

news from **FUEL CELLS 2000**

Fuel Cells 2000's Fuel Cell Technology Update – August 2010

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<http://www.fuelcells.org/dc/dcboard.php>

TRANSPORTATION APPLICATIONS

H2MOVES to Bring Fuel Cell Vehicles to Scandinavia.

A large demonstration project called H2MOVES will bring seventeen of the latest state-of-the-art fuel cell electric vehicles from Daimler and FIAT to Oslo, Norway. The project also includes a large scale hydrogen refuelling station in the city by H2 Logic. The project has a budget of €19.5 million (US\$25.5 million) financed by company contributions as well as European and national funding from Norway and Denmark.

<http://www.h2moves.eu/>

ENFICA-FC Project Sets Speed and Endurance Records.

A hydrogen fuel cell aircraft developed as part of the ENvironmentally-Friendly Inter City Aircraft powered by Fuel Cells (ENFICA-FC) project, set new speed and endurance records for an electrically-powered class C aeroplane in Italy. After three years of design, development and installation, the aircraft completed its maiden flight, recording speeds of 145-150 km/h (previous record was 135 km/h) and breaking the endurance record of 45 minutes.

<http://www.platinum.matthey.com/home/media-room/news-room/fuel-cell-aircraft-sets-new-world-records/19886914.html>

US Foodservice-San Francisco Purchases 40 OorjaPac Units for Forklifts.

US Foodservice-San Francisco has purchased 40 the OorjaPac Model 3 direct methanol fuel cells from Oorja Protonics to power pallet jacks in its Livermore, California, food distribution facility. U.S. Foodservice expects to save 620,000 kilowatt-hours annually using the fuel cells and will eliminate the need for a battery swap mid-shift. This translates to an estimated four hours of productivity savings per day or about 920 hours per year, which greatly accelerates the return on investment. The purchase comes after a month-long trial period where U.S. Foodservice saw demonstrably increased productivity using the fuel cells.

http://www.usfoodservice.com/about/media_lounge_press_releases.htm

Plug Power and Ballard Extend Supply Agreement.

Plug Power Inc. and Ballard Power Systems Inc. have extended their existing supply agreement, effective immediately, through 2014. Ballard will remain the exclusive supplier of fuel cell stacks for Plug Power's full suite of GenDrive™ power units. In addition, Plug Power will become the exclusive systems integrator for Ballard's fuel cell stack into solutions addressing the material handling market in North America. The previous agreement was due to expire December 31, 2010.

<http://www.plugpower.com/newsroom/pressreleases.aspx?action=details&newsid=352>

STATIONARY APPLICATIONS

FuelCell Energy Sells Unit to Carla's Pasta.

FuelCell Energy, Inc. has sold a 300 kW DFC300 fuel cell power plant and five year service contract through LOGANEnergy to Carla's Pasta, Inc. for installation at its frozen food processing facility in South Windsor, Connecticut. The fuel cell power plant is expected to provide 60 percent of the energy needs of the recently expanded facility with the byproduct heat to be used for facility heating and heating hot water for the production process and general facility needs. The power plant is expected to be operational by mid 2011.

<http://fcel.client.shareholder.com/releasedetail.cfm?ReleaseID=492678>

Ballard Completed Testing of 1-MW PEM System.

Ballard Power Systems has successfully completed the factory testing of a utility-scale distributed generation system using the company's proton exchange membrane (PEM) fuel cells. Ballard tested the fuel cell to a power level of 1 MW. Installation and commissioning of the system for a multi-year demonstration at FirstEnergy Generation Corp's Eastlake Plant in Ohio is planned for third quarter of this year.

<http://phx.corporate-ir.net/phoenix.zhtml?c=76046&p=irol-newsArticle&ID=1452455&highlight=>

IRD Awarded Funding for Methanol mCHP Plant.

IRD has gained EU and state funding to develop a methanol-fueled 500 Watt mCHP plant. The DKK 8.6 million (US\$1.5 million) project is being supported by the Ministry of Science, Technology and Innovation, as well as by the EU research program Eurostars. The Austrian company AVL List GmbH is a collaboration partner.

<http://www.denmark.dk/en/servicemenu/News/Environment-Energy-Climate-News/DanishFuelCellFirmGetsFundingToDevelopA500WMiniCHP.htm>

PORTABLE/BACKUP POWER

MICRO FUEL CELLS

FUELS/REFORMERS/STORAGE

Hydrogenics Receives Electrolyzer Orders.

Hydrogenics Corporation has secured orders for electrolyzers with customers in Russia and the Middle East. In Russia, Hydrogenics will supply a large industrial company in the city of Tomsk with a HySTAT unit for the production of light bulbs. The other order, with Siemens AG is for an electrolyzer to be used at a seawater desalination and power plant being built in Saudi Arabia; this award, the first for Hydrogenics directly with Siemens, includes outdoor housing, a hydrogen purification device, and auxiliary systems. Both orders are expected to be shipped during the second half of 2010.

http://www.hydrogenics.com/invest/News_Details.asp?RELEASEID=488585

Proton Energy Unveils New Hydrogen Generator.

Proton Energy Systems unveiled its new HOGEN C Series hydrogen generation system that is capable of producing ultra high purity hydrogen at rates up to 30 NM³/hr and 30 bar delivery pressure.

http://www.protonenergy.com/backend/arc_contenido/archivo303.pdf

MATERIALS/COMPONENTS/TESTING

FuelCell Energy to Procure Components to POSCO.

FuelCell Energy, Inc. has entered into a contract to procure fuel cell stack module assembly and conditioning equipment to sell to POSCO Power, the Company's South Korean partner. The production equipment will be used to assemble and condition fuel cell stacks in South Korea using fuel cell components supplied by FuelCell Energy. The production equipment is expected to be shipped in 2010.

<http://fcel.client.shareholder.com/releasedetail.cfm?ReleaseID=485142>

REPORTS/MARKET STUDIES

Korea Survey.

Fuel Cell Today recently released its Survey of Korea 2010.

<http://www.fuelcelltoday.com/online/survey?survey=2010-07/Survey-of-Korea-2010>

REQUESTS FOR PROPOSALS

Check out the [Fuel Cell RFPs](#) blog for more opportunities.

2011 Ohio Third Frontier Fuel Cell Program RFP.

The Ohio Department of Development has issued its FY2011 Ohio Third Frontier Fuel Cell Program Request for Proposals. The program will award up to \$7 million in grants for projects that accelerate the development and growth of the fuel cell industry in Ohio. Organizations that will be considered should be seeking to commercialize new products, manufacturing processes or technologies, or to modify existing components that are produced in Ohio for use in fuel cells or fuel cell systems; or commercially oriented demonstration projects.

<http://www.development.ohio.gov/OhioThirdFrontier/FuelCellProgram.htm>

GE Ecomagination Challenge.

GE launched a \$200 million open innovation challenge that seeks breakthrough ideas to create a smarter, cleaner, more efficient electric grid, and accelerate the adoption of smart grid technologies. The "GE ecomagination Challenge: Powering the Grid," invites technologists, entrepreneurs and start-ups to share their best ideas and come together to take on one of the world's toughest challenges - building the next-generation power grid to meet the needs of the 21st century.

<http://challenge.ecomagination.com/ideas?randomtokenforcache=128076978018680qCa>

DOE Liquid Hydrogen.

The U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy's (EERE) Fuel Cell Technologies Program is seeking applications for a project that employs liquid carrier technology as a means of storing or delivering hydrogen. Eligible applications for this award can involve applied research, development, demonstration, or any combination of these. The work scope may include materials research and development, systems engineering and development, scale-up demonstration, or any combination of these.

http://www1.eere.energy.gov/hydrogenandfuelcells/solicitations_detail.html?sol_id=354

PA DEP Alternative Fuels Incentive Grant Program.

The Pennsylvania Department of Environmental Protection (PA DEP) is accepting applications for its Alternative Fuels Incentive Grant (AFIG) Program. Eligible applicants in the innovative technology category include projects to research, develop and test advanced fuel cell engines and projects to research, develop and test advanced catalysts, enzymes or fuels, including hydrogen. Approximately \$6 million is available for grants under this program.

http://www.portal.state.pa.us/portal/server.pt/community/alternative_fuels_incentive_grant-move_to_grants/10492

NASA SBIR/STTR.

The National Aeronautics and Space Administration (NASA) issued its 2010 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) solicitation that includes subtopics on fuel cells and electrolyzers and electric propulsion systems.

<http://sbir.gsfc.nasa.gov/SBIR/sbirsttr2010/solicitation/index.html>

MISCELLANEOUS

Proton Energy and Penn State Win ARPA-E Funding.

Proton Energy Systems and its partner Pennsylvania State University was awarded \$2,148,719 from the Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E) program to develop an advanced energy storage device that incorporates a regenerative fuel cell.

<http://arpa-e.energy.gov/LinkClick.aspx?fileticket=EuZA5Wf5GHI%3d&tabid=83>

Product Catalog Updates Requested.

The Hydrogen and Fuel Cell Products Catalog on the National Hydrogen Association website is undergoing an update. To add your company's products to this free directory or update your listing, go to <http://hydrogenassociation.org/general/products/add.asp>.

SFC Smart Fuel Cell Changes Name to SFC Energy.

SFC Smart Fuel Cell AG is changing its company name to SFC Energy AG.

<http://www.efoy.com/en/press-release/11256-neue-firmierung-aus-sfc-smart-fuel-cell-ag-wird-sfc-energy-ag.html>

CONFERENCES

For a complete list of conferences, please go to <http://www.fuelcells.org/news/conf.html>.

Fuel cells for Uninterruptible Power Systems.

A workshop entitled "Fuel cells for Uninterruptible Power Systems: Reliable, Clean and Energy Efficient Solutions for Back-up and Stand-alone Power Systems" will be held Wednesday September 15, 2010, in Brussels, Belgium. For more information, please visit <http://fuelcelleurope.eurokeys.eu/>.

f-cell 2010.

The f-cell 2010 conference takes place September 27-28, 2010, in Stuttgart, Germany. For registration or exhibitor information, please go to <http://www.f-cell.de/englisch/Home/>.

Fuel Cells Science & Technology 2010.

The Fuel Cells Science & Technology 2010 conference will be held October 6-7, 2010, in Zaragoza, Spain. For conference information, please go to <http://www.fuelcelladvances.com/index.asp>.

Remote 2010.

The Remote 2010 Conference and Exposition will be held October 19-20, 2010, in Dallas, Texas. For conference details, please visit <http://www.RemoteExpo.com>.

GovGreen.

The Center for Environmental Innovation and Leadership (CEIL)'s GovGreen Conference and Exhibition will be held November 9-10, 2010, at the Washington Convention Center in Washington, DC. For more information, please go to <http://www.ceileadership.org/>.

ICEPAG 2011.

The 11th International Colloquium on Environmentally Preferred Advanced Power Generation (ICEPAG) will be held February 8-10, 2011, in Costa Mesa, California. For conference information, please visit <http://www.apep.uci.edu/ICEPAG2011/Default.aspx>.

HANNOVER MESSE.

The 17th Group Exhibit Hydrogen + Fuel Cells at HANNOVER MESSE 2011 will take place April 4-8, 2011, in Hannover, Germany. For details, please visit <http://www.h2fc-fair.com/>.

Hydrogen + Fuel Cells 2011.

The Hydrogen + Fuel Cells 2011 International Conference and Exhibition will be held May 15-18, 2011, in Vancouver, BC, Canada. For conference information, please go to <http://www.hfc2011.com/>.

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Fuel cells generate electricity without combustion by harnessing the energy released when hydrogen and oxygen are chemically combined. Fuel Cells 2000 is an independent, nonprofit activity dedicated to the commercialization of fuel cell technologies.