





















Hydrogen Program

2010 Annual Merit Review and Peer Evaluation Report

DOE/GO-102010-3144 December 2010

About the Cover

Photo collage (from top to bottom, left to right):

Portable fuel-cell-powered charger. Photo courtesy of MTI Micro Fuel Cells (NREL PIX 17982.)

Webline manufacturing of fuel cell membranes. Photo courtesy of BASF Fuel Cell, Inc. (NREL PIX 17983.)

Pore network model of microporous and gas diffusion layers (MPL/GDL) of a fuel cell anode/cathode. Image courtesy of Sandia National Laboratories.

DF-STEM image of platinum-gold fuel cell catalysts. Image courtesy of Oak Ridge National Laboratory.

STEM image of platinum on carbon supports. Image courtesy of Oak Ridge National Laboratory.

New ab-initio modeling of the semiconductor/liquid interface for photoelectrochemical solar water-splitting. *Image courtesy of Lawrence Livermore National Laboratories*.

Thermal model during charging of a section of a hydrogen storage bed using a metallic honeycomb structure. Image courtesy of Savannah River National Laboratory.

High-pressure hydrogen refueler tank truck. Photo courtesy of Energetics, Inc. (NREL PIX 17985).

Back-up power from fuel cells. Photo courtesy of Reli0n (NREL PIX 17984).

Photo on right:

Washington Monument, Washington, DC. Photo by Ned Stetson, U.S. Department of Energy (NREL PIX 17980).

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