

## 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 from January 2024. 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 experience in FORTRAN programming language and ABAQUS user-defined subroutines (VUMAT/UMAT) development. Good command of spoken and written English is highly desirable. Interested candidates should apply with a detailed CV to

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