

**Petroleum Engineering / Rock Mechanics**

**Expertise** Petroleum Geomechanics, Rock and Soil Mechanics, Numerical Modeling

**Education** Ph.D. (Geological Engineering, Geomechanics), 1997  
University of Oklahoma, Norman, Oklahoma  
M.S. (Geotechnical Engineering, with honors), 1990  
Universidad Simón Bolívar, Venezuela  
B.S. (Mining Engineering), 1984  
Universidad Central de Venezuela, Venezuela

**Honors & Awards** Intevp Scholarship, University of Oklahoma, 1996-1997  
Intevp Extraordinary Contribution to the Company Award, 1996

**Affiliations/Memberships** Member: Society of Petroleum Engineers, American Rock Mechanics Association

**Professional Experience**

2007 - Present *Itasca Houston, Houston, Texas, General Manager*  
2005 - 2007 *Geomechanics International, Inc., Houston, Texas  
Senior Geomechanics Specialist*  
2003 - 2005 *Global GeoSoluciones Consultores C.A. / GlobalGeo S.A. Edo. Miranda  
Venezuela  
President and Founder, Project Leader*  
*PDVSA — Intevp, Los Teques – Edo, Miranda, Venezuela  
Technical Leader*  
2000 - 2002 *Project Leader*  
1987 - 1997 *VVA Consultores, Caracas, Venezuela, Geomechanical Engineer*

**Project Experience**

**Geomechanical Fieldwork and Modeling:** Work in borehole stability studies; pore pressure prediction and analysis; in-situ stresses; fractured reservoir characterization and fault leakage potential; subsidence potential; sand production prediction and geomechanical characterization and modeling. Design of geopressure cube from a seismic velocity cube; integration of geomechanics into field design.

**Project Leadership:** Shale stability program: integrating fluid, geomechanical and drilling mechanics specialists for projects in deep, extended reach wells in Western Venezuela, including modeling of coupled processes. Integrated project to determine economic and technological opportunities for Ceuta Tomoporo in Eastern Venezuela. Integrated project for technological support to the Ceuta-Tomoporo Asset (supervision in geosciences, drilling, production, and surface facilities). Drilling optimization project in well construction (supervising groups for UBD, zonal isolation for HPHT wells, risk analysis applied to drilling operations and

ERD). Participation in steering committee for a joint industry project for drilling fluid-shale interaction modeling and laboratory studies (SINTEF) and industry projects with CSIRO.

*Teaching Experience:* Taught borehole stability and other geomechanics courses to industry professionals at PDVSA-Cied, Pemex and Universidad Sur Colombiana; taught graduate geomechanics courses at Zulia University in Venezuela; supervised five Masters theses in Petroleum Geomechanics; trained drilling engineers in geopressure analysis using KSI Predict.