

Thermochemical Cycles

C. Sattler

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Christian Sattler

Abstract

Thermochemical cycles promise to be one of the most efficient possibilities for large-scale hydrogen production. Therefore, nuclear and solar heated thermochemical cycles have been under development since the oil crises of the 1970s. During low oil prices in the 1980s and 1990s the interest on these technologies was low but since the ratification of the Kyoto Protocol thermochemical cycles are back in the focus. This chapter gives an overview on the different classes of thermochemical cycles and their state of development. It also describes where the limits of these technologies are and gives a view on possibilities for a future industrial application. Where possible it also discusses the economics of the processes.

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