Seawater electrolysis is used to use energy from solar radiation

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ABSTRACT

This experiment involves seawater electrolysis, using electricity produced in a photovoltaic panel. The hydrogen produced is then used in a fuel cell, which creates an electrical output in order to move small helices.
The experiment occurs in two different electrolysers. In the first electrolyser graphite electrodes are used as anode and cathode. In this case, hydrogen is released on the cathode until magnesium hydroxide precipitates and chloride is released on the anode. The second electrolyser has a graphite cathode and an iron anode. In this case, the iron anode is progressively oxidized to its ionic form and hydrogen is released on the cathode. In both electrolysers, the hydrogen produced is used to create an electrical output through a fuel cell.
This experiment demonstrates that it is possible to store energy from solar radiation for further applications in hydrogen cells.