



Position –Electrical Engineer - Subsea Systems

Employment Type – Term Employment, 18 months expected

Location - San Francisco Bay Area

Reporting to – Lead Electrical Design Engineer

Application Deadline: March 27, 2015

Program Overview

Schmidt Ocean Institute (SOI) is a private non-profit operating foundation (www.schmidtocean.org) established in March 2009 to advance oceanographic research, discovery, and knowledge, and catalyze sharing of information about the oceans. SOI is developing a series of advanced undersea robotic research vehicles for use on SOI's research ship Falkor. The vehicles will support scientific research throughout the full range of ocean depths, including operations at hadal depths, thereby providing scientists with access to the deepest parts of the ocean. The vehicles will be outfitted with a suite of sensors and scientific equipment to support collection of a broad range of data and samples.

Purpose / Role

The Electrical Engineer will support a range of tasks from initial electrical and electronic vehicle systems testing through commissioning, sea-trials and may include some technical support for at-sea operations of multiple technical and scientific systems related to the goals of the Schmidt Ocean Institute (SOI) and collaborators. The Electrical Engineer will work with the Lead Electrical Design Engineer and technical team to contribute practical and innovative designs for SOI's new subsea vehicle systems.

Skills & Education

Bachelor Degree in Electrical Engineering with 3+ years of experience with development of subsea systems. Electronic Systems, Electronics Troubleshooting, Electronic Testing Design, Quality Focus, Database Design, Analysing Information , Reporting Research Results, Attention to Detail, Emphasising Excellence, Innovation. Master's degree preferred.

Primary Responsibilities

- Evaluates electrical systems, products, components, and applications by designing and conducting research; applying knowledge of electricity and materials.
- Confirms system and components' capabilities by designing testing methods; testing properties.
- Develops electrical products by studying sub system requirements; researching and testing manufacturing and assembly methods and materials.
- Develops manufacturing processes by designing and modifying equipment for building and assembling electrical components; soliciting observations from operators.

- Assures product quality by designing electrical testing methods; testing finished products and system capabilities.
- Prepares product reports by collecting, analysing, and summarizing information and trends.
- Keeps equipment operational by following manufacturer's instructions and established procedures; requesting repair service.
- Maintains product data base by writing computer programs; entering data.
- Contributes to team effort by accomplishing related results as needed.

Requirements

- Sound understanding of electrical engineering principles.
- Expertise in electrical and electronic control systems, including component selection, schematic design, and schematic capture
- Knowledge of layout strategies for EMI minimization, signal integrity and low noise
- Comfort and ability to use all types of electronic test equipment
- Competent in use of PCB Design Tools (ALTIUM Designer preferred).
- Proficient in Agile or PDM/PLM Works (or similar), Excel.
- Strong working knowledge of remote and autonomous control systems required.
- Good working knowledge of CAD/CAM systems - e.g. SolidWorks (preferred), AutoCAD, PRO-E or other similar packages is preferred
- Good experience of Networking (Ethernet, MODBUS, RS232, RS485).
- Good experience of subsea engineering design useful.
- An enthusiasm for electrical engineering, practical experience and a varied background is essential.
- Excellent written and verbal communication skills (English)
- Valid passport

Compensation

Schmidt Ocean Institute offers a competitive salary and benefits package.

How to Apply:

Send a letter of interest and a resume / CV to: jobs@schmidtocean.org that clearly outlines how you meet the above requirements. References check will be conducted. Should a candidate make it to the formal interview stage, a design / project portfolio will be an asset.