

HydroSol-1 project

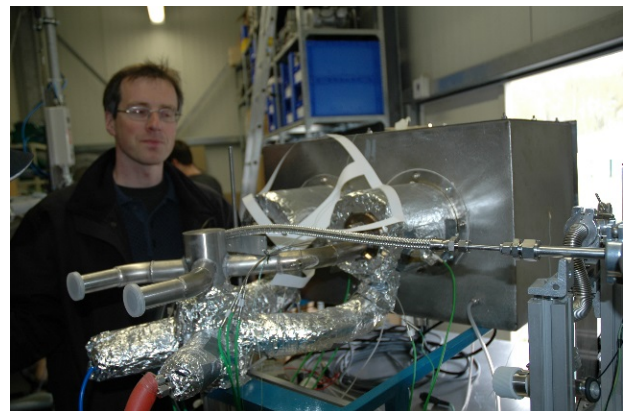
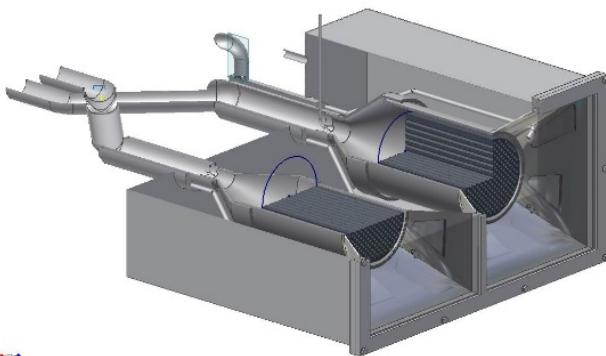
The aim of the HydroSol-1 research project was to exploit solar energy for the catalytic dissociation of water and the production of hydrogen. The basic idea was to combine a monolithic ceramic honeycomb structure capable of achieving high temperatures when irradiated with solar energy with an oxide-based redox catalyst system capable of performing water dissociation and being at the same time reversibly reducible and oxidizable at these temperatures, so that complete operation of the whole system (water splitting and catalyst regeneration) can be achieved on a solar monolithic energy converter.



Partners were:

- **Chemical Process Engineering Research Institute (C.P.E.R.I.)** of Greece - www.apr.cperi.certh.gr
- **Deutsches Zentrum für Luft- und Raumfahrt** of Germany - www.dlr.de
- **Stobbe Tech A/S** of Denmark – www.stobbe.com
- **Johnson-Matthey Fuel Cell Ltd.** of UK - www.matthey.com

Title: “Catalytic monolith reactor for hydrogen generation from solar water splitting”



The project was sponsored by the EU commission under FP5

Project period: start 01oct02 end 30oct05