

Job Title: FC Test Engineer	Job Code:
Department: R&D/Test Group	Job Grade:
Revision Date: 22 Aug 2022	Fair Labor Standards Act (FLSA):

Position Overview

The fuel cell test engineer's primary responsibility is to assemble and operate fuel cell test equipment and provide critical performance data on various high temperature membrane electrode assemblies throughout the spectrum of research, development, and production quality control. Will be part of the test/analysis team and work with research scientists, engineers, and production staff. Work will be carried out at Advent's brand new R&D facility in Charlestown, MA (opening late 2022).

Essential Job Functions

- Produce consistent and high-quality test results using a variety of fuel cell test equipment, including but not limited to single cells and short stacks
- Develop protocols and test methods for operation of single cells and short stacks
- Develop appropriate maintenance programs for the fuel cell test equipment
- Apply exceptional troubleshooting skill as primary engineer for solving software, electronic, gas metering, fluid handling, and mechanical equipment problems on fuel cell test equipment
- Support other engineers and scientists in identifying possible failure mechanisms in components that do not meet QC specifications
- Support FC Test Manager in component and material development work through analysis of test results and operation of single cell and short stack hardware
- Collaborate with Advent's research and development partners
- Accomplish job functions within Advent's safety protocols and procedures
- Conduct all work with exceptional attention to detail and unwavering integrity

Non-Essential Job Functions

- Assist in maintaining the appropriate quality systems related to the fuel cell testing
- Assist in planning and executing development trials and experiments
- Assist in customer technical assistance with respect to operation and testing of MEAs as well as proper gasket selection and assembly
- Assist engineering group on other various projects such as development of new processes and processing equipment, modification of existing processing equipment,

and development of new SOPs for modified equipment or newly developed processes

Requirements

- B.S. or higher from a nationally accredited university in Mechanical Engineering, Chemistry or Chemical Engineering with strong hands-on skill, Electrical Engineering with strong mechanical capabilities, or closely related degree and experience
- Experience with assembly and testing of single cell test equipment and hardware for polymer electrolyte fuel cells
- Experience with assembly of coated films and substrates into a finished stack, as well as lamination technologies
- Minimum of 3 years prior work experience or equivalent academic training specific to fuel cells, diagnostics, and electrochemistry

Other Skills/Abilities

- Excellent communication skills a must
- Ability to present data to all levels of the organization
- Ability to work with cross-functional teams from inside the company and outside the company
- Ability to enhance and modify software to improve the measurement process or solve problems a plus
- Experience with PLC programming or aptitude for and interest in learning this on a Siemens Simatic S7 PLC may be advantageous
- Familiarity with statistical software packages such as Minitab and database programs such as Microsoft Access
- Proficiency with Windows-based PC's and MS office programs including Outlook, Word, Excel, and PowerPoint

NOTE: This job description is not intended to be all-inclusive. Employee may perform other related duties as assigned to meet the ongoing needs of the organization. This position may be at times physically demanding and requires considerable manual dexterity, the ability to maneuver within confined spaces, and the strength to use a variety of manual and electric tools.