



Julian J. Bedoya, P. E. South Texas 2014 Young Engineer of the Year

Julian Bedoya is a Senior Associate at Stress Engineering Services, Inc. Most of his work has centered on performing engineering analyses of pressure vessels and pipelines to determine if the equipment in question has enough mechanical integrity to continue operations. The need for this type of work arises frequently and unexpectedly in refinery equipment, requiring immediate attention. In addition, he has performed full scale testing of pipelines, pipelines reinforced with composite and metallic materials, and other oil and gas equipment in general.

His work has included installing high temperature strain gauges and thermocouples in operating coke drums in order to obtain detailed measurements for later fatigue analysis and design work of these pressure vessels. He has expertise with swaged mechanical connections, having performed analyses and full scale testing work to determine the mechanical integrity of this connection under a variety of different loading conditions. Julian developed a two-day, finite element analysis course, which is aimed at people who are new to the subject, or managers that may be reviewing finite element analysis work.

Julian received a B.S. in Mechanical Engineering from Florida International University (FIU), and a M.S. in Biomedical Engineering from Texas A&M University. He has been an active member of ASME since his undergraduate days at FIU, holding positions of treasurer and chair of the local ASME student section, winning second place in the Old Guard Prize (oral presentation competition), and presenting a paper as an undergraduate at the IMECE Conference in New Orleans in 2002. Julian is also a member of Tau Beta Pi, which is the Engineering Honor Society.

Since 2005, Julian has been actively involved with the ASME Northwest Houston Subsection, where he is the programs chair. His presentations at conferences, include the Offshore Technology Conference (US and Brazil), the International Offshore Pipeline Forum, the International Pipeline Conference, the Pipeline Research Council International (PRCI), Coking.com forums. Julian has 8 publications in the oil and gas industry, 2 in biomedical engineering, and was a contributor to a chapter in vascular mechanics in the Wiley Encyclopedia of Biomedical Engineering. In 2013, Julian received the Herbert Allen award, which recognizes outstanding technical achievement by an engineer 35 years of age or younger. Julian is a licensed professional engineer in Texas, and is fluent in Portuguese, Spanish, English.