director/Head of the concerned group
- 4) Head of the concerned department
- 5) Representative(s) of PUP.

11. CHANGE IN SCOPE OF COLLABORATION

Any further modifications in the scope of collaboration, if required, would be through amendments with mutual consent in writing.



12. FORCE MAJEURE

Neither IIRS nor PUP shall be considered in default in performance of the obligations under this MoU, if such performance is prevented or delayed by events such as, but not limited to, war, hostilities, revolution, riots, civil commotion, strikes, lock-outs, conflagrations, Epidemics, accident, fire, wind, flood, drought, earthquake, or ordinance of any Government or any subdivision thereof, or because of any act of God, or for any other cause beyond the reasonable control of the party affected. Then the party so affected shall promptly notify the other party in writing specifying the nature of the force majeure and the anticipated delay in the performance of MoU, and as from the date of that notification, IIRS or PUP may at its discretion either terminate the MoU forthwith or suspend the performance of the contract for a period of not exceeding six months. If at the expiry of such period of suspension any of the reasons remain, IIRS and the PUP may either agree to a further period of suspension or treat the MoU as terminated.

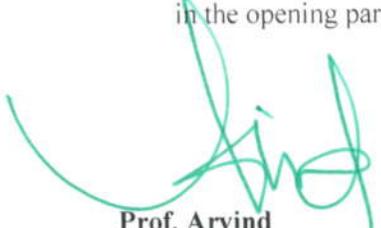
13. RESOLUTION OF DISPUTES

- i. This MoU shall take effect and be constructed in accordance with the Law of India and be subject to the jurisdiction of the courts at **Patiala/Dehradun**.
- ii. **If there is any dispute both the parties may resolve the dispute amicably, and if not resolved the MoU shall be terminated immediately and there shall be no financial liability.**

14. PREMATURE TERMINATION OF MoU

Either party may terminate this MoU with written notification, signed by a designated official of the party initiating termination. Such notification must be given at least six months in advance of the effective date of termination.

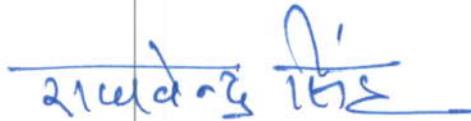
IN WITNESS WHEREOF, the Parties hereto have caused this MoU through their respective representative/authorized signatories on the day, the month, and the year herein before mentioned in the opening para of this MoU


Prof. Arvind

Vice-Chancellor

Punjabi University, Patiala

Patiala-147002


Dr. Raghavendra Pratap Singh

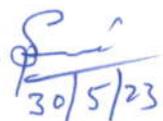
Director

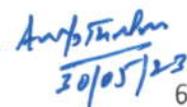
Indian Institute of Remote Sensing,

Indian Space Research Organization

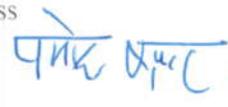
Dehradun - 248001

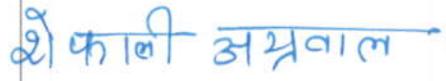
Witness

1. Dr. Sanjiv Puri - 
30/5/23

2. Dr. Anurag Thakur - 
30/05/23
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Witness

1.  पंकज कुमार
H.I. 30, 2, 23

2.  शिकहा अग्रवाल