

## Political Science

by Paul Natishan

**T**he decrease in funding for U.S. R&D has become more acute in recent years. The Spring 1998 Currents article discussed an effort by the Federation of Materials Society (FMS), and a coalition of over 100 science, engineering and technology organizations (called the Doubling Research Group), to address this issue. This coalition called on the U.S. Congress and Federal Administration to double the current level of federal investment in research within the next ten-year period beginning with fiscal year 1999. ECS is a member society of FMS, and this article updates recent discussions on federal funding and events pertinent to this issue.

The material presented here is a condensation of two FMS publications: a June 1998 FMS Bulletin on "Maximizing Return on Investment in Research and Development: Case Studies in Materials," which is a summary of the biennial meeting; and an FMS Action Alert, "Federal Research Investment Act Approved by Senate" (Aug. 4, 1998). Additional comments have been added.

### 15th FMS Biennial Conference

In May of this year, the FMS held a conference on "National Materials Policy." Participants representing industry, universities, and government gathered in Washington, DC, to discuss how the materials community could best influence policy decisions in all three sectors. A recurring theme was the state of R&D funding and that there needs to be a new paradigm for such funding. Senator Jeff Bingaman (D-NM) discussed the relationship between R&D and productivity. He related that 25-50% of the productivity growth in the U.S. is associated with new technologies, and that civilian R&D (excluding NIH) will be down by 5% by 2003 if no changes are made. During that same time period, U.S. Department of Defense spending will be flat.

Senator Bingaman, Representative Vernon Ehlers (R-MI), and virtually every other speaker pointed out that the science policy under which the U.S. has been working was inspired by the Vannevar Bush report in 1945. Recently, Rep. Ehlers, who is the first PhD physicist in Congress, has undertaken the task of rewriting the U.S. Science Policy. Information concerning that document, which was released September 24, can be obtained at: [www.house.gov/science/science\\_policy\\_study.htm](http://www.house.gov/science/science_policy_study.htm).

Dr. D. Allan Bromley, former Presidential Science Advisor and currently Dean of Engineering at Yale University, offered advice to the materials community on how to get across its message. Particularly needed, he said, are "success stories" showing the contributions of advances in materials and processing to the standard of living. He concluded by urging the community to engage in coalitions not only within itself but

with other non-materials groups who share the same commitment to advancing R&D as an investment. Dr. Bromley related that letters from constituents on issues such as this are often crucial in legislation. He encouraged everyone to get to know their congressmen.

### Federal Research Investment Act

As the 105th Congress came to a close, the Senate, by unanimous consent, passed S.2217, the Federal Research Investment Act (FRIA). The FRIA establishes a long-term vision for federal funding of fundamental scientific and pre-competitive engineering research. This bill doubles the annual amount of civilian R&D funding over a twelve-year period. FMS and all its member societies were signatories to the "Unified Statement" last year which inspired the bill, and have been active

participants in the Doubling Research Group which succeeded in acquiring the following 36 bi-partisan cosponsors for the bill and its eventual passage.

“ *Senator Bingaman called for a national ecosystem of innovation.* ”

Spencer Abraham (R-MI)  
Daniel K. Akaka (D-HI)  
Wayne Allard (R-CO)  
John D. Ashcroft (R-MO)  
Jeff Bingaman (D-NM)  
Barbara Boxer (D-CA)  
John Breaux (D-LA)  
Conrad Burns (R-MT)  
Max Cleland (D-GA)  
Thad Cochran (R-MS)  
Paul D. Coverdell (R-GA)  
Alfonse D'Amato (R-NY)  
Mike DeWine (R-OH)  
Christopher Dodd (D-CT)  
Pete Domenici (R-NM)  
Richard Durbin (D-IL)  
Lauch Faircloth (R-NC)  
Dianne Feinstein (D-CA)

Bill Frist (R-TN)  
Phil Gramm (R-TX)  
Kay Bailey Hutchison (R-TX)  
Robert Kerrey (D-NE)  
John Kerry (D-MA)  
Mary L. Landrieu (D-LA)  
Carl M. Levin (D-MI)  
Joe Lieberman (D-CT)  
Carol Moseley-Braun (D-IL)  
Daniel P. Moynihan (D-NY)  
Charles S. Robb (D-VA)  
Pat Roberts (R-KS)  
Jay Rockefeller (D-WV)  
Richard J. Santorum (R-PA)  
Paul S. Sarbanes (D-MD)  
Olympia Snowe (R-ME)  
Fred Thompson (R-TN)  
John W. Warner (R-VA)

Congratulations to the materials community for its role in gaining this Congressional recognition for science and engineering and a sincere thank you to those Senators that cosponsored and voted for this bill.

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