THERMODYNAMIC ANALYSIS OF THE ELECTROLYSIS PROCESS OF BROWN'S GAS

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Abstract:

Thermodynamic analysis aims to study the energy thermodynamic processes occurring during electrolysis in the production of Brownian gas. The applied methods are monitoring of the temperature of the electrolyte - sea water at different operating modes. A key criterion for the obtained Brown gas is the temperature of the electrolyte, which shows us whether there is an exothermic process based on the synthesis of hydrogen and oxygen atoms after their separation from the water molecule. The most important conclusion and goal of the study is to show analytically that the production of molecular hydrogen and oxygen are the most inefficient method for the production of energy carrier due to the presence of exothermic and respectively endothermic combustion processes. The other fundamental conclusion is that Brown's gas appears to be an ideal, perfect energy accumulator, without any internal hysteresis characteristic of all known batteries.

Key words: exothermic process, lack of heat release, endothermic process,