grades of laser and particle-beam drivers will be needed to achieve ignition of a deuterium-tritium pellet. And entirely new research programs may be necessary to augment existing efforts. In particular, the ICF committee identified a "gap" between efforts at the NOVA laser and the Particle Beam Fusion Accelerator, and the Halite-Centurion program, which is highly classified and related to target research. Consequently, DOE declined to elaborate on the alleged research void. ■

MARK CRAWFORD

Smithsonian Photobiology Lab to Close

The Smithsonian Institution is closing down its venerable plant photobiology research laboratory next fall, much to the dismay of some plant physiologists.

The Smithsonian Environmental Research Center, budgeted this year at $2.15 million, used to be located at the Smithsonian's main building in Washington, DC, but was moved to suburban Rockville, Maryland, in 1975. There was talk of building it a new facility at the Smithsonian's Chesapeake Bay research center after the current lease runs out in 1990, but priorities shifted after the advent of the new Smithsonian secretary, Robert McC. Adams, last year.

The laboratory, founded in 1929, conducts basic research on such things as photosynthetic mechanisms and how plants tell time. Its director, William Klein, acknowledges that the lab does "not have much in common with the rest of the institution"—it is the only Washington-area branch of the institution that does not have exhibits—but believes that "we had a unique organization" with a rare combination of disciplines including biophysics, agricultural engineering, anthropology, ecology, and genetics.

Lab officials are somewhat miffed at the way the decision came about, saying that it was not preceded by consultation with them or an on-site inspection. The decision to close, relayed last Valentine's Day, was originally supposed to take effect in late 1987 but has been moved up to next November.

Steven Britz, who does research on photobiology at the Agricultural Research Service (part of the U.S. Department of Agriculture), says the lab's demise is unfortunate in view of the fact that "plant physiology as a field is not well supported." He cites in particular the lab's work on the physiology of flowering, which is central to the subject of crop yields. There is "hardly any work on this going on at USDA," he says.

Winslow Briggs, director of the Carnegie Institution of Washington's plant biology department at Stanford University, says he is very unhappy about the loss of the lab. "I don't know of any other lab group that represents quite the range of photobiology that they do there." While they are not trained in "fashionable biotechnology," says Briggs, their work in some areas, such as how algae harvest light, is "in my opinion the best in the world."

According to David Challinor, the Smithsonian's assistant secretary for science, the lab is being dropped because its lease is running out, a new building is "impossible under the present fiscal climate," and its physical isolation and lack of academic surroundings make it difficult to get first-rate graduate students. He says the lab has been subjected to two external reviews, in 1979 and 1983. The lab does good science and is "to some degree unique," says Challinor, but there are other distinguished centers doing photobiology—namely, the Carnegie Institution and the Boyce Thompson Institute for Plant Research, now at Cornell University.

Challinor says the Smithsonian, which is aiming for a $750,000 increase in its fiscal year 1987 research budget, wants to focus on strengthening other areas in biology, such as genetics, microbial evolution, and tropical biology.

The closing appears to reflect a larger trend within biology, de-emphasizing work at the cellular level in favor of molecular biology and biotechnology. ■

CONSTANCE HOLDEN

European Commission Proposes Shift in Joint Research

Brussels

The research ministers of the 12 member countries of the European Economic Community were asked at a meeting in mid-April to approve a major shift in the emphasis of their $600-million-a-year joint research programs, financed through the Brussels-based EEC Commission. The proposal was discussed but action on it was deferred to a later meeting.

The commission has proposed that the member states significantly reduce the high priority given in the past to fields such as energy research. For example, it is suggesting the virtual elimination of joint funding for demonstration projects in solar and wind energy. In contrast, it wants to shift the main focus of its support toward research directly related to industrial technologies, in particular microelectronics, telecommunications, and biotechnology. It is also proposing that new joint research programs be established in the fields of marine technology and transportation.

The proposals are contained in a "framework program" for the 5 years 1987–1991 setting out priorities and budget limits which must now be adopted unanimously by all member states before individual research programs can be funded. According to Paolo Fasella, head of the Commission's science, research, and technology directorate, the shift in emphasis reflects an increasing political awareness in Europe of the importance of research on advanced technologies "prompted in part by the U.S. invitation to participate in the research phase of the Strategic Defense Initiative."

The financial targets set out by the Commission are ambitious and not likely to be fully met. It suggests that member states double their joint spending on research, to reach a total of almost $10 billion over the next 5 years. Achieving this would mean raising from 2 to 5 percent the proportion of the commission's budget spent on research.

More significant, perhaps, is the proposed balance in funding. The Commission wants 60 percent of its research funds in the 5 years 1987–1991 to be spent on "enhancing Europe's industrial competitiveness," including expansion of current research programs such as ESPRIT (in information technologies) and RACE (on telecommunications). At present, these absorb 28 percent of the joint research funding. In contrast, the proportion spent on energy research would fall from 47 to 21 percent. The overall growth being recommended would allow these efforts, which include a major commitment to the funding of fusion research, to be maintained at their current levels. Failure to secure this increase, however, could lead to significant reductions in several areas of energy research.

What will happen in practice also depends on how effective a new, streamlined decision making procedure turns out to be. Under the new procedure, once the 5-year framework program has been passed, specific projects will only require approval by a "qualified majority" of member states: in the past unanimous endorsement was required.

With the EEC member governments keen to keep the Commission's spending down, reaching consensus on the framework program is not expected to be straightforward. ■ DAVID DICKSON