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**FUEL CELL CONNECTION -- September 2002 Issue**  
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## Administration

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## News on U.S. Government Fuel Cell Programs

### 1. DOD Fuel Cell Test and Evaluation Center to Install Residential Fuel Cell System

The Department of Defense Fuel Cell Test and Evaluation Center (FC Tec) has purchased and will install a Plug Power 5-kW residential combined heat and power fuel cell system. The system is the first of several different manufacturers' systems that will be purchased and tested by FC Tec as part of a DOD project to develop and validate a test protocol for residential fuel cells in cooperation with the National Rural Electric Cooperative Association.

<http://www.ctc.com/index.cfm?fuseaction=1511&PR=02sep19.htm>

### 2. Hydrogen Produced from Peanut Shells

A team of researchers from the National Renewable Energy Laboratory, Clark Atlanta University, Georgia Institute of Technology, Scientific Carbons and Enviro-tech have successfully demonstrated the use of biomass from peanut shells to produce hydrogen. NREL and Scientific Carbons filed for patent protection on a new slow-release fertilizer made while producing biomass-based hydrogen and a sequestered carbon.

<http://www.gnet.org/news/newsdetail.cfm?NewsID=22050>

### 3. DOE Funds Pilot Plant for Production of Fuel Cell Electrodes

Southwest Research Institute (SwRI) has opened a pilot plant for the high-volume production of fuel cell electrodes, thanks to a \$12 million DOE contract, and additional funding/resources from Southwest Research Institute, W.L. Gore, and General Motors. Electrodes will be produced for fuel cell stacks to be constructed by General Motors for Argonne National Laboratory to evaluate. The pilot plant will remain available for continued production demonstrations.

[http://www.businesswire.com/cgi-bin/f\\_headline.cgi?bw.092502/222680374](http://www.businesswire.com/cgi-bin/f_headline.cgi?bw.092502/222680374)

### 4. Coast Guard Fuel Cell Project Status Report Posted

Site preparation work is complete for the US Coast Guard Air Station Cape Cod Fuel Cell Project, which will demonstrate a stationary fuel cell power plant at the station. A "very productive on site meeting was held at FuelCell Energy in Danbury, Connecticut...to discuss the project's current status and remaining issues..." FuelCell Energy and PPL Savage engineers are awaiting final approval to connect to the utility grid. Monthly status reports are available online.

<http://www.uscg.mil/systems/gse/energy/FuelCell/Fuel-Cell-Consolidate-Status-Report.pdf>

### 5. New National Heavy-Duty Fuel Cell Vehicle Work Group Launched

The Federal Transit Authority launched a new National Heavy-Duty Fuel Cell Vehicle Work Group at the American of Public Transportation Association (APTA) Annual Meeting & Expo in Las Vegas. FTA's ad hoc Fuel Cell Transit Review Committee will transition to the new Work Group, which will be facilitated by the Northeast Advanced Vehicle Consortium. "The purpose of the new Work Group is to bring together a wide range of stakeholders interested in the successful commercialization of heavy-duty fuel cell vehicles with a near-term emphasis on fuel cell buses, including fuel cell developers, transit operators, bus companies, federal and state policymakers, electric and hybrid drive suppliers, testing laboratories and others." For more information on this effort, contact Lisa Callaghan (lisacal@navc.org or 617-482-1770, ext. 14).

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*6. FEMP Introduces "Locator" for Energy Training Courses*

The Federal Energy Management Program has created the "Training Event Locator System" to assist the energy and water conservation community to identify training courses and conferences offered by organizations other than FEMP. "Fuel Cells" is listed as a course sub-category within the "Renewables/Distributed Energy Resources" category.

<http://zeus-1.y12.doe.gov/FEMP/Scripts/Frameset.cfm?UserType=General>

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*7. DOE & DOC Secretaries Detail Climate Research and Technology Progress*

In a letter to President Bush, Secretary of Energy Spencer Abraham and Secretary of Commerce Don Evans detailed progress on federal climate change science and technology programs, including fuel cells. The letter notes fuel cells for transportation and hydrogen-based energy systems as high priority technologies now being pursued. The letter also references a U.S.-Indo workshop on fuel cells, which occurred in June 2002.

<http://www.climate-science.gov/Library/climateletter.pdf>

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*8. PCAST Sends Letter to President Recommending Increase in Federal R&D Investment*

The President's Council of Advisors on Science and Technology (PCAST) sent a letter to President Bush calling for a doubling in the FY2004 budget of federal research investments in physical sciences and 4 major engineering fields (electrical, mechanical, chemical, and metallurgy & materials) from the FY2002 levels. The Council says "Inadequate federal funding for physical sciences and engineering hurts all scientific disciplines," based on a study of the trends and patterns of federal support of R&D over the past 25 years.

[http://www.ostp.gov/PCAST/02\\_8\\_28.html](http://www.ostp.gov/PCAST/02_8_28.html)

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*9. Hydrogen Technical Advisory Panel to Meet in October*

The Secretary of Energy's Hydrogen Technical Advisory Panel will meet in Washington, DC, on October 22-23, 2002. The meeting will be held at the Holiday Inn – Capitol. There is no registration fee. Details will be posted on the Hydrogen Information Network.

<http://www.eren.doe.gov/hydrogen>

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*10. Hydrogen and Fuel Cells Codes and Standards Matrix Available Online*

DOE has posted a Hydrogen and Fuel Cells Codes and Standards matrix with details on technical contacts and status.

<http://www.hydrogensafety.info/CurrentMatrix.pdf>

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*11. Presentations Posted for Fuel Cell Roadmap Workshop*

Presentations are now available online for the DOE Office of Power Technologies' Fuel Cells for Buildings and Stationary Applications Roadmap Workshop, which was held in April 2002.

[http://www.eren.doe.gov/hydrogen/fuelcell\\_workshop.html](http://www.eren.doe.gov/hydrogen/fuelcell_workshop.html)

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RFP/Solicitation News
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*12. NETL Master Solicitation for Technologies for Coal, Oil and Gas*

The National Energy Technology Laboratory has issued a master solicitation for proposals for the Development of Technologies and Capabilities for Developing Coal, Oil and Gas Energy Resources. Proposals must be submitted under one of thirteen program "Areas of Interest,"

including "Coal Fuels and Hydrogen" and "Fuel Cells". Between 50 and 75 awards are anticipated from this solicitation. It is estimated that \$23.85 million will be available for award under this solicitation, subject to the availability of funds. The deadline for proposals is October 28, 2002.  
[http://www.eps.gov/spg/DOE/PAM/HQ/DE-PS26-02NT41613-00\\_MASTER\\_SOLICITATION/listing.html](http://www.eps.gov/spg/DOE/PAM/HQ/DE-PS26-02NT41613-00_MASTER_SOLICITATION/listing.html)

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*13. DOE to Issue Fuel Cell Solicitation*

DOE has announced it will issue a solicitation for the research and development of stationary and automotive fuel cell technology. The solicitation will include teaming requirements. Subject to the availability of funds, DOE expects to allocate \$7 million in FY2003 for the selected projects. Total estimated Government funding for the solicitation is approximately \$70 million for the period of performance. The solicitation is expected to be issued in mid-October 2002.  
[http://www.energy.gov/HQPress/releases02/sepr/pr02193\\_v.htm](http://www.energy.gov/HQPress/releases02/sepr/pr02193_v.htm)

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Contract / Funding Awards
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*14. NETL Picks Foundation for Joint Russian-American Fuel Cell Power Plant Production*

The National Energy Technology Laboratory intends to non-competitively solicit the U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union to provide administrative and financial management functions for a grant with the Russia Federal Nuclear Center to prepare materials for a full-scale business plan on organization of a joint Russian-American production of fuel cell power plants in Russia.  
<http://www.eps.gov/spg/DOE/PAM/HQ/DE-RQ26-02NT20898/SynopsisP.html>

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*15. Teledyne Selected for NASA MEA Testing*

NASA's Glenn Research Center has awarded a \$252,289 contract to Teledyne Energy Systems for membrane electrode assemblies life testing.  
<http://prod.nais.nasa.gov/cgi-bin/eps/synopsis.cgi?acqid=103266&type=award>

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*16. Army, Syntroleum Finalize Contract for Single Battlefield Fuel*

The U.S. Army will contract with Syntroleum Corporation for a flexible marine mounted facility for the production of a synthetic fuel designated S-5 X-02-001, formulated to be freely interchangeable with JP-8, and would be usable in some fuel cell power systems. Work has already begun under the terms of the \$3.5 million contract, which has a 12-month duration.  
<http://www.syntroleum.com/news/2002pr/09192002.htm>

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*17. Boeing Wins DARPA Contract for Fuel Cell-Powered Aerial Vehicle*

The Defense Advanced Research Projects Agency has awarded a contract to Boeing for the design of a fuel cell propulsion system for a new unmanned aerial vehicle (UAV). The contract was valued at over \$300,000.  
[http://story.news.yahoo.com/news?tmpl=story&u=/nm/20020903/bs\\_nm/arms\\_boeing\\_dc\\_1](http://story.news.yahoo.com/news?tmpl=story&u=/nm/20020903/bs_nm/arms_boeing_dc_1)

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*18. Navy Awards \$1.15 Million to Plug Power for Residential Fuel Cells*

The Navy Renewable Energy Division at NAVAIR China Lake, California, awarded a \$1.15 million contract to Plug Power for residential fuel cells. Eight of the fuel cell systems will be installed on the Naval Air Station North Island and Submarine Base San Diego, and another will be installed at China Lake. The systems use natural gas as the source of hydrogen.

[http://www.news.navy.mil/search/display.asp?story\\_id=3370](http://www.news.navy.mil/search/display.asp?story_id=3370)

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*19. DOE Selects DTE Energy for Hydrogen Power Park Project*

DOE has selected DTE Energy as its partner in a 3-year hydrogen power park project. Under the contract, DTE Energy will develop, build and operate an integrated hydrogen energy system capable of delivering 15,000 kilowatt-hours of electricity per year.

[http://biz.yahoo.com/prnews/020923/dem005\\_1.html](http://biz.yahoo.com/prnews/020923/dem005_1.html)

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*20. Grant Awarded to AltFuel Solutions for Hydrogen Infrastructure Planning*

The Ohio Department of Development, Office of Energy Efficiency, has awarded a grant to AltFuel Solutions to conduct Phase I of a demonstration hydrogen fuel station project in the Cleveland area. The new facility will refuel natural gas, hydrogen, and hydrogen fuel cell vehicles.

<http://www.afdc.doe.gov/whatsnew.shtml>

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Legislation / Regulations
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*21. California Governor Signs Clean Energy Legislation*

California Governor Gray Davis has signed legislation establishing the California Renewables Portfolio Standard, which requires retail sellers of electricity to increase their use of renewable resources by at least 1 percent per year, until 20 percent of their retail sales are from renewables, which must occur by 2017.

[http://www.governor.ca.gov/state/govsite/gov\\_htmldisplay.jsp?CatTitle=Press+Release&sFilePath=/govsite/press\\_release/2002\\_09/20020912\\_L02110\\_Enviro\\_Legislation.html&sTitle=GOVERNOR+DAVIS+SIGNS+ENVIRONMENTAL+LEGISLATION+TO+MANDATE+CLEANER,+AFFORDABLE+ENERGY+9%2f12%2f2002&iOID=36156](http://www.governor.ca.gov/state/govsite/gov_htmldisplay.jsp?CatTitle=Press+Release&sFilePath=/govsite/press_release/2002_09/20020912_L02110_Enviro_Legislation.html&sTitle=GOVERNOR+DAVIS+SIGNS+ENVIRONMENTAL+LEGISLATION+TO+MANDATE+CLEANER,+AFFORDABLE+ENERGY+9%2f12%2f2002&iOID=36156)

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Industry Headlines
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*22. GM Showcases Hy-wire Fuel Cell Vehicle at Paris Auto Show*

General Motors showcased its Hy-wire, a fuel cell vehicle driven by a "by-wire" technology that replaces the steering, brake and acceleration mechanisms with electronic controls. The Hy-wire follows GM's AUTOnomy, which was unveiled less than a year ago at the Detroit Auto Show.

[http://story.news.yahoo.com/news?tmpl=story&u=/ap/20020926/ap\\_wo\\_en\\_bu/france\\_auto\\_show\\_1](http://story.news.yahoo.com/news?tmpl=story&u=/ap/20020926/ap_wo_en_bu/france_auto_show_1)

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*23. Smart Fuel Cell Introduces Commercial Product*

Smart Fuel Cell has launched its first commercial product, a portable stand-alone power supply fueled with methanol. The system, called SFC 25.2500 R, has a power output of 25 W continuous and up to 80 W peak. The exchangeable 2.5 liter methanol cartridge yields 2500 Watt-hours of electrical energy.

<http://www.smartfuelcell.de/en/presse/c020911.html>

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Press releases and story ideas may be forwarded to Bernadette Geyer, editor, for consideration at [bernie@usfcc.com](mailto:bernie@usfcc.com).

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[\(http://www.usfcc.com/\)](http://www.usfcc.com/)

*National Fuel Cell Research Center* -- The mission of the NFCRC is to promote and support the genesis of a fuel cell industry by providing technological leadership within a vigorous program of research, development and demonstration. By serving as a locus for academic talent of the highest caliber and a non-profit site for the objective evaluation and improvement of industrial products, NFCRC's goal is to become a focal point for advancing fuel cell technology. By supporting industrial research and development, creating partnerships with State and Federal agencies, including the U.S. Department of Energy (DOE) and California Energy Commission (CEC), and overcoming key technical obstacles to fuel cell utilization, the NFCRC can become an invaluable technological incubator for the fuel cell industry.

[\(http://www.nfcrc.uci.edu/\)](http://www.nfcrc.uci.edu/)

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<http://www.netl.doe.gov>