

# Mechanical / Materials Engineer

Karagozian & Case - Glendale, CA 91203

## About Karagozian and Case, Inc.

Karagozian and Case, Inc. (K&C) is an internationally recognized multidisciplinary science and engineering consulting firm founded in 1945 with a focus on creating custom engineered solutions for extreme environments. K&C's mission is to engineer specialized solutions and products for the defense, space, energy, security, construction, and manufacturing industries. K&C's rapidly growing practice areas include: 1) applied research and testing, 2) modeling, simulation, and analysis, 3) product and software development, 4) protective design engineering, and 5) threat vulnerability assessments.

## Career Opportunity

K&C is seeking a highly talented, motivated, and hands-on entry-level Engineer that can work, think, and innovate in a fast-paced work environment with challenging time constraints. The individual must have a strong technical interest in material characterization and have demonstrated experience in the laboratory environment. You will work with a great team of talented scientist and engineers on diverse multidisciplinary R&D projects that result in cutting-edge technologies and solutions.

### Essential Requirements (must have):

- MS or Ph.D. (graduate in 5 years) in Mechanical Engineering, Materials Engineering, Aerospace Engineering or Related Field (Ph.D. preferred)
- U.S. Citizen or U.S. Permanent Resident only
- 2-3+ years of experience working in the laboratory with high strain-rate testing (e.g., split-Hopkinson bar or Kolsky bars) and low strain rate testing (e.g., Instron/MTS machine, other servo-hydraulic actuators)
- Experience selecting, installing, and obtaining data with various diagnostics, including but not limited to, strain gages, piezo-electric sensors, loads cells, oscilloscope, optics/laser measurement, high-speed video, digital image correlation, ultra-sonic testing, SEM/TEM/FIB)

### Preferred Qualifications:

- Experience designing parts/components for machining using 3D CAD software, 2D drawings for manufacture, assembly drawings and bills of materials
- Fundamental comprehension of solid mechanics and mechanics of various materials (e.g., metals, composites, metamaterials, granular materials, ceramics or other quasi-brittle materials)
- Knowledge regarding acoustic/stress wave and/or shock propagation through a variety of materials
- Experience of experimental data reduction/analysis on by MatLab/Python

### Job Duties

- Conduct company's material characterization, impact, and fragmentation testing projects
- Plan of experiments and interpret/reduce data collected from experiments
- Enhance and update in-house test capabilities, test procedures, and safety plans
- Guided by senior personnel, prepare contract deliverables (progress reports, final reports, briefings, etc.)
- Support proposals and bids for future work.
- Demonstrated ability to work collaboratively with other colleagues and team members
- Collaborate with academia and publish in technical journals.
- Present and participate at relevant technical conferences

### Experience (Minimum Preferred):

- Laboratory: 1 year
- Machining: 1 year
- Ceramics materials: 1 year

### Job Type: Full-time