

PROFESSIONAL SERVICE

Dr. Lopez is a member of several professional organizations and has occupied leadership positions in The American Physical Society (Chair, Committee on Minorities), The Texas Section of APS (Chair), and The National Society of Hispanic Physicists (Founder and President). He also has served on numerous boards and committees for The National Science Foundation, NASA and other national agencies, scientific journals, publishers, etc. He has also served institutions such as Universidad Católica de Concepción (Chile), Texas A&M Commerce, University of Texas at Brownsville, University of Texas at San Antonio, Universidad Autónoma de Cd. Juárez (México), and others.

SYNERGISTIC ACTIVITIES

- With funding from the Sloan foundation and in collaboration with Drs. David Ernst (Vanderbilt U.) and Carlos Ordoñez (U. Houston) Dr. Lopez created the National Society of Hispanic Physicists (NSHP) in 1995. While acting as its President, Lopez piggybacked the national NSHP meetings with those of the Texas Section of The American Physical Society to gain strength and members. Now standing on its own –and with over 400 members strong— NSHP has just received \$500,000 from The National Science Foundation to organize the 2011 national meeting in conjunction with the National Society of Black Physicists. For more information see <http://www.hispanicphysicists.org/board/>.
- Participated with Dr. Javier Herrera to create the Engineering Physics career at the Universidad Autonoma de Cd. Juarez (Mexico). From 1994 to 1996 Dr. Lopez helped in the design of the curricula, cooperative programs with UTEP and invited renowned Mexican and international physicists to visit and advise the new faculty.
- While acting as Chair of the Committee on Minorities (COM) of the American Physical Society, Dr. Lopez helped develop the nascent Minority Speaker Program and the COM's Climate for Minorities Site Visit Program to help organizations improve the climate that minorities in physics sometimes experience.

MEMBERSHIPS

- American Physical Society, Fellow and Lifetime Member.
- Texas Section of American Physical Society.
- National Society of Hispanic Physicists, Founding and Lifetime Member.
- Sociedad Mexicana de Fisica, Lifetime Member, Member of Division of Radiation, Member of Division of Nuclear Physics.

LEADERSHIP

American Physical Society

- Member, Advisory Committee for the Physics and Astronomy New Faculty Workshops, Am. Assoc. of Physics Teachers, the Am. Astronomical Soc. and the American Physical Society, 2009.
- Member, Executive Committee, Forum on International Physics, American Physical Society, from 2001 –2004.

- Member, Forum of International Physics, American Physical Society, 2002-2005.
- Organizer, 1998 Meeting of the Texas section of The American Physical Society, held at UTEP in October 1998.
- Member, Committee of Minorities of the American Physical Society from 1/92 to 12/94. Participant of the meetings of 3/92 (Indianapolis), 4/92 (New York), 3/93, 5/93, 10/93, 3/94, 10/94.
- Member, Visiting Committee to U. of Pittsburg, Committee on Minorities, American Physical Society, 3/30-31, 1998.
- Member, Executive Board, Texas Section, American Physical Society, 1998-2000.
- Past Chair, Committee of Minorities of the American Physical Society, from 1/95 to 12/95.
- Participant, Workshop on Systemic Reform, American Physical Society, Jan. 9 -12, 1995, Bethesda, MD.
- Member, Visiting Team to NMSU's Physics Department, organized by the Committee on Minorities of the American Physical Society. Feb. 27-28, 1995.
- Chair, Committee of Minorities of the American Physical Society, from 1/94 to 12/94. Chair of the meetings of 3/94 and 10/94. Host of COM receptions at the 3/94 and 4/94 meetings of APS.

Texas Section of The American Physical Society

- Past Chair, Texas Section of the American Physical Society, 3/2003-3/2004.
- Chair, Texas Section of the American Physical Society, 3/2002-3/2003.
- Vice Chair, Texas Section of the American Physical Society, 2000 to 2001.
- APS Council Representative, Nominating Committee of the Executive Committee of the Texas Section of the American Physical Society, Arlington, Texas, October 10, 1996.

National Society of Hispanic Physicists

- Panelist, panel "Getting into and staying in graduate school", organized by the national Society of Hispanic Physicists, in the 2008 Joint Fall Meeting of the Texas and Four Corners Sections of APS, AAPT, and Zones 13 and 16 of SPS, and NSHP and NSBP, El Paso, Texas, Oct. 17, 2008
- Communication Officer, from 2000 to date.
- Past-President, National Society of Hispanic Physicists. 3/2003-2/2005.
- President, National Society of Hispanic Physicists. 2000-2003.
- President Elect, National Society of Hispanic Physicists, 1997-2000.
- Member, Organizing Committee, Workshop on Physics Education, National Society of Hispanic Physicists and the Panamerican Association for Physics, held at Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, N.L., Mexico, Sept. 22-24, 1997.
- Chair, Nominating Committee, National Society of Hispanic Physicists, 1996.
- Founder, of the Society of Hispanic Physicists. Austin, May 18, 1996.

Sociedad Mexicana de Física

- Panelist, Round Table Discussion on Science Policy, "I International Symposium on Radiation Physics", Division of Radiation Physics of the Sociedad Mexicana de Física, Mexico City, Dec. 1-3, 2003.
- Member, Executive Board of the Division of Radiation Physics of the Soc. Mexicana de Física, from 2003 to date.
- Member, Executive Board of the Division of Nuclear Physics of the Soc. Mexicana de Física, from 2001 to date.

Other

- Coordinator, Lecture Series, 1st Austin Science and Engineering Festival, Oct. 22-23, 2010.
- Participant, Meeting on Diversity, ExxonMobil-AAPT National Task Force on Undergrad. Phys., Irving, TX, 12/7-8/ 2002.
- 1996-1997 SACNAS advisor, Society for the Advancement of Chicanos and Native Americans. 1995.

SERVICE

REFEREEING AND REVIEWING

- Reviewer, research proposal, Universidad Nacional de Colombia, Feb. 2009.
- Reviewer, NSF, 1996 (RIMI), 2001 (nuclear theory), 2007 (NSF- PHY - MPS/PHY), 2008 (Nuclear theory)
- Reviewer, Department of Defense, ten proposals, 2008.
- Referee, Rev. Mex. Fis., 1995, 2003, 2006, 2008, 2009, 2010.
- Reviewer, Petroleum Research Fund, 2003, 2005.
- Reviewer, of one article for Brazilian Physics Journal, November 2003.
- Reviewer, of one article Astronomical Society's Universe at Your Fingertips Resource Notebook, Astronomical Society of the Pacific, 2001.
- Referee, The Physical Review C and The Physical Review Letters, 1997, 1998, 1999.
- Reviewer, Pacific Northwest Lab., nuclear physics proposal, 1998.
- Reviewer, Advanced Fuel Cycle FOA Merit Review, Energetics Incorporated, 2008.
- Reviewer, NASA MUST Scholarship Selection Committee, Hispanic College Fund, 2008 and 2009.

CONSULTING

Exam preparation, etc.

- Writer, Physics GRE questions, Educational Testing Service, Mar. 2011.
- Writer, Physics questions, Texas Teacher Certification exam, Educational Testing Service, 2007, 2008, 2009, 2011.
- Writer of physics questions for Texas Teacher Certification exam – Science 4-8 Teacher's Test, Educational Testing Service, Feb. - Mar., 2008.
- Document Rater, for College Board Advanced Placement Best Practices Course Study, March 24, 2006, Center for Educational Policy Research, <http://cepr.uoregon.edu>, <http://www.s4s.org>.
- Physics consultor, for IB physics course at Coronado High School, EPISD, from January to May, 2006.
- Exam Rater, of CLEP Natural Sciences examination, January, 2006, College Board's College Level Examination (CLEP) Program, <https://www.standardsetting.org>.
- Participant of AP Pretest Program of Educational Testing Service, Princeton, NJ, Electricity and Magnetism. 1993.

National Science Foundation, NASA, etc.

- Panelist, Graduate Research Fellowship Program, NSF, 2002, 2004, 2005, 2009 and 2011.
- Panelist, NSDEG Fellowship Program, Dept. of Energy, National Shore, MD, Feb. 18, 2011.
- Participant, "Office of Space Science (OSS) Education/Public Outreach Council", sponsored by NASA/OSS, Galveston, Texas, Tuesday, Dec. 5, 2000.
- Member, Diversity on the Geoscience, NSF Directorate of Geosciences, Arlington, VA, May 18-19, 1999.
- Panelist, NSF Div. Undergrad. Studies, Instrumentation & Lab. Improvement Program, 1994, 1995, 1996 and 1997.
- Member, Visiting Committee, to review NSF's Div. of Undergraduate Education, Arlington, VA, May 21-23, 1997.
- Member, Educational Task Force, NASA's Office of Space Science, 1995-1996. Attended meetings in Washington, D.C., Annapolis, and Las Cruces from 11/95 to 5/1996.

Book reviews

- Chapters 20-25 of Physics: principles and problems, Quadgraphics2, McGraw Hill, 2011.
- Chapters 21-26 of University Physics, by Bauer and Westfall, McGraw Hill, 2011.
- "Understanding Physics", 2nd ed., by Cummings, et al., for Content Connections, 2005.

- "Modern Physics" by Mark Edwards, McGraw-Hill, \$150, 7/2002.
- "Concept of Modern Physics" by Beiser, McGraw-Hill, 7/2000.
- "Fundamentals of Physics", by Halliday, Resnick and Walker, John Wiley and Sons., 994.
- "Modern Physics, Models and Applications" of Wm. C. Brown Publisher, 1996.

Program advisor

- Ad hoc evaluator, Universidad Catolica de la Santisima Concepcion, Concepcion, Chile. (12/12- 16/2009).
- Evaluator of Physics M.S. Program, of Texas A&M - Commerce, Nov. 2008.
- Evaluator, Educational proposal MECESUP UPA 061, Univ. Playa Ancha, Valparaiso, Chile 27/7–12/8 2008.
- Evaluator of Physics Ph.D. Program of UT Brownsville, subcontracted by UT Brownsville, Sept. 2006.
- External reviewer for faculty promotion , University of Colorado, Colorado Springs, August, 2006.
- External Member of Physics Chair Search Committee, University of Texas at San Antonio, November, 2006.
- Advisor, Engineering Physics degree plan of the Universidad Autónoma de Cd. Juárez, Nov. 2003.
- Advisor, of Engineering Physics degree plan of the Universidad Autónoma de Cd. Juárez, November 2003.
- Advisor, Engineering Physics Career, Universidad Autonoma de Ciudad Juarez, 1997 to 2001.
- Judge, "UT Brownsville AMP Student Presentations", Univ. of Texas at Brownsville, Brownsville, Texas, 4/9/99.
- Participant, "Foro de Discusion de las Ciencias en Cd. Juarez", UACJ, at Juarez City Hall, Jun. 18, 1998.
- Consultant, Universidad Autonoma de Ciudad Juarez, for the creation of a Physics Career. From 1994 - 1995.

Workshops and courses

- Instructor of physics development workshop for 32 MSP Staff Developers, UTEP's MSP, Dec. 5, 2005.
- Instructor of physics workshop for pre-K and K teachers, Ysleta Independent School District, Aug 3 - Dec 2006.
- Instructor of physics development workshop for high school teachers, UTEP's MSP, July 20-21, 2005.
- Workshop, "Middle School Physics", delivered to 32 MSP Staff Developers, at UTEP, Dec. 5, 2005.
- Workshop, "Deepening Science Knowledge for High School Physics Teachers", delivered to 35 high schools teacher at UTEP, July 20-21, 8:30 am. – 3:30 pm, 2005.
- Workshop, "Physics for Pre-K and K Students – Bilingual Seminar for Teachers", delivered to two groups of 45 and 54 teachers at R, Kennedy Pre-K Center, Ysleta ISD, El Paso, Texas, June 8-9, 2005.
- Instructor, "Quantum Mechanics", at the Universidad Autonoma de Ciudad Juarez, Spring 2001.

Universo (Spanish version of StarDate)

- Technical Editor, "Universo a sus pies", by the Astronomical Society of the Pacific, Summer-Fall 2001.
- Technical Editor, "Universo: Ancient Horizons", UT Austin and Science Museum of Virginia, 4/2000.
- Technical Editor, "Universo - Almanaque Celestial", 1996 and 1997, McDonald Observatory.
- Technical editor, "Universo", Spanish version of "Star Date", radio show produced by McDonald Observatory of the University of Texas at Austin. Organizer of Focus groups, and technical translator. From 1994 to 2010.