

**PRESS RELEASE****February 2013****Advent Technologies participation at ESA-ESTEC,  
European Space Agency-European Space Research and Technology Center**

Advent Technologies participated at the meeting "Power and Energy Conversion Final Presentation Day" that took place in ESA-ESTECV, in Noordwijk of Netherlands

Advent Technologies presented the results of *ESTEC Contract No. 22329/09/NL/CBI* named "Regenerative PEM fuel cells" with Technology Readiness Level TRL3-4 at the session "Fuel Cell Demonstration Testing".

Advent presentation has been focused on: materials study, MEAs development for water electrolysis, Development of HT PEM electrolyzer stack and HT PEM stack, development of a closed loop Regenerative FC system, System testing under cycling. Advent team was the only that presented 300 cycles of fuel cell and electrolyser working together and 1000hrs of start stop cycles of the fuel cell alone by simulating the electrolyser's operation. Overall, the results justified the feasibility and proof-of-concept of such regenerative PEM system.

The successful implementation of *ESTEC Contract No. 22329/09/NL/CBI* allows for its potential use in satellite and space applications and the continuation of the project to the next Technology Readiness Level TRL5-6 with the contract "Development of a closed loop Regenerative HT-PEM fuel cell system". ADVENT will be the Prime Contractor.