



Dr. Jorge Gardea-Torresdey is the Endowed Dudley Professor of Chemistry and Professor of Environmental Science & Engineering at The University of Texas at El Paso (UTEP).

Dr. Gardea-Torresdey's research interests include: applications of spectroscopy techniques in environmental chemistry; benefits and implications of nanotechnology in agricultural systems (i.e. the improvement of crop yields and quality through the use of nanoparticle delivery systems for essential nutrients, pesticides, and herbicides); development of analytical methods to detect nanomaterials; and the development of nano-enabled modular water treatment systems that are easy to deploy and that can treat and reuse challenging wastewaters.

Dr. Gardea-Torresdey has a strong record of teaching and training undergraduate and graduate students. Dr. Gardea has graduated 43 Ph.D. Students (35 in Environmental Science and Engineering, 7 in Chemistry and 1 in Material Science & Engineering), and 36 students have received their M.Sc. degrees under his mentorship. Also, he has mentored more than 37 undergraduate students in research. He has graduated more Ph.D. students (43) in STEM fields in UTEP's history.

Dr. Gardea-Torresdey is a key investigator who has authored over 500 publications (h-index, 92, more than 28, 000 citations, as per google scholar) and issued five US patents for environmental remediation. He has been the UTEP PI of three major multi-institution research centers on nanotechnology. 1) the \$48,000,000 NSF University of California Center for Environmental Implications of Nanotechnology (UC CEIN, UCLA, leading institution), (2) the \$18,500,000 NSF ERC Center for Off-Grid Nanotechnology Enabled Water Treatment (NEWT, Rice University, leading institution), and (3) the \$480,000 USDA Center to Enhance Micronutrient Use Efficiency and Increase Crop Yield using nanotechnology (Connecticut Agricultural Experimental Station (leading institution)). The scientific contributions of Dr. Gardea-Torresdey have allowed him to receive many honors throughout his professional life. Among other awards, he has received the UTEP's Graduate Mentor Award (2016) and his research achievements are highlighted in the Lawrence Hall of Science of the University of California Berkeley. He received the 2009 SACNAS Distinguished Scientist of the Year Award and was awarded the 2012 Piper Professor Award, which is one of the most prestigious honors conferred to a Professor in the State of Texas. Very recently, Dr. Gardea received the distinguished 2018 University of Texas System's STARS Retention Award, which is perhaps the highest honor for a faculty in the whole University of Texas System.

Dr. Gardea's career has been highlighted by the most important Journals in Science and Engineering, including the October 28, 2009 issue of Environmental Science & Technology (ES&T) and the December 3, 2009 Issue of Nature. He was Editor of the Journal of Hazardous Materials from 2007 to 2010 and on January 1, 2011, he was appointed Associate Editor of ES&T.