

Dean's Colloquium

Associate Professor Dr. Rubén Delgado

Department of Atmospheric and Planetary Sciences, Hampton University



When: Wednesday, January 25th, 2023

Where: Turner 129

Time: 3:00 – 4:00 pm

Title: Probing the Heights of the Atmosphere at the HULL

Abstract: Interdisciplinary research opportunities at Hampton University Lidar Laboratory (HULL) revolve around understanding atmospheric chemistry and physics with remote sensing technology. The impact of the meteorology on air quality, wind energy, and calibration and validation of satellite and numerical weather prediction models is examined with the use of active (lidar, rawinsondes, and radar) and passive (sun photometer, spectrometer, and satellite) remote sensing techniques, and surface in-situ measurements of gases and aerosols. These measurements allow us to better understand the coupling of chemistry and dynamics in air-land-marine processes in the planetary boundary layer (0-3 km above surface) and accelerate strategies to improve the accessibility of data to the public with an interest in climate change mitigation, energy resilience, air quality research, policy and community based environmental justice efforts.

Bio: Dr. Rubén Delgado joined HU in August 2022 as an Associate Professor of Atmospheric and Planetary Sciences. He leads the HU Lidar Laboratory (HULL). He pursued his doctoral degree in Chemistry at the University of Puerto Rico-Río Piedras and postdoctoral studies in lidar remote sensing at the University of Maryland, Baltimore County (UMBC). Dr. Delgado is the PI in the Unified Ceilometer Network, Team Leader in NASA's Increasing Participation for Minority Serving Institution program and HU campus PI in the NOAA Center for Earth Science Systems for Remote Sensing Technology. He has served as PI in multiple proposals and field campaigns in air quality and wind energy, and federally sponsored academic and research consortiums that promote diversity, equity, inclusion, and accessibility for underrepresented minority communities. In addition to his scholarly work, Delgado serves as a panel and science team member for NASA, National Academy of Sciences, National Center for Atmospheric Research, and the World Meteorological Organizations working groups. He has mentored over 90 students, given more than 150 presentations, and co-authored more than 40 peer reviewed journal articles.