Available Positions at FGC Plasma Solutions Inc.

About FGC Plasma

FGC Plasma Solutions is an eight-year-old startup company founded in 2013 to commercialize research performed at Case Western Reserve University on plasma-assisted combustion. FGC Plasma endeavors to develop ground-breaking technologies to improve combustion and other reacting flow processes with applications in energy, aerospace, and national security. To date, FGC Plasma has raised $6.2 million in funding has established collaborations with Notre Dame, MIT, ARL, AFRL, and Argonne National Lab. FGC Plasma has native high pressure and supersonic combustion test capabilities and is seeking to grow its technical team.

FGC Plasma Solutions is located in Central Square, at the heart of innovation in Cambridge, Massachusetts, and steps from MIT. Our team enjoys the benefits of this innovation ecosystem by regularly meeting with world-renowned faculty, visiting corporate and government members, and fellow entrepreneurs. We strive to produce an innovative, inclusive culture that allows our employees accelerated career and technical growth. We look forward to working with you!

Job Benefits and Perks

At FGC Plasma, we strive to provide our team with the health, well-being, and career assistance that make them successful both in and outside of the office. This means providing unique benefits that allow our employees to thrive. A high-level overview of the things we provide to our full-time employees is outlined below:

- Healthcare – We offer medical and dental to employees and their families, and provide incentives to maintain a happy, healthy lifestyle
- Retirement planning – At FGC Plasma, we want to help you succeed today and thrive tomorrow. All full-time employees are set up with our company 401(k) plan
- Stock Options – When FGC Plasma does well, we want you to do well. Our employees are eligible for our company stock option plan
- Vacation and Holidays: At FGC Plasma we like to take time to celebrate throughout the year. We observe all government holidays, and offer generous vacation plans to all

At FGC Plasma, we are lucky enough to work with some of the brightest minds and institutions from around the world. As a full-time employee, you can anticipate:

- Interacting with world class professors, scientists, and researchers from universities in our Cambridge MA backyard, and from around the world
- Travelling and working with members of government research institutions

We look forward to working with you!

EEO Statement

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or veteran status.

How to apply

Send an email with CV to careers@fgcplasma.com

Visit us on the web at fgcplasma.com.
High Speed Systems / Aerospace Performance Engineer

Job Description

- Work at an innovative startup developing plasma-assisted ignition and combustion technologies for jet engines, gas turbines and scramjets.
- Seize the opportunity to exercise technical direction of new products and join an emerging, innovative team.
- Take an active role in the development of novel plasma-based technologies for various reacting flow processes.
- Complete meaningful research and engineering on federally funded research projects in collaboration with major research institutions.
- Collaborate with a multidisciplinary team of engineers, experimentalists, and modelers on translational research.
- Design hardware and execute experiments at high pressure and supersonic combustion facilities.

Job Requirements

For this position, it is required that applicants have:

- Computational analysis experience with gas turbine and/or scramjet combustion concepts.
- Strong collaborative spirit, working well with team members in addition to other companies, laboratories, and universities.
- Comfort with project autonomy, uncertainty, and fast-paced work environment.
- Degree in engineering/sciences field with strong educational background in computational fluid methods, reacting flows, and/or computational plasma analysis. M.S. or Ph.D. preferred
- U.S. Citizenship or Legal Permanent Resident status.
- Willingness to relocate to the Cambridge, MA or South Bend, IN. regions.

Desired Skills

For this position, it is desired that applicants have:

- Prior experience with of high-speed flows, reacting flows, plasmas, thermo-acoustic instabilities, and/or combustion control.
- Background in computational analysis of high-speed and/or combustion systems, and development of computational analysis tools.
- Further background in analysis of computational/experimental fluid results (Internal/External high-speed flows, turbine component flows, etc.) and control system development/analysis desired
- Familiarity with computational resource management, server management, server development desired
- Laboratory or hands-on experience is also desired, if applicable
- Enthusiasm for innovations in the clean energy and high-speed vehicles

Expected Tasks

- Component, system, and vehicle-level analyses and multi-variable trade studies and optimization studies
- Mechanical/Fluid/Thermal Analysis of reacting gas experimental rigs, test articles, and production parts
- Interface with design teams to inform rapid iteration of component and system-level designs.
- Share in developing system-level architectures for companies future strategic verticals
- Development and promotion of inter-disciplinary team culture built on trust, respect, and shared passion.