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

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

### 1. ANL Researchers Develop Ceramic Membrane for Hydrogen Generation

Researchers at Argonne National Laboratory have developed a ceramic membrane that can extract hydrogen from methane. The membranes are made of a composite of iron, oxygen, cobalt and strontium.

[http://www.ornl.gov/news/pulse/pulse\\_v105\\_02.htm](http://www.ornl.gov/news/pulse/pulse_v105_02.htm)

### 2. PNNL Develops System to Remove Odorants from Natural Gas for Fuel Cells

Researchers at Pacific Northwest National Laboratory have developed a system for removing sulfur odorants – which act as a poison to fuel cells – from natural gas. The system will be tested by PNNL and Siemens Westinghouse Power Corporation. Phone (509) 375-3776.

### 3. ANL Research Team Receives Award for Autothermal Fuel Reforming Catalyst Work

An Argonne National Laboratory research team has received a Federal Laboratory Consortium Award for Excellence in Technology Transfer for its work on an autothermal fuel reforming catalyst for fuel cells.

<http://www.transportation.anl.gov/ttrdc/tech-briefs/flc-2002.html>

### 4. FEMP Sponsors Regional DER Workshops

The Federal Energy Management Program is sponsoring "Distributed Energy Resources at Federal Facilities," a workshop to be held in four locations in 2002. The workshops will be held in Atlanta (GA), Chicago (IL), Los Angeles (CA), and Boston (MA).

[http://www.eren.doe.gov/femp/techassist/der\\_resources.html#workshops](http://www.eren.doe.gov/femp/techassist/der_resources.html#workshops)

### 5. G-8 Energy Ministers Learn About Fuel Cells, Upcoming International Conference

A two-day G-8 Energy Forum sponsored by the State of Michigan and the U.S. Energy Association focused on transportation technologies, and featured presentations on the potential of fuel cells for a hydrogen economy. During a break in the second day of meetings, DOE Secretary Spencer Abraham announced that DOE will host an International Conference on the Future of Energy Transportation Technologies in Detroit in Fall 2002.

<http://www.usea.org/energyforumproceedings.htm>

[http://www.energy.gov/HQPress/releases02/maypr/pr02074\\_v.htm](http://www.energy.gov/HQPress/releases02/maypr/pr02074_v.htm)

### 6. Proceedings of DOE Hydrogen, Fuel Cell Programs Review Online

Proceedings are now online for the Annual Program/Lab R&D Review of the DOE Hydrogen Program, the Fuel Cells for Transportation Program, and the Fuels for Fuel Cells Program, which was held May 6-10, 2002.

[http://www.eren.doe.gov/hydrogen/hydrogen\\_review.html](http://www.eren.doe.gov/hydrogen/hydrogen_review.html)

### 7. Proceedings of International Conference on Hybrid Power Systems Online

Proceedings are now online for the Second DOE/UN International Conference and Workshop on Hybrid Power Systems, which was held April 16-17, 2002. Presentations available include a Technical Assessment of Fuel Cell/Turbine Hybrid Power Systems, and a Market Assessment for Fuel Cell Hybrids.

<http://www.netl.doe.gov/publications/proceedings/02/Hybrid/hybrid02.html>

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*8. Army Environmental Center Sustainability Briefings Include Fuel Cell Use*

In February 2002, the U.S. Army Environmental Center held briefings on sustainability, and how the Army can secure environmentally sustainable installations. AEC has initiated a Sustainability Advocacy Team to help address this issue. Briefings presented mention the potential of fuel cells for transportation applications.

<http://aec.army.mil/usaec/support/sustainability00.html>

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**RFP/Solicitation News**  
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*9. Hydrogen Research and Development Solicitation Announced*

DOE is seeking applications for research and development projects involving technologies for the production, storage and utilization of hydrogen. Individual awards for first year funding will depend on the type of project proposed: Production project maximum awards will be \$350,000, Storage project maximum awards will be \$600,000, and Utilization project maximum awards will be \$250,000. Total FY2003 funding available under this solicitation is estimated to be approximately \$2.5 million. Deadline for applications is June 20, 2002.

[http://e-](http://e-center.doe.gov/iips/busopor.nsf/8373d2fc6d83b66685256452007963f5/9ce00a969113325d85256baa006cd47c?OpenDocument)

[center.doe.gov/iips/busopor.nsf/8373d2fc6d83b66685256452007963f5/9ce00a969113325d85256baa006cd47c?OpenDocument](http://e-center.doe.gov/iips/busopor.nsf/8373d2fc6d83b66685256452007963f5/9ce00a969113325d85256baa006cd47c?OpenDocument)

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*10. Fuel Cell Development Support Sought by Naval Surface Warfare Center*

The Naval Surface Warfare Center, Carderock Division, Ship Systems Engineering Station seeks Analytical, Technical, Logistical and Program Support Services associated with R&D programs, including Fuel Cell Development. The deadline for responses to this solicitation is June 24, 2002. The Request for Quotation will be available for download after June 4, 2002.

<http://www.eps.gov/spg/USN/NAVSEA/N00167/N6554002Q0358/SynopsisP.html>

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*11. Massachusetts Renewable Energy Trust to Pre-Qualify Fuel Cell Firms*

The Massachusetts Renewable Energy Trust has issued a Request for Qualification in an effort to evaluate and pre-qualify firms capable of serving on an "on-call" basis to assist in outreach, technical assistance, proposal evaluation, project evaluation, and project management for distributed generation initiatives and projects. Professional service providers that are successfully pre-qualified under the Trust's RFQ will automatically be considered by the Trust for assignments related to new solicitations under development. Qualification submittals are due by 3:00 p.m. on June 27, 2002.

<http://www.masstech.org/massrenew/rfqservices.htm>

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*12. NICE3 Program Solicitation Announced*

The National Industrial Competitiveness Through Energy, Environment, and Economics (NICE3) Program is accepting proposals for projects to achieve cleaner production in the U.S. manufacturing and industrial sectors through the adoption of energy efficient and cleaner

production techniques. Approximately \$2 million is available through this solicitation. Deadline for proposals is June 28, 2002.

<http://www.oit.doe.gov/nice3/solicitations.shtml>

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*13. Joint EERE/FE Science Initiative Solicitation Issued*

Research on hydrogen generation technologies and sensors for fuel cells are topics of interest under the "FY2002 Joint Office of Energy Efficiency and Renewable Energy and Office of Fossil Energy Science Initiative." Approximately \$10.1 million will be available to fund an estimated 20 awards under this solicitation. The closing date for submission of applications is July 2, 2002.

<https://doe->

[iips.pr.doe.gov/iips/busopor.nsf/1be0f2271893ba198525644b006bc0be/34308219661d190e85256bb3006cf3fb?OpenDocument](https://doe-iips.pr.doe.gov/iips/busopor.nsf/1be0f2271893ba198525644b006bc0be/34308219661d190e85256bb3006cf3fb?OpenDocument)

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*14. NASA Plans to Construct Fuel Cell Test Facility*

NASA/Glenn Research Center plans to release an Invitation for Bids on or about June 3, 2002, for the construction of a fuel cell test facility. Approximately \$1M - \$5M is available for the procurement. The deadline for responses to the Invitation is July 3, 2002.

<http://prod.nais.nasa.gov/cgi-bin/eps/synopsis.cgi?acqid=101509>

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*15. Pennsylvania DEP Accepting Applications for Environmental, Energy Challenge Grants*

Pennsylvania's Department of Environmental Protection is now accepting applications for the State's Environmental and Energy Challenge grant program, which provides funds to address pollution prevention, pollution reduction and energy efficiency. For the first year, DEP expects to invest more than \$1.5 million in a variety of projects. Deadline for applications is July 3, 2002.

<http://www.dep.state.pa.us/update/default.asp?ID=6276>

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*16. NASA SBIR Program Solicitation to Open Soon*

The NASA Small Business Innovation Research Program will issue its 2002 solicitation on June 6, 2002. Proposals will be accepted on topics including rocket propulsion testing systems and space propulsion. Further information will be made available after June 6, 2002, at NASA's SBIR web site. <http://sbir.nasa.gov/SBIR/front1.html>

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*17. DURIP Program to Provide Funds for University Research Instrumentation*

The Department of Defense announced the FY2003 Defense University Research Instrumentation Program (DURIP), which is designed to improve the capabilities of U.S. institutions of higher education to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment. Approximately \$45 million is available through this solicitation. Past solicitations have funded Micro Fuel Cell R&D at University of Illinois and Studies of Fuel Cell Materials by City University of New York. Proposals must be received no later than 4:00 p.m. on August 22, 2002.

<http://afosr.sciencewise.com/pdfs/DURIP03BAA.pdf>

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**Contract / Funding Awards**  
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*18. AQMD Selects Fuel Cell Technologies Corporation for Residential Demonstrations*

South Coast Air Quality Management District selected Fuel Cell Technologies Corporation to supply ten 5-kW fuel cell power systems to the first California demonstration of fuel cells for

homes. AQMD is contributing \$350,000 from an air pollution settlement and \$16,149 from its Clean Fuels Fund. Installation is expected to begin in the fall of 2002.

[http://www.fct.ca/03\\_05\\_02.html](http://www.fct.ca/03_05_02.html)

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*19. NSF Planning Grant for Fuel Cells Awarded to University of South Carolina*

The University of South Carolina's department of chemical engineering has received a National Science Foundation Planning Grant to develop an industry/university cooperative effort to research and develop fuel cells. A planning meeting has been scheduled for June 9-11, 2002, at USC's main campus in Columbia, S.C. More information can be obtained from Chuck Scaglione at 803-777-8028, or via email at [fuelcells@enr.sc.edu](mailto:fuelcells@enr.sc.edu).

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*20. NIST to Acquire Plug Power Residential Fuel Cell Unit for Testing*

The National Institute of Standards and Technology, Building Environment Division, intends to negotiate, on a sole source basis, with Plug Power for one of the company's 5-kW residential fuel cell units, to enable NIST to develop a testing method for residential fuel cells.

<http://www.eps.gov/spg/DOC/NIST/AcAsD/Reference-Number-02-863-6366/SynopsisP.html>

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**State Initiative**  
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*21. Ohio Launches \$103 Million Fuel Cell Program*

Ohio Governor Bob Taft launched a \$103 million Fuel Cell Initiative to invest in fuel cell research, project demonstration and job creation. Funds will be allocated in three ways: \$75 million in low-interest loans to make strategic capital investments that will create and retain jobs; \$25 million for research, development and demonstration of fuel cells; and \$3 million for worker training.

<http://www.state.oh.us/gov/one-pager.pdf>

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**Industry Headlines**  
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*22. Study Available on Use of Bio-Based Fuels With Stationary Fuel Cells*

The Northeast Regional Biomass Program, in conjunction with XENERGY, announced the completion of a comprehensive study titled "Toward a Renewable Power Supply: The Use of Bio-based Fuels in Stationary Fuel Cells."

<http://www.nrbp.org/publica.htm>

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*23. SunLine to Open Beta Test Center for Advanced Transportation Technologies*

SunLine Transit Agency plans to open a test center to test advanced transportation technologies including fuel cell vehicles, hydrogen generation equipment, and fuel storage technologies.

<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/05-17-2002/0001730404&EDATE=>

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*24. Lincoln Composites Demonstrates 10,000 Psi Hydrogen Fuel Tank*

Advanced Technical Products' Lincoln Composites division has successfully tested a TUFFSHELL™ hydrogen fuel tank with an operating pressure of 10,000-psi (700 bar).

<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/05-21-2002/0001732204&EDATE=>

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**25. ASHRAE Publishes Book on Fuel Cells for Buildings**

The American Society of Heating, Refrigerating and Air-Conditioning Engineers recently published "Fuel Cells for Building Applications," to provide building designers with information they need to identify fuel cell applications that will yield economic and environmental benefits.  
[http://www.ashrae.org/NEWS/2002\\_fuel.htm](http://www.ashrae.org/NEWS/2002_fuel.htm)

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**Administration**  
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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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**The Sponsors**

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

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

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[\(http://www.netl.doe.gov\)](http://www.netl.doe.gov)