CPC Project Provides Recommendations for Technology Investment

The Steering Committee of the Project on Technology Policy Assessment, sponsored by the Competitiveness Policy Council (CPC), gave a nonpartisan evaluation of the federal government's science and technology (S&T) activities and prepared a report entitled "Investing in Innovation." The Committee of this national project identified six principles to guide federal actions in the future.

Speaking at the AAAS R&D Colloquium (American Association for the Advancement of Science Research and Development), Lewis M. Branscomb, Harvard professor and chair of the project Steering Committee, said that he had discussed these ideas and the implications for specific government programs with senior administration officials and with senators and representatives from both parties. "There is a clear opportunity in this session to get agreement on ways to give the administration's programs the broad support and continuity they need to be effective," said Branscomb.

The report emphasizes the role that the private commercial sector plays not only in the economy, but in new approaches to environmental protection and defense acquisition. According to Branscomb, the United States "can no longer rely on the research done by the largest firms in their corporate research laboratories. They have been downsized and turned to acquiring ideas and technology from outside the firm. The medium-sized suppliers that specialize in particular technologies are emerging as the key sources of innovation."

The project provides an assessment of the successes and weaknesses of the administration's technology programs during the first term, and advances six principles that the team believes will make federal S&T policy more effective and will bring it a broader base of political support.

Branscomb said that the two key ideas in the report are, first, government should replace its "science and technology policy" with a "research and innovation policy." According to the report, basic technology research deserves as much federal attention as does basic science research; the two are often indistinguishable. Branscomb urged the National Science Foundation and other government agencies to abandon the use of "applied research" as a category in their data and instead focus on S&T research, both of which deserve federal support, and on problem-solving and development which should generally be left to the market.

Second, the report said that public-private technology partnerships should be structured so that it is clear how the results reach a broad range of users and benefit the public at large. This suggests using consortia of firms, universities, and national laboratories in almost every case where the government is not the customer for the end product (e.g., defense).

Many specific programs are discussed in the report. Suggestions are given for changes in the way some of them are run. The report said that the Advanced Technology Program (ATP) in the Department of Commerce should, with few exceptions, fund only consortia or associations of firms, universities, and governmentfunded laboratories, and should focus on basic technology research. Those state governments with strong innovation programs of their own could play an important role in assembling those consortia and measuring program effectiveness, the report said.

The report's ideas were discussed in a hearing of the Senate Commerce Committee's Subcommittee on Science Technology and Space, chaired by Senator William H. Frist (R-Tenn.) on April 16.

CPC was created as a bi-partisan body by Congress in the 1988 Trade and Competitiveness Act. To obtain a copy of the report, contact Competitiveness Policy Council, 1726 M Street, N.W., Suite 300, Washington, DC 20036; 202-632-1307; fax 202-632-1350; or http://www.ksg.harvard.edu/iip/techproj/home.html.

NRC Reports PNGV Needs More Resources, Refocused Effort

In its third review of the program known as the Partnership for a New Generation of Vehicles (PNGV) (see the July 1996 issue of MRS Bulletin, pages 12–13), the National Research Council's (NRC) Standing Committee to Review the Research Program recommends that PNGV managers consistently direct research and development efforts toward technologies that have the most potential for meeting program goals by the 2004 deadline. The progress of current technical research was assessed in three major areas: energy conversion, energy storage, and electronic systems.

The report said that more resources should be used for developing low-cost, lightweight diesel engines and that fuel cells or gas turbines that could be successful in the long term should continue to be developed and funded appropriately. The report also recommends that effort should go toward developing high-power lithium-ion and nickel metal hydride batteries and that the program needs to develop an organizational structure and schedule that will hasten the development of necessary electronic devices and systems.

A copy of the report can be obtained from the National Academy Press, 2101 Constitution Avenue, NW, Washington, DC 20418; 202-334-3313 or 1-800-624-6242. □

Correction:

The May 1996 (p. 10) issue of MRS Bulletin published a multisociety statement to Congress regarding funding for scientific research. The information was released at a press conference on March 4. At that time, 23 societies had signed the document. By the time the letter reached Capitol Hill, it reflected a total of 41 signatories since an additional 18 societies joined the group: American Association for Crystal Growth; American Association of Petroleum Geologists; American Association of Pharmaceutical Scientists; American Psychological Association; American Society for Mass Spectrometry; American Vacuum Society; Council of Scientific Societies Presidents; Estuarine Research Federation; Health Physics Society; Institute for Operations Research and the Management Sciences; The International Society for Optical Engineering; The Minerals, Metals & Materials Society; Psychonomic Society; Radiation Research Society; Society of Exploration Geophysicists; Society of Vertebrate Paleontology; Soil Science Society of America; and University Materials Council. As of the time this issue of MRS Bulletin goes to press, five more societies have joined the group: American Statistical Society, The Ecological Society of America, EPSCoR Foundation, Institute of Mathematical Statistics, and Southeastern Universities Research Association.