



Position in Structural Dynamics and Failure Analysis

BlazeTech has a full-time opening in the above area for a PhD or BS/MS with an equivalent experience in Mechanical, Aeronautical, Civil or Materials Engineering.

Job Description:

Investigation of the effects of explosive loadings, high speed impacts and hydrodynamic ram on aerospace and vehicular structures. Quantification of fluid-structure interactions and dynamic response from the onset of failure to complete structural collapse. Particular emphasis on crack propagation and delamination in composites. Formulation of key tests to be conducted in national large-scale test facilities. Development of analytical and numerical models to interpret the test data and make predictions. Development of blast resistant and structural hardening technologies.

Requirements:

- Relevant coursework or experience in areas such as Solid and Fluid Mechanics, Vibration, Elasticity, Plasticity, Fracture Mechanics and Composite Structures.
- Strong emphasis in analysis and computational methods such as FEA and hydrocodes.
- Must be willing to participate in a fairly wide spectrum of projects.
- **Must be US Citizenship (preferred) or Permanent Resident.**

General:

Founded in 1987, BlazeTech is a leader in providing R&D, product development and computational services in environmental safety and energy for civilian and military applications. Recently, we focus on major hazards and homeland defense threats that pose risks to people, property and the environment. Over the years, we have developed innovative and cost-effective solutions for many problems of national importance. Sample projects include:

- Dynamic response and structural failure of composites under impact and blast loadings
- Hydrodynamic ram and fluid structure interactions
- Fire/explosion in aircraft fuel tanks under accidental and combat conditions
- Structural collapse of buildings under the effect of fire
- Characterization of nanomaterials
- Explosion suppression technologies
- Impact of high energy lasers

BlazeTech bridges the gap between theory and practice and between academia and industry. Our projects include multi-disciplinary, cutting-edge work in technical areas with high potential for market impact. We perform work similar to the R&D department of a major company but our flexibility allows us to be more responsive to current issues. For the self-motivated, the opportunities for innovation and achievement abound. We provide competitive salaries and benefits including life, medical and dental insurance, 401k and profit sharing. Please send resume and transcripts to Human Resources at the email or address below.