

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
UNIVERSITY OF PUERTO RICO AT MAYAGÜEZ
AND
THE PONTIFICAL CATHOLIC UNIVERSITY OF PUERTO RICO**

REGISTRO DE CONTRATOS
TOMO 23 PAGINA 42
CONTRATO NUM 2014-000230

THIS MEMORANDUM OF UNDERSTANDING is made by and between the University of Puerto Rico at Mayagüez (UPRM), here represented by its Interim Chancellor, Prof. Lucas Noé Avilés Rodríguez,

and Pontifical Catholic University of
Puerto Rico represented by its President, Dr. Jorge Iván Vélez-Arocho

WHEREAS, UPRM and the Pontifical Catholic University of Puerto Rico (PCUPR) have collaboratively met through the UPRM Electrical and Computer Engineering Department with Dr. Conrado M. Calzada and Dr. Dallas E. Alston to collaborate on an initiative concerning the installation of a meteorological radar on the PCUPR campus. The UPRM Electrical and Computer Engineering Department has a NSF grant in which the first part of the grant terminated in August, 2013. The Department has set up radar stations in several municipalities in Western Puerto to significantly improve the meteorological radar reception in these areas. According to the US National Weather Service, their radar located in Cayey, Puerto Rico, does not provide specific radar reception for Ponce due to the mountain range between Cayey and Ponce. UPRM is thus offering a limited opportunity to PCUPR to establish a meteorological radar facility, free of cost to PCUPR for the radar equipment and software, within the PCUPR campus. The space located on the PCUPR campus will be leased free of cost to UPRM for the installation of the radar. Similarly, the UPRM radar and related equipment located on the PCUPR campus will be leased free of cost to PCUPR. The meteorological radar station will benefit the professors and students who will be trained to operate and maintain sophisticated radar equipment. The professors and students will have access to all of the data generated from the radar. After UPRM offers basic training to PCUPR professors and interested students in meteorological radars principles the manipulation and analysis of the data will provide professors and students an excellent opportunity relating to science and engineering. PCUPR professors will also be co-authors of any publications generated from the data, in which PCUPR professors made significant contributions to the work. Perhaps the most beneficial utilization of the radar will be the safety aspects of the information. In 1985, Ponce suffered the most cataclysmic event of its history, the landslide which occurred in the community of Mameyes. The hope is that the citizens of Ponce could be notified of impending or occurring heavy rain downpour in the area. Also, the citizens could be informed of tornadoes or water spouts detected by the radar. The Department of Biology has an on-going grant from the PR Department of Natural and Environmental Resources to further develop and to maintain a Marine Resources Virtual Monitoring Network, which will serve as an asset for the collaborative installation of the radar and serve as a source for distribution of data generated from the radar.

WHEREAS, UPRM is interested in continuing to establish meteorological radar stations in western Puerto Rico, and PCUPR (and the residents of Ponce) will benefit from establishing such an instrument on campus, it is of mutual interest that these two Higher Education Institutions collaborate in this initiative. The signatures (below) will indicate that a memorandum of understanding has been reached between UPRM and PCUPR.

NOW, THEREFORE, in consideration of the mutual understanding set forth, the Parties do hereby mutually agree as follows:

I. PURPOSE

- a. This Memorandum of Understanding is intended to facilitate interactions and cooperative initiatives between UPRM and PCUPR regarding the installation, operation, and research collaborations derived from the UPRM OTG Radar on the PCUPR Campus

II. IMPLEMENTATION

UPRM has sent a team to evaluate the locations and recommend the most viable locations. Because the infrastructure and materials will be mainly provided by UPRM (radar, wiring), PCUPR will only need to supply a simple computer, an internet connection, electrical power source, two physical plant PCUPR personnel to help with the installation, and will check the radar each month or when needed to ensure the proper operation. This last part, the maintenance of the radar will involve training PCUPR personnel. The electrical power consumption will be minimal. The maintenance schedule will be supplied by UPRM and coordinated with PCUPR, with routine maintenance carried out by PCUPR, pending appropriate training by UPRM under the supervision of Dr. José Colom-Ustáriz, Dr. Leyda León and Dr. Sandra Cruz-Pol. Dr. Conrado M. Calzada and Dr. Dallas E. Alston, PCUPR professors (telephone: (787) 841-2000; Facsimile: (787) 651-2644; cmcalzada@pucpr.edu; dalston@pucpr.edu), will supervise maintenance procedures, including supervising students working with the radar. PCUPR will be responsible for the energy and internet cost. Students working with the radar should be covered by PCUPR insurance.

III. OTHER TERMS AND CONDITIONS

- a. PCUPR will provide campus-wide guards; additional surveillance equipment or specialized security will be provided by UPRM.
- b. Visits or special maintenance activities performed by UPRM personnel will be coordinated in advance and upon arrival at the entrance gate of PCUPR, the UPRM visitors will present proper identification.
- c. PCUPR will not be responsible for damaged equipment occurring from natural or intentional damage to equipment, including sabotage.
- d. The radar equipment would be covered by UPRM insurance and PCUPR will be provided with a copy of the insurance coverage. The UPRM insurance policy will include PCUPR as an additionally insured entity concerning installation and damaged equipment occurring from natural or intentional damage to equipment, including sabotage. Any accidents occurring during the installation or maintenance of the equipment will be covered for UPRM personnel by the UPRM insurance policy, and for PCUPR personnel (including students), by the PCUPR insurance policy, respectively.
- e. Nothing in this Memorandum of Understanding shall obligate UPRM and PCUPR individually or collectively, to any current or future expenditure of resources in advance of the availability of appropriations through their respective fiscal authorization procedures.
- f. UPRM inventions and copyrights shall remain at all times the property of the UPRM, although published papers will include PCUPR professors if a significant contribution was made by PCUPR professors.
- g. The two parties are committed to maintaining records and will be available for examination or copying by the Office of Internal Auditors of the University of Puerto Rico and PCUPR, by a firm of outside auditors hired by the University of Puerto Rico, by the Office of the Comptroller of Puerto Rico in its auditing of the University of Puerto Rico as required by law. Audits will be carried out at reasonable times during the course of the services or after their completion, in accordance with generally recognized auditing practices. Said documents will be kept for a period of no less than six (6) years or until the Office of the Controller of Puerto Rico has made its investigation, whichever occurs first.
- d. Neither party shall use the name of the other institution, its initials, stamp, logos, seal, or any other identifying emblem or distinctive symbol of the other institution without the express written authorization of the institution to which said objects belong.

- e. Neither of the parties shall assume any liabilities to each other. As to liability to each other, the parties do not waive any defense as a result of this agreement. Likewise, this provision shall not be construed to limit the parties' rights, claims or defenses which arise as a matter of law pursuant to any provisions of this agreement. Additionally, this agreement shall not be construed to limit the sovereign immunity of the Government of Puerto Rico and the University of Puerto Rico.
- f. Each of the parties consents to exempt and exonerate the other party from responsibility in the case of any judicial or extrajudicial claim, and to provide indemnity for damages and/or mental or moral anguish that may be suffered by any person or legal entity, when said damages are alleged to have been caused by the negligent, reckless, and/or culpable actions, conduct, or omissions of each party, its agents or employees, when such damages shall have occurred totally or partially during the realization of this Agreement.

PCUPR personnel will provide monthly maintenance service to the meteorological radar or other service as needed and will communicate problems with UPRM personnel and follow instructions for resolving problems, assuming the problems can be resolved within the expertise of PCUPR personnel, not including expenses incurred, which will be assumed by UPRM. All data and information collected from the radar within the PCUPR campus will be provided to UPRM. Collaborative efforts to analyze and to publish the data will be encouraged between UPRM and PCUPR.

UPRM will be responsible for obtaining and maintaining up-to-date any state (of Puerto Rico) or federal licenses or permits needed to operate the radar.

IV. PERIOD OF AGREEMENT

This Memorandum of Understanding shall be effective when signed by authorized representatives of both UPRM and PCUPR, and registered at the UPRM office. This Memorandum shall remain in force until the meteorological radar equipment is removed from the PCUPR campus, pending termination of the project or lack of funding for the project to continue, unless, terminated according to the provisions of paragraph VII below. This Memorandum of Understanding will remain in effect until the radar is removed from the PCUPR campus, thus effectively ending this agreement or until either of the parties submits a petition to end the agreement, which will be duly evaluated by both UPRM and PCUPR for subsequent appropriate action.

V. EQUAL OPPORTUNITY

UPRM and PCUPR subscribe to the policy of Equal Opportunity and will not discriminate on the basis of race, sex, age, political orientation, ethnicity, religion, or natural origin. UPRM and PCUPR shall abide by these principles in the administration of this Memorandum of Understanding, and neither entity nor any of its representatives shall knowingly impose criteria for the exchange of scholars, staff, or students that would violate the principles of nondiscrimination.

VI. MODIFICATION

This Memorandum of Understanding may be modified only in writing by authorized representatives of UPRM and PCUPR. Modifications shall be incorporated by reference and made a part of this Memorandum of Understanding.

VII. TERMINATION

This Memorandum of Understanding may be terminated at any time by written mutual agreement or upon 90 days advanced notice by either Party. Either party may terminate this agreement in the event of a substantial breach of the terms contained herein, as permitted by the University Laws and Rules and

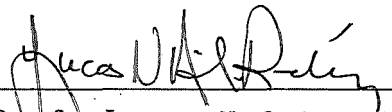
Regulations of the University of Puerto Rico. The signatories to this Agreement shall expend their best efforts to amicably resolve any dispute that may arise under this Agreement. Any dispute that they are unable to resolve shall be submitted to the Director or designee of the PCUPR and to the University of Puerto Rico at Mayagüez Chancellor or designee for resolution. The courts of Puerto Rico retain jurisdiction. The meteorological radar will be removed from the PCUPR campus within 90 days of the termination of the project or of the termination of the memorandum of understanding between UPRM and PUCPR.

VIII. FORCE MAJEURE

In the event that the performance of the obligations under this Memorandum are impeded by reason of Force Majeure, the parties shall be released from their obligations and neither party shall be responsible for any damage sustained and have no further recourse against the other party. Force Majeure shall mean accident before and after the installation of the equipment, fire, earthquake, hurricane, flood, Act of God or natural disaster, epidemics or pandemics, nuclear explosions, strike, work stoppages, or other labor disturbance, riots or civil commotions, vandalism, war or other act of any nation, terrorism, power of government, or government agency, or any other cause which is beyond the control of the parties.

IX. GOVERNING LAW

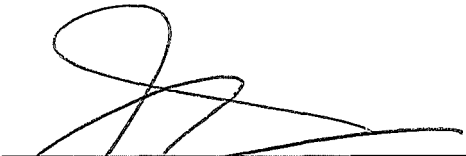
In any dispute regarding the terms of this Memorandum, shall be constructed according the laws of Puerto Rico.



Prof. Lucas Noé Avilés
Interim Chancellor
UNIVERSITY OF PUERTO RICO,
MAYAGUEZ CAMPUS

Date: 28 Nov 2013

City: Mayaguez, PR



Dr. Jorge I. Vélez-Arocho
President
PONTIFICAL CATHOLIC
UNIVERSITY OF PUERTO RICO

Date: April 18, 2013

City: Ponce, P.R.

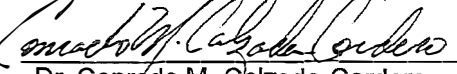
Recommended by:



Dr. Sandra Cruz-Pol
Professor - Principal Investigador

Date: 5/2/13

Revised and recommended by:



Dr. Conrado M. Calzada-Cordero
Professor - Principal Investigador

Date: 12-IV-2013

Recommended by:



Dr. Walter F. Silya
R&D Center Director