



YOUNG

ciate superintendent of the electronics division until joining the Defense Department last December.

The entire Federal budget request for FY 1983 was about 4% above FY 1982 levels, with the Federal investment in R&D rising approximately 10%. Of this increase in R&D obligations, however, 94% (or almost \$4.2 billion) was slated for the Defense Department. Much more than half of this money would be related to weapons development. The increase in Defense R&D represents a shift in priorities for the Federal investment in R&D: In FY 1982 the Defense Department represented 38% of all R&D funding; in the FY 1983 request it represents 57%, with concurrent cuts in the other agencies that perform R&D.

Within the FY 1983 Defense Department budget, \$24.3 billion was requested for RDT&E. Of this amount, only \$828 million, up from \$696 million appropriated in FY 1982, is for basic research and about \$400 million is for research at universities. Overall funds for basic research would increase 19%, while funds for physics research would increase from \$87 million in FY 1982 to \$100 million in FY 1983, or approximately 15%.

Most of the RDT&E funds are slated to be spent on testing and development of large new weapons systems, such as accelerated development of alternatives for the MX basing modes, developing and testing the B-1 bomber, and further work on the advanced medium-range air-to-air missile concept.

Ailing university research budgets would receive a boost from the Defense budget increases in several ways. Each of the armed services would set aside \$10 million per year over the next five years to support much-needed improve-

ments in university research instrumentation. This program is a new initiative within the FY 1983 budget in response, at least in part, to a Defense Science Board study, "University Responsiveness to National Security Requirements," published in January. Young says that details about how the program will be administered by the Services have not yet been worked out, but should be ready this month. Inquiries should be directed to the Office of Naval Research, where proposals will be handled.

A graduate fellowship program in the Defense Department is at least partially in place. Each of the services is in the process of setting up programs that Young estimates would award about 100 fellowships in FY 1983. Under most of these programs, students would receive a stipend of \$12 000 per year and the university would receive \$8000 per year to cover fees and expenses; each fellowship would run for three years. Young said, "The exciting thing is that DOD is recognizing the importance of quality over quantity. This more generous support should insure that there is more money for the best students."

—JC

Samios is chosen as Brookhaven director

High-energy physicist Nicholas P. Samios is the new director of Brookhaven National Laboratory. The Board of Trustees for AUI (a nonprofit organization that operates Brookhaven for the Department of Energy) conducted a formal search for a director, following the resignation effective last December of George Vineyard (PHYSICS TODAY, October 1981, page 56). Samios, who has been serving as the acting director since 1 January, assumed the directorship in May.

Commenting on his plans for Brookhaven, Samios said, "My specific goal is to keep alive the construction of a high energy collider to be finished in the late 80s." The Isabelle project, which has been beset with both technical and management problems (PHYSICS TODAY, April 1981, page 17), received a strong endorsement from the HEPAP subpanel headed by George Trilling of Berkeley (PHYSICS TODAY, January 1982, page 51). The Trilling panel, while recommending that Isabelle be completed during this decade, noted that DOE would have to receive a minimum of \$440 million per year to accomplish this goal. The panel said "If support at this level cannot be made available in time for Isabelle completion within this decade, the Isabelle project cannot be continued." The FY 1983 budget request of \$429 million for DOE is now being acted on by Congress, and includes no

construction funds for Isabelle and \$23 million for magnet R&D (PHYSICS TODAY, April 1982, page 20).

Samios received his PhD from Columbia University in 1957 and then taught in the physics department there until 1959. He then joined the physics department at Brookhaven. He has served as leader of the Nuclear Interactions Group (1965-1975), as chairman of the physics department (1975-1981), and as Deputy for High Energy and Nuclear Physics from February 1981 until being named acting director of the lab. Samios is perhaps best known for his discoveries of the Ω^- particle and the first charmed baryon.

Bautz heads NSF astronomy division

Laura Bautz, who had been serving as the acting director of the Division of Astronomical Sciences in NSF, was appointed to the directorship on a permanent basis effective in April. The Division of Astronomical Sciences is part of the Astronomical, Atmospheric, Earth and Ocean Sciences Directorate and is responsible for administering the national astronomical observatories operated by NSF and research programs in astronomy.

After obtaining her PhD in astronomy from the University of Wisconsin in Madison in 1967, Bautz joined the faculty at Northwestern University. She taught astronomy there until 1975, when she came to Washington. She has been with the Physics Division at NSF for about six years, serving as deputy director of that division for the two and a half years prior to being named acting director of the Division of Astronomical Sciences. Throughout

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her career, Bautz told us, she has sustained an interest in the areas in which she conducted her research—stellar evolution and clusters of galaxies.

DOE awards to untenured particle physicists

The DOE Office of Energy Research has selected Thomas DeGrand (University of Colorado), Ray Hagstrom (Argonne National Laboratory), John Lo Secco (Caltech), Paul Steinhardt (University of Pennsylvania) and Michael Witherell (University of California, Santa Barbara) for the Outstanding Junior Investigators program in FY 1982. The program was initiated in 1978 to assist the research support of outstanding untenured high-energy

physicists who might otherwise leave the field for lack of permanent positions. Proposals, considered by DOE on a continuing basis, should be submitted by sponsoring organizations to R. L. Thews, Physics Research Branch, Division of High Energy Physics, DOE, Washington, DC 20545.

in brief

Materials Science Programs, Fiscal Year 1981, which summarizes all DOE programs underway in basic materials science as of 30 September 1981, has been published by DOE. It is available for \$13.50 (on microfiche, \$3.50) from the National Technical

Information Service, US Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. (Request No. DOE/ER-0106, UC-25.)

A report prepared by the National Research Council, *Career Outcomes in a Matched Sample of Men and Women PhDs*, is available from the National Academy Press, NAS, 2101 Constitution Avenue, N. W., Washington, DC 20418.

The Optical Society of America is conducting a fund drive for the \$504 000 it needs to buy and renovate the two townhouses in the Dupont Circle neighborhood of Washington, DC, it has occupied since 1979. The campaign, to continue until early 1984, has raised \$438 000, mainly from corporate and individual contributions, since it began in 1980.

For 1981 physics graduates: salaries up, offers down

While the starting salaries of new physics graduates are continuing to rise, the number of job offers they get has declined somewhat, according to the 1980-81 *Graduate Student Survey*, prepared by Susanne D. Ellis of the AIP Manpower Statistics Division.

In 1981 the greatest salary increases went to graduates with the most advanced degrees. The median salary of 1981 PhDs in potentially permanent positions was \$2470 monthly, 12% higher than the 1980 median; for graduates in postdoc positions the median rose 11%, to \$1460. For graduates with terminal masters' degrees, the rise was 9%, to \$1900; for bachelor's recipients it was only 6%, to \$1660.

An index by which Ellis assesses demand, the percentage of new graduates receiving two or more job offers by September, shows a slight decline for 1981 graduates, to 52%, after increases since 1974. There has also been an increase, to 4% from 2%, in the portion of new doctors who are offered no jobs. The percentage of new master's recipients receiving two or more offers remained the same as it was in 1980, 40%, and the percentage of those getting no offers rose slightly, to 12%.

The new survey also shows that the employment advantage that experimenters have had over theorists has disappeared. In 1981 theoretical physicists were more likely to receive offers for two or more jobs than were their experimentalist colleagues.

The employment prospects for astronomy PhDs were found favorable: All respondents who sought jobs found them. The number seeking jobs in 1981 was small, however, because the num-

ber of new astronomy doctors fell to 82, the lowest number since the Division first tabulated such data, in 1976.

The percentages of foreign enrollments and graduates are continuing to increase. The portion of first-year graduate students who are foreign citizens rose to one-third from one-fifth, the portion in the early 1970s. The number of foreign PhDs went from 22% to 26% between 1981 and the previous year. At the same time, the portion of US PhDs who started employment overseas rose from 3% in 1980 to 5% in 1981.

Of 1981 PhDs who obtained potentially permanent employment, 10% were foreign citizens, a figure unchanged from the previous year, Ellis told us. In postdoc positions, however, the proportion of foreigners doubled last year, to include one-quarter of such jobs. (These data do not appear in the *Survey* for want of space.)

During the 20-year history of the *Survey*, as trends call for elaboration and curiosity arises about new matters, the *Survey* includes new questions. This year graduate students were asked about their membership in professional societies. The responses indicate that 31% of all graduate students and 61% of new PhDs are members of such societies.

The survey is available, free, from Susanne D. Ellis, Manpower Statistics Division, AIP, 335 East 45 Street, New York, N.Y. 10017. Request publication R-207.14.

Marmet, Stoicheff head Canadian Association

Paul Marmet is the president for 1981-82 of the Canadian Association of Phy-

sicists, and Boris Stoicheff is the new vice president-elect.

Marmet received a BSc at Laval University in 1956 and a DSc in physics there in 1960. He became an assistant professor at Laval in 1961 and has been professor there since 1967. He has worked on experimental equipment and techniques used to study atomic and molecular phenomena, including an electron velocity selector, mass spectrometers, and high-sensitivity and high-resolution magnetic equipment.

Stoicheff, who will succeed the present vice-president, A. R. Crawford of Anatek Electronics, was educated at the University of Toronto, earning a BSc in 1947, an MA in 1948 and a PhD in physics in 1950. He worked at the National Research Council as a research officer in the division of pure physics from 1953 to 1964. He has been professor of physics at the University of Toronto since 1964. He was president of the Optical Society of America in 1976. He has done work in molecular spectroscopy and structure, light-scattering processes and laser spectroscopy.

Waring elected president of Sigma Pi Sigma

Richard C. Waring, associate professor at the University of Missouri, Kansas City, has been elected for a two-year term as president of Sigma Pi Sigma.

In the same election the following faculty members were elected to the SPS National Council: Jerry P. Draayer (Louisiana State University), Gary P. Agin (Michigan Technological University), Robert Wood Green (Morningside College) and Philip T. McCormick (University of Santa Clara). □

the physics community