

**No. DST/TMD-EWO/AHFC-2021**  
**Government of India**  
**Department of Science & Technology**  
**Technology Mission Division (Energy, Water and all Others)**

**List of projects supported by DST under**  
**“ADVANCED HYDROGEN AND FUEL CELL PROGRAMME (AHFC-2021)”**

<b>S. No.</b>	<b>Proposal Title &amp; File Number</b>	<b>PI Name and Organization Details</b>	<b>Specific Area</b>	<b>Duration (In months)</b>	<b>Sanctioned Cost (in Rs.)</b>
1.	Design and Demonstration of Prototype Green Hydrogen Production Process in Biorefinery Platform with Net Zero Emissions  <b>DST/TMD-EWO/AHFC-2021/2021/32</b>	<b>Dr. S Venkata Mohan</b>  CSIR-Indian Institute of Chemical Technology, Hyderabad (CSIR-IICT)	Hydrogen production	36	4,99,65,760
2.	Indigenization of the HT-PEMFC Technology at the Raw Materials and Sub-Component Level by Establishing Pre-Production Scale Manufacturing Facilities  <b>DST/TMD-EWO/AHFC-2021/2021/39</b>	<b>Dr. Sreekumar Kurungot</b> CSIR - National Chemical Laboratory, (CSIR-NCL)  <b>Dr. Vishal Mahesh Dhavale</b> CSIR - Central Electro Chemical Research Institute (CSIR-CECRI)	New Material development	36	6,07,67,280
3.	Development of Alkaline Water Electrolyser Stack Prototype for green H <sub>2</sub> production from dynamic renewable energy devices using self-repairable Electrocatalyst and stable Membrane  <b>DST/TMD-EWO/AHFC-2021/2021/100</b>	<b>Dr. Nainesh Patel</b>  Christ (Deemed to be University), Karnataka	Hydrogen production	36	70,62,360

4.	<p>Development of Electrodes and modular Compact Membrane less Electrolyzer set up for sustainable H<sub>2</sub> production from sea/tap/ground water</p> <p><b>DST/TMD-EWO/AHFC-2021/2021/111</b></p>	<p><b>Prof. Akhoury Sudhir Kumar Sinha</b></p> <p>Rajiv Gandhi Institute of Petroleum Technology, Uttar Pradesh</p>	Hydrogen production	24	2,53,28,000
5.	<p>Indigenous Development of Electrolyte Supported Reversible Solid Oxide Fuel Cell RSOFC Stack and its Demonstration in Power Generation and Hydrogen</p> <p><b>DST/TMD-EWO/AHFC-2021/2021/118</b></p>	<p><b>Dr. ST Aruna</b> CSIR - National Aerospace Laboratories, (CSIR-NAL)</p> <p><b>Dr. Abhijit Das Sharma</b> CSIR - Central Glass And Ceramic Research Institute (CSIR-CGCRI)</p>	Fuel Cell	36	2,23,37,640
6.	<p>Smart Hydrogen Supply Chain supported Polymer Electrolyte Membrane Fuel Cell in Telecom Tower Power Backup</p> <p><b>DST/TMD-EWO/AHFC-2021/2021/127</b></p>	<p><b>Dr. Ramya Krishnan</b></p> <p>International Advanced Research Center for Powder Metallurgy And New Materials, Hyderabad</p>	Hydrogen utilization & refueling	36	5,54,94,000
7.	<p>Development and Determination of Operability Margins of a 3D Printed Hydrogen Burner System</p> <p><b>DST/TMD-EWO/AHFC-2021/2021/154</b></p>	<p><b>Dr. Saravanan Balusamy</b></p> <p>Indian Institute of Technology, Hyderabad Telangana.</p>	Hydrogen utilization & refueling	36	73,29,268

8.	Development of high-efficiency opposed-piston (OP) engine for hydrogen and HCNG fuels  <b>DST/TMD-EWO/AHFC-2021/2021/157</b>	<b>Prof. R V Ravikrishna</b>  Indian Institute of Science, Bangalore	Hydrogen utilization & refueling	36	3,08,00,848
9.	Long-term decarbonization strategies for the Indian steel sector with hydrogen as one option  <b>DST/TMD-EWO/AHFC-2021/2021/184</b>	<b>Dr. Anjana Das</b>  Integrated Research And Action For Development, Delhi	Policy Frameworks/ Hydrogen Safety	18	60,00,000
10.	Advanced Process Simulation Modelling for Hydrogen Application in Hard to Abate Industries – A Technical and Economic Assessment.  <b>DST/TMD-EWO/AHFC-2021/2021/185</b>	<b>Dr. Murali Ramakrishnan Ananthakumar</b>  Center for Study of Science, Technology, and Policy (CSTEP) Bengaluru	Policy Frameworks/ Hydrogen Safety	18	71,75,033
11.	Design of power converter for 3-phase grid integration of Hydrogen fed PME Fuel cell using high frequency link multistage converter.  <b>DST/TMD-EWO/AHFC-2021/2021/191</b>	<b>Dr. Rupesh Wandhare</b>  Indian Institute of Technology Hyderabad, Telangana	Fuel Cell	36	46,52,670