

ATP Announces Materials Processing as One of Six Focus Areas

The Commerce Department's National Institute of Standards and Technology (NIST) in December 1994 announced six new focused areas of technology—all based on input from US industry—for which companies and consortia will be able to propose projects to receive nearly \$800 million of long-range, cost-shared support under the Advanced Technology Program (ATP).

The new program areas are Motor Vehicle Manufacturing Technology, Catalysis and Biocatalysis Technologies, Materials Processing for Heavy Manufacturing, Digital Data Storage, Digital Video in Information Networks, and Advanced Vapor Compression Refrigeration Systems.

The primary technical goal of the cost-shared, \$150 million, five-year ATP focused program in Materials Processing for Heavy Manufacturing is to develop and demonstrate innovative materials processing technologies that will help US companies in the heavy manufacturing sector make longer lasting, more reliable and more efficient products, features that will give their products a competitive advantage in the marketplace. Truck engines that need overhauls only after one million miles, drive trains that require only half as much maintenance and repair, and a 2% increase in power generation efficiency are among the specific goals. One versatile tactic for achieving these and other ends is to develop surface treatments and coatings that make ceramic and metal components more resistant to wear, corrosion, fatigue or temperature-mediated degradation.

Another key technical goal is to significantly reduce manufacturing costs, a factor that will enable US manufacturers to offer passenger cars, light trucks and heavy equipment at prices that will make them especially attractive in the competitive markets of developing countries. Some of the major strategies for lower manufacturing costs are the elimination of processing steps, preventing waste and pollution, and reducing manufacturing cycle time. A way to reduce manufacturing time is through more intensive process modeling and rapid prototyping techniques, which also can make it possible to concurrently engineer several process steps rather than having to wait for the completion of earlier steps before focusing on later ones. Among tactics to

prevent, control and minimize waste and pollution is to convert steel waste into cement and concrete feedstock and to recover iron from the dust and slag of steel making.

An extensive series of workshops and working group meetings began in November 1993 involving many companies distributed among the heavy manufacturing industries. By the following summer, over 40 companies either individually or jointly submitted white papers to NIST outlining specific projects suited for an ATP focused program as well as expressing commitments to share the costs of seeing the projects through to successful completions with the ultimate goal of moving these technologies to the market. The companies include both large and small materials suppliers, component manufacturers, and original equipment manufacturers.

For information about eligibility, cost-sharing requirements, and how to apply for the 1995 award, contact the Advanced Technology Program, phone (800) 287-3863; fax 301-926-9524; or e-mail atp@micf.nist.gov.

DOE Must Design a Realignment Plan

Responding to President Clinton's commitment to cut taxes for the middle class and to enhance the effectiveness and efficiency of government, Secretary of Energy Hazel R. O'Leary announced a four-month effort to realign the Department of Energy (DOE). Planning for the realignment began this past summer following release of DOE's Strategic Plan, *Fueling a Competitive Economy*.

The realignment builds upon the department's current contract reform and restructuring efforts already intended to save more than five billion dollars over the next five years, including \$1.55 billion through a freeze on contractor salaries.

In order to create a more effective and efficient agency, teams of DOE employees and experts in corporate redeployment will examine the department's structure, functions, and financial and human resources. They will recommend ways to align DOE along its five "business lines"—science and technology, national security, environmental quality, energy resources, and economic productivity—described in the April 1994 Strategic Plan. Final recommendations are due to O'Leary on April 29, 1995.

In designing a new DOE, the employee teams will examine both DOE headquarters and field organizations that employ

about 20,000 federal employees and 140,000 contract employees. The functions of all federal employees except those of the department's power administrations and the Federal Energy Regulatory Commission will be reviewed.

While the realignment ultimately will reduce the workforce, it will not be driven by the need to reach a predetermined number of employees. Instead, it will be driven by an analysis of the entire organization—how it currently functions and how it should function in view of its new missions.

Walker Heads the New House Committee on Science

The House Science, Space and Technology Committee formerly chaired by George Brown (D-California) will become the Science Committee under the new chair, Walter S. Walker (R-Pennsylvania). The Science Committee will consist of four subcommittees. Walker eliminated the Subcommittee on Investigations and Oversight.

The Subcommittee on Space and Aeronautics—previously called the Subcommittee on Space—will retain the same interest areas as before and will be chaired by James Sensenbrenner (R-Wisconsin).

The Subcommittee on Basic Research—previously the Science Subcommittee—will be headed by Steve Schiff (R-New Mexico). It will oversee the research of the Department of Energy's government-owned, contractor-operated laboratories.

The Subcommittee on Energy and Environment—formerly the Subcommittee on Energy—will oversee the National Oceanic and Atmospheric Administration, the National Weather Service, and the Environmental Protection Agency programs. Its new chair is Dana Rohrabacher (R-California).

The Subcommittee on Technology, chaired by Connie Morella (R-Maryland), will oversee the Federal Aviation Administration. Other aeronautics areas at the National Aviation and Space Administration, previously held under its predecessor, the Subcommittee on Technology, Environment and Aviation, will be moved to the jurisdiction of the Space Subcommittee.

The House Committee on Science shifted from 22 Republicans and 33 Democrats to 27 Republicans and 23 Democrats, down five members from 1994. The Committee's e-mail address is housesst@hr.house.gov □