

# INTERNSHIP – CRYOGENIC SYSTEM TESTING (SUMMER 2023)

Woburn, MA

## COMPANY INFORMATION:

Providing 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. And transmission is important: A 1% increase in the rate of transmission expansion might [reduce the US's total 2030 emissions by almost 20%](#).

## JOB DESCRIPTION:

You will join VEIR's cryogenics team, designing testing equipment and procedures to validate the long-term reliability of the system's active mechanical components. Transmission infrastructure is typically designed for a lifetime of 40 years; your work will be critical to ensuring VEIR's systems can endure repeated thermal and mechanical cycling for such durations. Besides your core work, your internship may also involve research and development activities in applied superconductivity (useful for fusion and quantum computing), cryogenics, vacuum systems, and high voltage engineering. VEIR is still small; learning opportunities are numerous, and your work will matter.

## DUTIES & RESPONSIBILITIES:

- Assist Project Managers to support ongoing lab operations
- Create 3D models in SolidWorks
- Prototype and test concepts and testbeds
- Assist in writing standard procedures for in-lab operations
- Perform routine duties in a wide range of systems engineering
- Maintain laboratory site and experimental facilities, e.g., orderliness, cleanliness, coordination of craft work, site preparation, site clean-up, and waste management

## PREFERRED EDUCATION/EXPERIENCE:

- Actively enrolled in accredited university
- Pursuing a degree in science or engineering
- Experience with CAD in SolidWorks, Ansys, and/or COMSOL
- Experience with LabVIEW, MATLAB, and/or Python
- Proficient in Microsoft Office tools
- Outstanding written and verbal communication skills

## REQUIRED SKILLS:

- Ability to contribute to multiple simultaneous projects effectively
- Ability to deliver on critical project goals and milestones in an independent environment
- Ability to communicate clearly and concisely (written/oral) with all levels of the company
- Ability to motivate others and build team unity
- Experience working effectively with cross-functional teams in a fast-paced, dynamic environment

## ADDITIONAL NOTES:

- Working conditions: Research laboratory environment, periodic work in outdoor environments (outdoor testbeds, pilot demonstrations)
- **The internship is paid, and Woburn, MA, is proximate to Boston.**

We appreciate your application!  
VEIR Inc.