

**Current Position:** Associate Professor, Department of Physics and Chemistry  
University of Puerto Rico at Arecibo

**Appointments:** Associate Professor, UPR Arecibo (1996-Present).  
Instructor, UPR Cayey (1995-1996).

**Research Areas:** Planetary Habitability, Environmental Biophysics, and Astrobiology.

**Education:** M.S. 1995, University of Puerto Rico at Mayagüez (Physics/Biophysics)  
B.S. 1990, University of Puerto Rico at Mayagüez (Physics)

### Overview

Prof. Méndez is an Associate Professor of the Department of Physics and Chemistry at University of Puerto Rico at Arecibo (UPR Arecibo). He has been part of the University of Puerto Rico since 1995 teaching physics and astronomy. From 1988 to 1991 he worked between the University of Puerto Rico at Mayagüez and Fermilab in Batavia, Illinois developing simulations to optimize particle physics detectors. In the summer of 1994 he worked at NASA Goddard Space Flight Center modeling solar plasma physics. In 1998 he started working in the field of astrobiology in various research and education projects supported by his university and NASA Puerto Rico Space Grant. In 2007 he was funded by NASA NAI MIRS to test some of his habitability models with microbial growth experiments. He worked on this project at NASA Ames Research Center under the supervision of Dr. Chris McKay. Prof. Méndez plans to start a Ph.D. in physical chemistry focusing in environment-life interactions to continue his research interests.

### Selected Publications

- Méndez, A. (2009). Standard Planetary Habitability (SPH) of Global Land Areas on the *40th Lunar and Planetary Science Conference*, Abstract #2333.
- Méndez, A. (2006). The Planetary Habitability Classification on *37th Lunar and Planetary Science Conference*, LPI, Abstract #2396.
- Méndez, A. (2002). Habitability of the Martian Surface on the *33rd Lunar and Planetary Science Conference*, LPI, Abstract #1999.
- Méndez, A. (2001). Planetary Habitable Zones: The Spatial Distribution of Life on Planetary Bodies on *First Steps in the Origin of Life in the Universe*, J. Chela Flores *et al.* (eds.), Kluwer Academic Publishers, 211-214.
- Méndez, A. (1999). Biophysical Comparison of the Habitable Zones on Earth and Mars on *Fifth International Conference on Mars*, LPI, Abstract #6197.
- Méndez, A. (1999). Planetary Habitable Zones on Earth and Mars on *Astrobiology: Origins from the Big-Bang to Civilization*, J. Chela Flores *et al.* (eds.), Kluwer Academic Publishers, 303-306.

### Computer Experience

GIS, Image Processing, Data Visualization, Monte Carlo Techniques, Interactive Data Language (IDL), Matlab/Octave, Fortran, C, R, Unix/Linux.

### Memberships

*The American Association for the Advancement of Science, American Geophysical Union, The Society of Physics Students*