



THIRD CLASS
Bulk Rate

ACADEMIC R&D EXPENDITURES UP 9 PERCENT IN 1973; REDUCED GROWTH EXPECTED FOR 1974

Universities and colleges reported expenditures of \$3.6 billion for R&D performance in 1973—more than ten times the \$334 million spent in 1953. This represents a 9-percent increase from the \$3.3 billion reported in 1972, though in constant dollars the increase was only 5 percent. Among the contributing factors were the substantial increases in Federal R&D obligations to universities and colleges for fiscal years 1971 and 1972—up 7 percent and 10 percent, respectively. The less-than-one-percent increase in fiscal year 1973 R&D obligations will probably result in reduced growth of R&D expenditures in 1974.

In 1973 the Federal Government supported 56 percent of the research and development performed in the academic sector, amounting to \$2.0 billion—10 percent above the 1972 figure of \$1.8 billion. The category "Institution's Own Funds"—including approximately \$690 million for departmental research—was the second leading source of R&D funds, with \$1.0 billion reported in 1973.

One-half of academic research and development is conducted in the life sciences. Adjusted for inflation, R&D expenditures in the biological sciences increased 12 percent since 1972, while the clinical medical sciences for the first time showed a decline in funding.

Universities and colleges have traditionally performed more basic research than applied research and development combined and, until 1964, the trend was

toward an ever-increasing concentration in basic research. From 1964 to 1970, however, basic research expenditures stabilized at about 77 percent of total R&D expenditures, dropping to 71 percent in 1973. Applied research, with increased Federal support of projects directed toward practical application, increased 28 percent since 1972, in contrast with the 2-percent increase in basic research.

Publicly controlled universities and colleges accounted for \$2.3 billion, or 63 percent of total academic R&D expenditures in 1973. This figure is 10 percent over the \$2.1 billion spent in 1972. This primarily reflects the growing influence of the large State universities, 30 of which are among the top 50 academic institutions in terms of R&D expenditures. Private institutions, although heavily supported by Federal research funds amounting to 68 percent of their total expenditures in 1973, reported only a 6-percent increase in R&D performance in the 1972-73 period.

Data described here represent the R&D portion of the NSF *Survey of Scientific Activities of Institutions of Higher Education*. Data have been collected through periodic surveys since 1953 and are now on an annual basis. More detailed information is available in the *Science Resources Studies Highlights*, "Academic R&D Expenditures Up 9 Percent in 1973," (NSF 74-306) available from NSF.

