Ocean Engineering Department



Postdoctoral Research Opportunity at TAMUG

The Ocean Engineering Structures and Extreme Material Laboratory (OESEM) of the Department of Ocean Engineering at the Texas A&M University, Galveston has an opening for 6-month Postdoc position (which may be extended upon contract renewal) to conduct research in the areas of computational fracture modeling and fluid-structure interaction (FSI) of gaseous mixtures starting the sooner. Of particular interest are candidates willing to conduct research in advanced FSI modeling incorporating GERG 2008 Equation of States (EOS) into the depressurization of real gas in running ductile fracture scenarios of linepipes using general-purpose ABAQUS software. The research conducted at the Ocean Engineering Structures and Extreme Material Laboratory (OESEM) focuses on the multidisciplinary structural engineering aspects of fracture and damage in load-bearing materials with emphasis on multiphysics interaction and structural integrity for critical structural components. Current R&D programs conducted at OESEM focus on the development of robust procedures for computational integrity analyses of in-service structural components for engineering applications. Eligible candidates should have received their Ph.D. or D.Sc. degrees within the past 5 years in Mechanical Engineering, Metallurgical Engineering, Materials Science, or related areas. Have user-defined experience in FORTRAN programming language and ABAOUS subroutines (VUMAT/UMAT) development. Good command of spoken and written English is highly desirable. Interested candidates should apply with a detailed CV to

Marcelo Paredes, Ph.D.
Assistant Professor
Department of Ocean Engineering
Texas A&M University
200 Seawolf Parkway, PMEC 117
Galveston, TX 77554

Email: <u>lparedes@tamu.edu</u> Phone: +1 409-740-4526