## **Hydrogen Fuel Cell**

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| **Aim** | **Methodology** | **Results** |
| * To develop a self-contained fuel cell that stores its own hydrogen, eliminating separate pressurized tanks and minimizing efficiency loss caused by pressure drops. | * Designed all components in **SolidWorks**, leveraging its user-friendly interface for part creation and assembly. * Cut and assembled **acrylic plates**, sealed with silicone glue, and added iron brackets for reinforcement. | * A fully functional conceptual design was fabricated and tested, confirming the feasibility of an integrated hydrogen storage approach while highlighting the best electrode–electrolyte combinations for improved cell efficiency. |

 