

# FUEL CELLS – JOURNEY TOWARDS A NEW ENERGY ERA

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*Fuel cells have emerged as one of the most promising new technologies for meeting global power needs in the 21<sup>st</sup> century. It is an electrochemical device, which directly converts the chemical energy of a fuel to electrical energy. Inherently clean, quiet and remarkably efficient (>50%) fuel cells have been identified for future transport and stationary applications. A combination of fuel cell with renewable energy (like wind, hydel, and solar) for supply of hydrogen (fuel for fuel cell) could reduce the greenhouse gas emissions and dependency on fossil fuels. Besides offering environment friendly power, this non-conventional energy sector may also open up tremendous job opportunities. The cost of fuel cell must therefore be brought down drastically for it to reach the common people's doorstep. CGCRI Kolkata is currently engaged in developing this new technology for stationary power applications.*

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