Fuel Cell Systems Engineer Interview Questions

1. Explain how you would conduct fuel cell testing projects, using fuel cell test stations, analytical instruments, or electrochemical diagnostics, such as cyclic voltammetry or impedance spectroscopy.
2. Name a time when you designed or implemented fuel cell testing or development programs.
3. Walk me through how you plan or implement fuel cell cost reduction or product improvement projects in collaboration with other engineers, suppliers, support personnel, or customers.
4. Share an effective approach to evaluate the power output, system cost, or environmental impact of new hydrogen or non-hydrogen fuel cell system designs.
5. What is the most challenging part of developing or evaluating systems or methods of hydrogen storage for fuel cell applications?
6. What kind of experience do you have writing technical reports or proposals related to engineering projects?
7. How do you stay up to date on current literature, attend meetings or conferences, or talk with colleagues to stay abreast of new technology or competitive products?
8. Name a time when you prepared test stations, instrumentation, or data acquisition systems for use in specific tests of fuel cell components or systems.
9. Walk me through how you coordinate fuel cell engineering or test schedules with departments outside engineering, such as manufacturing.
10. Describe methods you have found effective to validate design of fuel cells, fuel cell components, or fuel cell systems.
11. Tell me about the last time you simulated or modeled fuel cell, motor, or other system information, using simulation software programs.
12. Tell me how you would recommend or implement changes to fuel cell system designs.
13. Describe an experience when you provided technical consultation or direction related to the development

or production of fuel cell systems.
14. What have you found to be the best way to plan or conduct experiments to validate new materials, optimize startup protocols, reduce conditioning time, or examine contaminant tolerance?
15. Name a time when you managed fuel cell battery hybrid system architecture, including sizing of components, such as fuel cells, energy storage units, or electric drives.
16. What is the most challenging part of identifying or defining vehicle and system integration challenges for fuel cell vehicles?
17. What kind of experience do you have designing fuel cell systems, subsystems, stacks, assemblies, or components, such as electric traction motors or power electronics?
18. What have you found to be the best way to characterize component or fuel cell performances by generating operating maps, defining operating conditions, identifying design refinements, or executing durability assessments?