MEMORANDUM OF UNDERSTANDING

BETWEEN

INDIAN INSTITUTE OF TROPICAL METEOROLOGY, PUNE MINISTRY OFEARTH SCIENCES, GOVT. OF INDIA



AND

COTTON UNIVERSITY, GUWAHATI



FOR

Scientific collaboration in STUDIES ON Lightning, Thunderstorm and Related Phenomena

le.s. mihih





MEMORANDUM OF UNDERSTANDING

BETWEEN

Indian Institute of Tropical Meteorology (IITM), Pune, The Ministry of Earth Sciences, Govt. of India

And

Cotton University, Guwahati

For

Scientific collaboration in STUDIES ON "Lightning, Thunderstorm and Related Phenomena,"

This Memorandum of Understanding (hereinafter referred to as MoU) is entered into on Lebynary 202 BETWEENDirector, IITM, Pune(hereinafter referred to as "FIRST PARTY"), an Autonomous Body under the Ministry of Earth Sciences, Govt. of India, situated at Pashan, Pune-411 008

AND

Prof B. C. Goswami, Vice Chancellor, Cotton University (hereinafter referred to as "SECOND PARTY"), situated at Panbazar, Guwahati, 781 001

This MoU is towards recognizing the areas of mutual interest for relevant scientific, technical and social fields of education in science and technology, research, dissemination of knowledge and training to under graduate and post graduate students along with small duration project work if required. The Parties are desirous of entering into this MoU for University-Institute interaction to declare their respective intentions and to establish the basis of cooperation and collaboration between the Parties upon the terms as contained herein.

Prof. G. C. Wary

lis. Nihil





I. PREAMBLE:

Indian Institute of Tropical Meteorology (IITM) Pune is an autonomous institute, under the Ministry of Earth Sciences (MoES), Govt. of India. IITM is a premierresearch Institute to generate scientific knowledge in the field of meteorology and atmospheric sciences that has potential application in various fields such as agriculture, economics, health, water resources, transportation, communications, etc. It functions as a national center for basic and applied research in monsoon, weather and climate.

Cotton University (erstwhile Cotton College), a premier institute of higher education in North East has been playing a pivotal role in academia, particularly in the N-E region as well as in the nation since its inception year 1901. In the year 2017, the Government of Assam upgraded this premier institute to a full-fledged University as recognition of its century old glory and academic excellence. The University continues being a vibrant space for academic activities and looks forward to the introduction of innovative programs in academics/research for both students and faculty to cater to the requirements in the contemporary challenging global scene in education.

II. Role and responsibilities of CU, Guwahati and IITM, Pune.

- IITM will be installing a MRR at CU campus along with accessories for observations of vertical profiles of temperature and humidity.
- 2. CUwill provide basic infrastructure required such as electricity and security etc. toMulti-Channel Microwave Radiometer (MMR) at Physics Department, in its campus. Further any assistance in installation, as may be required will be provided by CU. CU will take active part in the measurements to be made with MMR.
- Department of Physics, CU would interact with IITM and schedule measurements
 cycle as and when required. CU would inform the problems related to operation, if
 any, to IITM as and when detected.
- 4. If IITM wishes to establish an Atmospheric Electricity Observatory at CU, Guwahati, CU will, to the degree that it can, extend the necessary logistical

Post G. C. Wary

les. No like





support. Faculty and Students of CU may also participate in the measurements, in case they express their interest in the work.

- 5. The ownership and all rights on instruments and facilities installed by IITM will be owned by IITM.
- 6. Collaborating scientists of IITM and CUwill take part in data acquisition (using IITM facilities at CU, analysis and interpretation of data and publication of research papers under joint authorship. Papers/project reports published using data collected at CUshould acknowledge the contributions of both CUand IITM scientists.
- 7. IITM Scientist(s) may visit CUas may be needed for measurements, maintenance and troubleshooting.
- 8. CUwill provide necessary facilities to IITM staff during the visit to CUwith prior information.
- 9. IITM will provide accommodation facilities to CUstaff and students during the visit to IITM with prior information. Students accommodation will be subject to the availability of the hostel facility and will be limited to the number of days as decided by the IITM guest house and hostel management committee.
- 10. As per data policy all rules shall be applicable to the Faculty from CUfor data requirements from IITM, Pune.
- 11. Faculty from CUwill get data by requesting to IITM for ongoing experiments and may be used for academic purposes (like in publication of PGstudents projects and PhD scholars research papers).
- 12. IITM faculty may be invited to CUas adjunct/visiting faculty to deliver lectures on syllabus related topics and topics of current interestinthe Atmospheric Electricity and Atmospheric Science. The schedule for the same may be finalized by mutual consent. In case of syllabus related topics, CUwill provide remuneration to IITM faculty as per rules and regulation of CU.

Port G.C. Wary

le.s. Notial





- 13. IITM will provide the Training to CUstaff/students about the instruments of atmospheric electricity. Training shallbe subject to the evaluation by the Academic cell of IITM on the duration, facilities provided for training and on the number of attendees. Also students of CUare encouraged to do project work with IITM Scientists through the regular application procedure for the short term projects coordinated by the Academic Cell.
- 14. Technical and administrative liasion shall be maintained between the CU and IITM through Programme Monitoring Group (PMG), Director of Research and others decided by the University administrations through Project Monitoring Cell (PMC), Dr. Rahul Mahanta, Dr. Anup Kumar Nath (CU side) and Dr S.D. Pawar, Sh. V. Gopalakrishanan, Sh. Manoj Domkawale (IITM Side) to facilitate the joint activity.
- 15. In addition to collaboration in observational aspects of 'lightning, thunderstorm and related phenomena', IITM will also facilitate collaboration between largerpool of modeling expertise available at IITM and Cotton University scientists on modeling and prediction aspects of 'lightning, thunderstorm and related phenomena' of common interest.
- 16. Any other areas of co-operation as agreed to by the Parties from time to time.

III. NOW, THEREFORE, IT IS HEREBY AGREED BY IITM, Pune AND COTTON UNIVERSITY, GUWAHATITO SIGN THIS MoU.

(i) Period of MoU-

This MoU comes into effect from the date of its signing and will remain in force for three years. Its validity can be extended by mutual agreement of the parties.

(ii) The progress of the collaboration and scientific output may be reviewed as and when required by Director IITM, Pune and Vice Chancellor, CU.

(iii) Broad Objectives-

CUand IITM hereby agree to collaborate at an academic level in activities related to Atmospheric Electricity.

Port S.C. Wary

le s. No liah





Confidentiality clause

The sharing and dissemination of technical information and know-how generated or acquired in the course ofthis research shall be worked out jointly by IITM and CU in keeping with the national interests and overall objectives of the programmes.

Ownership of equipment-

The expenditure on maintenance of the equipment belonging to IITM shall be incurred by IITM. Since the property ownership rights for the equipment would remain with IITM, the annual depreciation as well as insurance charges on these equipments shall be borne by IITM.

TERMINATION

In case of breach of trust, the MoU may be terminated by giving one month written notice of termination.

No liability clause

All activities would be normally carried out with due professional care and declared safety precautions, while handling of different technologies, instruments, equipment and substances. However, neither IITM nor CUshall claim from the other, any compensation for any loss or damage whatsoever resulting due to implementation of any technology, the use of any instruments or equipment or handling of any substance at the premises of IITM, the CUor any other potential premises developed under this MoU.

IV. SETTLEMENT OF DISPUTES

Any difference or dispute between the Parties concerning the interpretation and/or implementation and/or application of any of the provisions of this MoU shall be settled amicably through mutual consultation and/or negotiations between the Parties. In case, the dispute cannot be resolved mutually, either side may take recourse to arbitration by designating some responsible and impartial authority/person as sole arbitrator to settle dispute/s may be.

Port. G. C. Wary





V. REVISION, VARIATION AND AMENDMENT

Either Party may request in writing a revision, variation or amendment of this MoU. Any such revision, variation or amendment agreed to by the Parties shall be in writing and shall form part of this MoU. Such revision, variation or amendment shall come into force on such date as may be determined by the Parties.

This MoU being duly authorized bythe respective organizations with the witness and signature on this MoU on the date.

SIGNATURES AND SEAL OF THE ORGANIZATIONS

Indian Institute of Tropical Meteorology (IITM), Pune (FIRST PARTY):

प्रो रवि. एस. नन्जुनडैया/Prof. Ravi S. Nanjundiah निदेशक / Director

lis. Mili-भारतीब उच्चादेशीय मौसम बिज्ञान संस्थान (1) (Prof. Ravi S. Nanjundiah) INDIAN INSTITUTE OF TROPICAL METEOROLOGY

Director, IITM, Pune

डॉ. होमी भाषा तेड / Dr Hemi Bhabha Road, पाबान, पूने / Pashan, Pune

(2) (Dr. S.D. Pawar)

Representative witness of IITM, Pune

AND

Cotton University, Guwahati (Second party):

Vice Chancellor, Cotton University, Guwahati

earch & Development gare (2) Prof G. C. Wary

Dean, R&D, Cotton University, Guwahati (Representative witness)