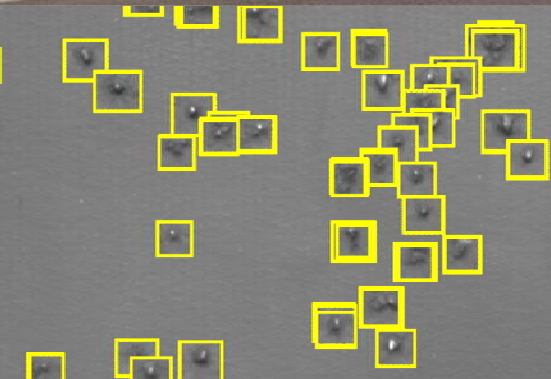


U.S. DEPARTMENT OF ENERGY

Hydrogen and Fuel Cells Program



2015 Annual Merit Review and Peer Evaluation Report

June 8–12, 2015
Arlington, VA

About the Cover

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

A cryogenic transmission electron microscopy three-dimensional reconstruction of hydrated Nafion. *Image courtesy of Lawrence Berkeley National Laboratory.*

A unit cell of a coordinatively unsaturated metal center $\text{Co}_2(m\text{-dobdc})$ structure dosed with three deuterium molecules (green) per open metal site. The circled inset shows a section of the unit cell that has been enlarged in the upper right, showing the location of the deuterium with respect to an open cobalt site. *Image courtesy of C. Ahn, U.S. Department of Energy, based on M.T. Kapelewski et al., J. Am. Chem. Soc., 2014, 136, 12119–12129.*

The California State University, Los Angeles, station was the first in the United States to receive a seal of approval for the consumer sale of hydrogen on a per-kilogram basis. The right portion of the image shows an enlarged version of the approval seal. *Photo courtesy of California State University, Los Angeles.*

The **Hydrogen Fueling Infrastructure Research Station Technology (H2FIRST)** project is designed to address the technical challenges of hydrogen station deployment in the early market.

Fuel cell cargo tractors are demonstrated at the Memphis International Airport by Plug Power with Fuel Cell Technologies Office partner FedEx. *Photo courtesy of FedEx.*

An optical reflectance image showing automated (not manual) detection of particulates on the electrode surface of a gas diffusion electrode. The individual images of the particles inside the yellow boxes are magnified 10 times. *Image courtesy of the National Renewable Energy Laboratory.*

Photo on right:

U.S. Capitol Building. *Photo courtesy of Dollar Photo Club.*

U.S. Department of Energy Hydrogen and Fuel Cells Program

**2015 Annual Merit Review
and
Peer Evaluation Report**

**June 8–12, 2015
Arlington, Virginia**

NOTICE

This report was prepared as an account of work sponsored by an agency of the United States government. Neither the United States government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States government or any agency thereof.