

493 Old Trenton Road · Cranbury NJ 08512 · Phone: 609 - 490 - 1090 · Fax: 609 - 490 - 1066

## SENIOR MECHANICAL ENGINEER

## POSITION SUMMARY

We seek a Senior Mechanical Engineer to design, build, and test novel thermal and electrical power generators requiring mechanical, thermal, and electrical engineering. The power source is based on novel hydrogen chemistry that produces extraordinarily high-power-density plasma from hydrogen containing fuel. The goal is to harness the power as heat or convert the plasma into electricity directly using a novel magnetohydrodynamic converter or indirectly inputting the corresponding thermal power into conventional Rankine or Brayton cycle turbine-generator systems. The system comprises an electromagnetic pump molten metal injection system, an electrical fuel ignition system, and a power converter. The successful candidate will work with a team of engineers, technicians, and machinists in house as well as effectively manage external resources.

## ACCOUNTABILITIES

- ✓ Planning and leading the mechanical design efforts for power system design-build-test including coaching and mentoring other engineers through execution of the work.
- ✓ The critical elements are the ability to integrate mechanical, thermal, and electrical systems and the requisite depth and breadth of analytical and prototyping skills, enhanced by creativity, cross-disciplinary problem solving and intuition, coupled with excellent time and project management capability.
- ✓ Ability to read and produce mechanical drawings.
- ✓ Must be able to clearly recognize and communicate component integration challenges that exist and suggest solutions, timelines, and resources required to solve these challenges.
- ✓ Proven multi-functional team leadership.
- ✓ Supply chain management.
- $\checkmark$  Must be prepared to attend the weekly meetings.
- ✓ Must come prepared with detailed reports as required.
- ✓ Capable of following up on assigned tasks.
- ✓ Must be capable and responsible for running a generator testing station, performing generator component testing, and supporting others to perform other such tests.

## **QUALIFICATIONS**

- ✓ Minimum of a PhD with at least three years of extensive, hands-on industrial engineering experience with mechanical, electrical, and thermal system integration is required.
- ✓ Mechanical, electrical, and thermal system design and integration capability.
- ✓ Design and implementation of monitor and control systems.
- ✓ Experience at rendering and modeling.
- ✓ Knowledge and experience with transformers is a plus.

Compensation: DOE + Bonus + Potential Stock Options

Brilliant Light Power, Inc. offers competitive salaries and a comprehensive benefits package. For more information regarding Brilliant Light Power, Inc., please visit our web site at: http://www.brilliantlightpower.com

For consideration, please email your resume to vfaktor@brilliantlightpower.com.