Sr. Project/Systems Engineer

Overview and Background

SPARC Research was founded in 2018 to advance state-of-the-art rocket and airbreathing technology development, preliminary design, and prototype demonstration using modern Multiphysics modeling tools. With industry leading years of combined experience in rocket propulsion, SPARC's personnel create relationships with customers that are built on trust.

Working with established propulsion suppliers, missile prime contractors, and Government laboratories to provide unique design solutions to demanding propulsion requirements, SPARC Research provides unbiased technical analyses and design solutions that our customers can count on. SPARC Research currently has 20 employees, numerous interns and consultants, and is still growing. The CEO, president, and directors provide a combined 165 years of experience in rocket propulsion and government contracting.

Keys to company success:

- Relationships with customers that are built on trust
- Unbiased technical analysis and design solutions a customer can count on
- Providing a work life for employees that is enjoyable and rewarding
- A transparent management approach that recognizes personal employee contributions
- Engagement with educational institutions at all levels

SPARC Research is in need of a **Sr. Project/Systems Engineer** to join our team in Warrenton, VA. Our position requires mechanical design experience with a demonstrated knowledge base of rocket motor propulsion design and flight-testing experience. Our position additionally requires problem solving skills that include but are not limited to: development and production of rocket motor cases, insulation, energetics additive manufacturing, and other critical components for solid and liquid rocket motors and high supersonic – hypersonic propulsion systems.

Job Responsibilities

The **Sr. Project/Systems Engineer** will lead a team of engineers and support staff to perform mechanical design engineering assignments that require application of engineering principles, theories and concepts to develop components, and integrated propulsion systems for missile programs.

Requirements

Our position requires a bachelor's degree in Mechanical Engineering, or an appropriate discipline, and ten (10) years of directly related experience, or an equivalent combination of education and experience.

Additional Requirements:

- Ability to lead others through the product development life cycle (development to production)
- Engineering background with knowledge and understanding of propulsion systems
- General understanding of manufacturing processes (heat treating, welding, brazing, rough and finish machining)
- Proficiency in Microsoft Office products (Word, Excel, and Power Point)
- Satisfy federal government requirements for access to government information, which requires U.S. Citizenship or U.S. Permanent Residency

Preferred Qualifications:

- Experience with risk management, system requirement flow downs, and requirements tracking
- Working knowledge of various drafting tools and software. Geometry-based modeling is desirable
- Experience in the design and development of mechanical structures, including thermal and structural analysis, practice, and principles
- Documented experience of technical leadership on a prototype flight demonstration program
- General component and system level knowledge of solid and liquid propulsion hardware is desirable
- Active SECRET clearance