



Mechanical Engineering
Academy of Distinguished Alumni

Enrique V. Barrera, Ph.D.

Distinguished Mechanical Engineer, 2005

BSME w/Honors, The University of Texas at Austin,
1979

MSME, The University of Texas at Austin, 1984

Ph.D., The University of Texas at Austin, 1987

*Professor of Materials Science and
NanoEngineering and Chemistry
Rice University, Houston, TX*

Born: Corpus Christi, TX and grew up in Orange, TX

Parents: Arturo Valdez Barrera and Juanita Nilda Barrera, formerly of Austin, TX.

Professor Barrera has spent his career in Materials Science and Nanotechnology. He has developed new materials systems in Composites, Polymers, Metals, and Ceramics. He has developed products that advance the strength of glass and glass/polymer systems. He has developed nanomaterials and has contributed to the understanding of nanomaterials across many useful properties. Professor Barrera has contributed as an educator, researcher, and mentor of students and professionals. He has been well-published and produced a number of patents. He has reached out to the community and has provided international outreach in nanotechnology by his interactions in Mexico. He has consulted to industry in broad areas of aerospace, medical implants, umbilical tubing for oil and gas, and materials for rock tools.

Professor Barrera's contributions have been based on his fundamental interests, his ability to work across numerous materials systems, and his desire to prepare students for outstanding careers in Materials Science and Nanoengineering.

Honors: Albert Eston White Distinguished Teacher Award, 2018; Hispanic Business Magazine's 100

Most Influentials (2006); Fellow of the American Society of Materials (ASM International) (2004). Member of the team that developed fluoronanotubes that received a R&D Magazine 100 Award (2003). Great Minds in STEM Educator of the Year Award (2003). Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, (PAESMEM) (2002). Group Achievement Award, NASA JSC (2001). Great Minds in STEM Award for Outstanding Technical Achievement (1994). NSF National Young Investigator (NYI) (1993) (now called the Career Award).

Residential Faculty Associate of Jones College and Magister of Jones College (Lived on the Rice University campus for 9 years in Student Life).

Co-Founder, former CTO, and current Board Member of NanoRidge Materials, Inc.

Former CTO of C-Bond Systems, LLC, 2004-present. Former Board Member of the Houston Forensic Science Center, Houston, TX, 2012-2015. Distinguished Visiting Professor of Tec de Monterrey, Mexico, 2015-present.

Married to Maribel H. Barrera since 1990 with two children: Monica H. and Thomas Enrique.