



ENGINEERING/RESEARCH TECHNICIAN (Thermal Engineering)

Woburn, MA

Giving everyone in the world access to clean, reliable, affordable energy will require substantial expansion of global electricity transmission networks. VEIR is developing a new generation of High Temperature Superconductor (HTS)-based transmission lines, enabling long distance, reliable, low loss, cost-effective power transfer in far smaller right-of-ways. VEIR's innovations overcome the main barriers to transmission expansion, enabling the world to access the very lowest cost renewable power.

VEIR is seeking a qualified **Engineering/Research Technician** to join our team. This individual will support VEIR's Heat Transfer Engineering team in designing and executing experiments to evaluate the performance of VEIR cryogenic cooling prototypes.

DUTIES & RESPONSIBILITIES:

- Maintain laboratory site and experimental facilities, e.g., orderliness, cleanliness, coordination of craft work, site preparation, site clean-up, and waste management
- Design, construct and operate experimental stands; build and assemble mechanical and electrical laboratory equipment; set-up various types of sensing and recording equipment including data acquisition, cryogenic temperature sensors (77K), pressure sensors, flow meters, temperature control circuits, etc.
- Work with liquid nitrogen flows, pressurized systems, energized electrical equipment, hand-operated power tools, basic machine shop equipment and forklift
- Work with engineers to perform precision measurements in cryogenic testbed environment
- Record procedures, equipment, and parameters used in technical work. Capture and analyze findings and data
- Collaborate with the experimental team, interpret results, summarize outcomes, and plan next stages of technical work
- Work with other personnel as appropriate for the conduct of the technical work
- The Company expects all Engineering/Research Technicians to exercise independent judgment and discretion with regards to design, installation and assembly of laboratory test stands and equipment, maintenance of experimental facilities, use of data acquisition systems, and the conduct of experiments to investigate the performance of VEIR subsystem prototypes.

MINIMUM EDUCATION/EXPERIENCE:

- Associate's degree in a relevant field plus at least 3 years of related professional experience, or an equivalent combination of education and experience.
- Experience with mechanical and electrical construction of research equipment
- Expertise in troubleshooting and operating specialized laboratory equipment
- Experience working with and operating specialized laboratory and diagnostics equipment such as mechanical systems, data acquisition systems, cryogenic systems, fluid control systems; etc.

PREFERRED EDUCATION/EXPERIENCE:

- Associate's degree in a relevant field plus at least 5 years related professional experience, or an equivalent combination of education and experience.
- Experience following the scientific method to design, perform, record, and report experiments and results.

REQUIRED SKILLS:

- Ability to build and maintain detailed understanding of VEIR technology and experimental procedures
- Thorough understanding of and demonstrated experience adhering to environment, safety, and health policies and procedures
- Sound knowledge and understanding of work hazards, safety practices and resolution of related issues
- Competency in technical work, such as handling cryogenics, soldering; fabrication, carpentry and basic machining; following analytical procedures and methodology; characterizing and testing materials, using hand and power tools
- Ability to use research data acquisition systems (oscilloscopes/digitizers, temperature and pressure sensors, LABView).
- Exceptional internal customer service, organizational skills and ability to interact with all levels of staff, service providers, and customers.
- Excellent oral, written and interpersonal communication skills across all levels of staff and management.
- Ability to work in a fast-paced, team-oriented environment
- Ability to work independently and take ownership of projects and assignments

ADDITIONAL NOTES:

- Working conditions: Laboratory environment, periodic work in outdoor environments (outdoor testbeds, pilot demonstrations)