

**MEMORANDUM OF UNDERSTANDING BETWEEN THE INSTITUTO GEOFÍSICO DEL
PERÚ AND THE UNIVERSIDAD METROPOLITANA OF THE ANA G. MENDEZ UNIVERSITY
SYSTEM.**

As party of the first part, the Universidad Metropolitana of the Ana G. Mendez University System represented in this instance by Dr. Carlos M. Padín Bibiloni, married, resident of San Juan, Puerto Rico and chancellor of the Universidad Metropolitana (UMET). UMET being a private institution of higher education located in San Juan, Puerto Rico that takes part in the Ana G. Mendez University System, not for profit institution of higher education under the laws of the Commonwealth of Puerto Rico. UMET has developed, in collaboration with SRI International, a version of the Advanced Modular Incoherent Scatter Radar (AMISR). This consists of an antenna, 15 panels and the technical equipment for its operation. These modules were constructed for installation in Chascomús, Argentina where the geomagnetic conjugate point of the Arecibo Observatory of Puerto Rico is located. This project will allow the study, for the first time, the propagation mechanisms of ionosphere movement and energy at hemispheric distances.

As party of the second part, of the Instituto Geofísico del Perú (IGP) represented in this act by his Executive President, Dr. Ronald F. Woodman Pollitt, with DNI N° 09178924, and address in Badajoz Street N° 169, Mayorazgo – IV Etapa. Ate, Lima – Peru, Executive Public Organism of the Ministry of the Environment whose principal function is that of studying all of the phenomena related to the structure, physical conditions and the historical evolution of the Earth. The institute generates uses and transfers knowledge and information both scientific and technological in the field of Geophysics and Science in order to take part in the international scientific community and to contribute to the development of the geophysical environment with emphasis on the prevention and mitigation of the natural disasters and of anthropic origin.



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Both organizations recognize the importance of this scientific collaboration for the advancement of investigative work in its respective countries and the accomplishment of the institutional mission. Thus, both establish the current agreement of collaboration with the following clauses:

Clause I: The Radio Observatorio de Jicamarca, Perú is a research center dedicated to the study and observation of the upper atmosphere and ionosphere. The observatory belongs to the Instituto Geofísico del Perú and counts with the necessary infrastructure (14 platforms constructed from internal funds) to receive, place and test the 14 panels that are part of the Advanced Modular Incoherent Scatter Radar (AMISR).

Clause II: The 14 panels of the Advanced Modular Incoherent Scatter Radar (AMISR) will be received in the Radio Observatorio de Jicamarca, Perú with the purpose of conducting operational tests prior to its shipment to its final destination of Chascomús, Argentina. The panels will remain in Perú for a period of no more than 12 months from the date of arrival.

Clause III: During the stay of the 14 panels in the Radio Observatorio de Jicamarca, Perú simultaneous "Electrochorro" and Spread-F observations will be conducted with the AMISR radar and the one in Jicamarca to study the differences that could exist between what has been observed by both systems. Furthermore there will be experiments with the "beam-forming" capacities that the AMISR radar possesses and see if it is feasible to generate images of coherent echoes with this system and at the same time compare these results with the ones obtained from the Jicamarca radar.

Clause IV: Each part will maintain the property of the elements and equipment that it supplies to the other for the investigative work that are held during the validity of this agreement.

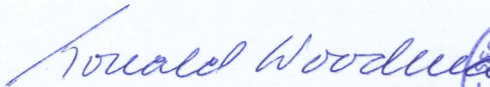


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Clause V: Each part accepts and recognizes that the rights and obligations of this agreement are subject to the laws and regulations of the Government of Perú, on what it is related to the controlled importations and exportations of technologies, and the exportation information product of this agreement.

Clause VI: This agreement will be effective on the date of its celebration and for a period of 12 months upon its signature.

In common agreement the representatives of both parts sign this document today, February 17, 2014 in Lima, Perú.


From the Instituto Geofísico del Perú

Dr. Ronald Woodman, Ph.D.

Executive Presidente


From the Universidad Metropolitana:

Dr. Carlos M. Padín Bibiloni, Ph.D.

Chancellor

