



**MEMORANDUM OF UNDERSTANDING  
BETWEEN**



**Department of Physics,  
Bharati Vidyapeeth's  
Dr. Patangrao Kadam Mahavidyalaya, Sangli**

**AND**



**Department of Physics,  
School of Science,  
Sanjay Ghodawat University, Kolhapur**

**For**

**Scientific Collaboration in the study of Space and Atmospheric Science**



**Department of Physics, Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli, situated at Sangliwadi-416416 (hereinafter referred to as "FIRST PARTY").**

**AND**

This Memorandum of Understanding (MoU) is entered into on **31<sup>st</sup> March 2022** between **Department of Physics, School of Science, Sanjay Ghodawat University, Kolhapur** (hereinafter referred to as "**SECOND PARTY**") state private university, situated at Kolhapur-Sangli Highway, Atigre, Kolhapur, Maharashtra-416 118.

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 of project work. The Parties are desirous of entering into this MoU for Department- Department interaction to declare their respective intentions and to establish the basis of cooperation and collaboration between the Parties upon the terms as contained herein.

#### **I. PREAMBLE:**

Bharati Vidyapeeth's Dr. Patangrao Kadam Mahavidyalaya, Sangli has taken a leading role in introducing the certificate course on Space and Atmospheric Science at Undergraduate level. We are also aware that the Sanjay Ghodawat University offers Post graduation Program in Space and Atmospheric Science and also has a well-equipped Center for Space and Atmospheric Science (CSAS) under department of Physics.

There are new challenges and avenues open in this area to do research in this multidisciplinary area of research like Meteorology, Geophysical fluid dynamics, satellite remote sensing and to find new measures to overcome the current environmental problems like depletion of the ozone layer, global warming issues, acid rains, hurricanes, tornadoes in coastal regions.

Atmospheric science is the study of the dynamics of the layers of gas that surround the Earth, other planets and moons. This encompasses the interactions between various parts of the atmosphere as well as interactions with the oceans and freshwater systems, the biosphere and



human activities. The current challenging problem of water crisis has also its solution in atmospheric science. A new area of research is involved in harnessing the water vapor present in the air.

It is very important to note that the atmospheric science is intimately connected to space science. This will provide a unique opportunity for our students to record, analyze and interpret the data collected from the space station during different periods and especially after the onset of significant celestial events.

Sanjay Ghodawat University was established as a state private university under Government of Maharashtra. Act No XL, 2017. Situated in Hatkanangale district, Kolhapur, it was formerly known as Sanjay Ghodawat Group of Institutions. The university is accredited with Grade 'A' by the National Assessment and Accreditation Council (NAAC) and the National Board of Accreditation (NBA). The University is approved by the All India Council for Technical Education (AICTE), the Council of Architecture (COA), the Pharmacy Council of India (PCI) and the University Grants Commission (UGC). It is situated in serene atmosphere amidst idyllic hills and lush green meadows to study in harmony with Nature.

The university has developed the Center for Space and Atmospheric Science in Department of Physics (School of Science) in association with the Indian Institute of Tropical Meteorology (IITM), Pune. The study of Lightning activities, thunderstorms, Weather measurements, like rain, temperature, cloud, humidity, wind, ozone, aerosol, water vapor etc. carrying in this center. In addition, measurements of solar activities are taking.

Department of Physics of Dr. Patangrao Kadam Mahavidyalaya and Sanjay Ghodawat University is involved in the regular operation of the Faculty and student exchange program. The college was established on 16<sup>th</sup> September 1985, as Arts, Science and Commerce College, Sangli, and it was renamed as Bharati Vidyapeeth Dr. Patangrao Kadam Mahavidyalaya, Sangli on 8<sup>th</sup> January 1999. The college has a spacious and beautiful building, with well-equipped laboratories, classrooms, ICT enabled classrooms, auditorium, two open stages, landscape garden and a playground. The college was granted permanent affiliation in the year 1997, by Shivaji University, Kolhapur. The college is trying to bridge disparity between the rural and urban culture with our parent institution motto, 'Social Transformation through Dynamic Education'.



Recently, UGC, New Delhi has granted two diploma courses under Community College Scheme. The college is also selected by DST, India to develop instrumentation facilities under FIST scheme. We are the proud recipients of the Best NSS unit Award of Government of Maharashtra for our substantial work through National Service Scheme.

**II. NOW, THEREFORE, IT IS HEREBY AGREED BY DEPARTMENT OF PHYSICS OF DR. PATANGRAO KADAM MAHVIDYALAYA AND SANJAY GHODAWAT UNIVERSITY, KOLHAPUR TO 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 Reports**

The progress of the collaboration and scientific output shall be reviewed once in a year by Head of the Departments alternately at Dr. Patangrao Kadam Mahavidyalaya and SGU, Kolhapur.

**(iii). Broad objectives-**

Dr. Patangrao Kadam Mahavidyalaya and SGU, Kolhapur hereby agreed to collaborate on an academic level in activities related to Project work of students and Faculty development program as well as Faculty exchange program. To conduct the collaborative research work.

**III. Role and responsibilities**

1. SGU will provide data of corresponding instruments which are installed at the Center for Space and Atmospheric Science for B.Sc. and M.Sc. Project. Students and Faculty can only publish this data with prior permission by PI from SGU, Kolhapur.



2. The SGU will provide computer access with internet to students during their project for data acquisition and help in literature search as and when it is found necessary by both parties for a smooth collaboration.
3. Collaborating scientists of Dr. Patangrao Kadam Mahavidyalaya and SGU will take part in data acquisition (using IITM facilities at SGU), analysis and interpretation of data and publication of research papers under joint authorship. Papers/project reports published using data collected at SGU should acknowledge the contributions of both SGU and IITM scientists.
4. SGU, Kolhapur will also provide the laboratory facilities for students and faculty research work on Nano Science and Material Science.
5. SGU will not provide accommodation facilities to students and staff of Dr. Patangrao Kadam Mahavidyalaya during the visit of SGU.
6. As per data policy all rules shall be applicable to the Faculty and students from the Dr. Patangrao Kadam Mahavidyalaya for data requirements from SGU, Kolhapur.
7. The SGU Faculty may be invited to Dr. Patangrao Kadam Mahavidyalaya an adjunct/visiting faculty to deliver lectures on syllabus related topics and topics of current interest in the space and atmospheric science. The schedule for the same may be finalized by mutual consent. In case of syllabus related topics, Dr. Patangrao Kadam Mahavidyalaya will provide remuneration to SGU Faculty as per rules and regulation.
8. The SGU will provide the Training to Dr. Patangrao Kadam Mahavidyalaya staff and students about the instruments of atmospheric science.
9. Technical and administrative liaison shall be maintained between the Dr. Patangrao Kadam Mahavidyalaya and SGU through Programme Monitoring Group (PMG), Dr. Sarita P. Patil Dr. Anand, D. Sawant, Dr. Rani P. Pawar and Dr. Sambhaji Pawar (SGU side) and Prin. Dr. D. G. Kanase, Dr. Dada P. Nade, Dr. Amit Supale (Dr. Patangrao Kadam Mahavidyalaya side) to facilitate the joint activity.
10. Any other areas of co-operation as agreed to by the Parties from time to time.



## **CONFIDENTIALITY CLAUSE**

The sharing and dissemination of technical information and know-how generated or acquired in the course of this research shall be worked out jointly by the Department of Physics of Dr. Patangrao Kadam Mahavidyalaya and SGU in keeping with the national interests and overall objectives of the programmes.

## **OWNERSHIP OF EQUIPMENT**

The expenditure on travel and project material shall take care by students and Faculty of Dr. Patangrao Kadam Mahavidyalaya. Since the property ownership rights for the equipment has to IITM, Pune thus, if any kind of damage from students then Dr. Patangrao Kadam Mahavidyalaya will take responsibility.

## **EARLY TERMINATION**

Present MoU may be terminated at any time upon the written mutual consent of both sides or upon any side 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. The use of any instruments or equipment or handling of any substance at the premises of Dr. Patangrao Kadam Mahavidyalaya, the SGU or 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.



## 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 by the respective organizations with the witness and signature on this MoU on the date**

### Signatures and Seal of the Organizations

**Dr. Patangrao Kadam Mahavidyalaya  
(FIRST PARTY)**

**(Dr. D. G. Kanase)**

**PRINCIPAL**

**Dr. Patangrao Kadam Mahavidyalaya,  
Sangli.-416416.(Sangliwadi.)**

**(Dr. Amit Supale)  
Coordinator, IQAC**

**(Dr. Dada P. Nade)**

**HOD, Physics  
HEAD,**

**Department of Physics  
Dr. Patangrao Kadam Mahavidyalaya  
SANGLI 416 416**

**Sanjay Ghodawat University, Kolhapur  
(SECOND PARTY)**

**(Prof. Dr. Arun Patil)**

**Vice Chancellor**

**Sanjay Ghodawat University  
Kolhapur**

**(Dr. Vivek M. Kayande)  
Registrar**

**(Dr. Anand D. Sawant)  
Dean, R & D**

**(Dr. Sarita P. Patil)  
HOD, Physics**