

## Brief Bio-sketch for Dr. Robert L. "Bob" Horton

Dr. Robert L. "Bob" Horton is currently the Chief Technology Officer and Technical Vice President of Home Run Specialty Chemicals, Inc. (HRSC), a position he has held since he co-founded HRSC in February 2009. He is developing the product lines for specialty additives for production, drilling, completion, acid stimulation, hydraulic fracturing stimulation, wellbore work-over, and emulsion breaking and preventing. Dr. Horton was previously the Patent and External Technologies Manager at WellChem Technologies, a division of Nalco-Champion. Dr. Horton's responsibilities there also included leading a small research team in developing new specialty additives for wellbore construction, and serving as a liaison between the Petroleum Industry and WellChem Technologies R & D. Prior to 2009, Dr. Horton spent a decade as a Senior R & D Advisor with M-I SWACO, the world's leading supplier of drilling fluid systems, where he led a small research team in developing new reservoir drilling fluids and completion fluid additives. Dr. Horton is a member of nearly a dozen professional associations and is credited with over 78 patents and other publications. He earned a BA *cum laude* in Chemistry from Rice University, a Ph.D. in Chemistry from the University of California at Berkeley, and received post-doctoral training from the late Professor Joe Lewis at Rice.

Dr. Horton is currently donating a flow-assurance-related Provisional Patent Application to Rice University. While the Rice University / Texas Medical Center Chapter of Sigma Xi has an excellent relationship with the Texas Medical Center, there remains plenty of opportunities for improving its relationship with Rice University. Accordingly, Rice alum Dr. Horton has been dispatched by the Board of Directors of the Chapter in an attempt to improve the liaison between the Sigma Xi Chapter and Rice University. This, it is hoped, may be accomplished especially by his working to support the Rice Brine Chemistry Consortium, the Rice Hydrocarbon Thermodynamics & Flow Assurance Consortium, the Rice OEDK (Oshman Engineering Design Kitchen), Engineering Dean Chapman, OEDK Executive Director Kavalewitz, and Professors Vargas, and Oden. Dr. Horton's recent research has focused on prevention / mitigation of hydrocarbon flow losses in oil and gas production, and very recently he has augmented this research by mentoring a relatively young researcher, Ms. Anushka Jetly, a recent inductee as an Associate Member of Sigma Xi, a recent winner of a Sigma Xi First Place Award at the Science and Engineering Fair of Houston (SEFH) and a rising senior in a local high school, who is also working on a flow-assurance-related science fair project under Dr. Horton's mentorship. One goal of this science fair project is to produce for Ms. Jetly, a first-author, refereed publication in the ***Journal of the New Researcher***. In this mentorship role, Dr. Horton is overtly and materially fostering a member of the next generation of researchers.