

analysis was made in connection with a high-priority study of how to increase the supply of competent teachers for engineering colleges.

The survey found that average salaries for young engineers serving as instructors range from \$4214 in public institutions to \$4374 in privately supported schools. Department heads' salaries average \$9117 and \$9839, respectively. Deans earn \$10,932 and \$11,829, respectively, on the national average.

Of the 4000 engineering teachers surveyed, 80 percent earned income beyond their teaching salaries from the practice of engineering. Instructors earned an average of over \$1000, professors from \$2436 (public institutions) to \$4716 (private institutions). On the average, teachers in public institutions had outside earnings of \$2333, those in private institutions \$3634.

Engineering teachers' salaries do not vary widely across the nation. Averages in public institutions range from a low of \$4086 in the Mountain states to \$6886 in the Midwest, in private institutions from \$5133 in the Mountain states to \$7613 on the Pacific Coast. But average annual incomes vary more, from a low of \$7319 in the Mountain states to \$12,500 in the Pacific states, and there is a substantial spread around the national average.

The figures released by the A.S.E.E. were based on replies from more than 4200 engineering teachers, 35 percent of the 12,000 engineers engaged in teaching in the United States. Revised salary data will be presented in a final report, together with recommendations of the Committee on the Development of Engineering Faculties. This is scheduled for release early in 1958. The A.S.E.E. project was made possible by grants from the National Science Foundation and from private and industrial organizations.

### Books for Asian Students

In the past 2½ years the Asia Foundation's special project, Books For Asian Students, has sent 600,000 books to more than 1200 universities, colleges, libraries, and civic groups in Asia. These books were donated by 700 university and college groups, publishers, libraries, and individuals in the United States. The great need for books continues, as evidenced by increasing requests.

Contributions of books will be greatly appreciated. Items in every category on the university and college level, in good condition, published in 1948 or after, and works by standard authors, regardless of date, can be sent directly to: Books for Asian Students, 21 Drumm St., San Francisco 11, Calif. The foundation will reimburse donors for the

transportation costs of substantial shipments to San Francisco. All contributions are tax exempt.

The Asia Foundation, a nonprofit, nonpolitical organization founded by private American citizens, supports individuals and groups in Asia who are working for the "attainment of peace, independence, personal liberty and social progress." The foundation maintains 18 offices in Asia.

### Rockefeller Foundation Grants

Rockefeller Foundation grants during the third quarter of 1957 totaled \$1,890,525. Grants in the field of medical education and public health amounted to \$304,915; biological and medical research, \$350,650; agriculture, \$384,240; social sciences, \$186,415; and humanities, \$251,105; general appropriations totaled \$413,200.

During the same period 123 fellowships that had been awarded to individuals from 30 countries and one international organization became active.

### Ford Foundation Awards

The Ford Foundation recently announced grants and appropriations totaling \$49,187,371 in the final quarter (July through September) of its 1957 fiscal year. The total includes \$25.6 million in grants out of appropriations announced in previous quarters. Of this amount, a \$24.5 million appropriation approved in March was granted during the final quarter to the Woodrow Wilson fellowship program to attract outstanding students to college teaching careers.

During the quarter the foundation completed its program in support of training and research in the behavioral sciences and mental health with grants totaling \$9,819,150 to colleges, universities, and research centers. The largest award was a \$5-million grant for the continued operation of the Center for Advanced Study in the Behavioral Sciences, Stanford, Calif., until August 1964.

### UN Radiation Committee

The Scientific Committee on the Effects of Atomic Radiation, established by the United Nations General Assembly in December 1955, will hold its fourth session beginning 27 January 1958. The announcement of the date and agenda for the session has been sent to the committee's 15 members: Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia, Egypt, France, India, Japan, Mexico, Sweden, the U.S.S.R., the

United Kingdom, and the United States.

When the committee was set up, it was asked among other things to collect all available information on the effects of radiation on man and his environment, and to develop by mid-1958 a summary and evaluation of the reports received. The first draft of this comprehensive report will be discussed at the January session.

A yearly progress report to the General Assembly that was distributed recently notes that the committee met twice in 1956 and again in April 1957. Zenon Bacq of Belgium is chairman, and E. A. Watkinson of Canada is vice-chairman. As part of its work of gathering information, the Scientific Committee so far has received 130 reports from 27 governments and U.N. specialized agencies.

### Federal Research Budget

In fiscal year 1957, Federal Government expenditures for scientific research and development amounted to around \$3 billion, according to a report released by the National Science Foundation. The \$3-billion expenditure reflects an increase of almost 20 percent over the 1956 expenditure of \$2.5 billion. The estimate is included in *Federal Funds for Science VI*, the latest in an NSF series of surveys of the Federal Government's research and development budget. The NSF report includes an analysis of the Government's financial obligations in terms of administering agencies, character of work, scientific fields, and organizations performing the work.

In fiscal year 1957, the Department of Defense and the Atomic Energy Commission accounted for 85 percent of the funds. Along with these two agencies, six other agencies—the Department of Health, Education, and Welfare, the Department of Agriculture, the National Advisory Committee for Aeronautics, the Department of the Interior, the National Science Foundation, and the Department of Commerce—were responsible for all but 1 percent of the research and development budget.

More than 60 cents of every dollar for conducting research and development was obligated for development; less than 40 cents for research, both applied and basic. Basic research accounted for 8 cents.

Of the \$964 million obligated for basic and applied research in fiscal year 1957, the physical sciences, including engineering, claimed 67 percent; the life sciences, 29 percent; and the social sciences, 4 percent.

Thirty-five cents of each Federal dollar for basic and applied research and development went to profit organizations, 14 cents went to educational insti-

tutions, 48 cents remained within the Federal Government, and 3 cents went to "other" institutions. Copies of *Federal Funds for Science VI* may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C., for 35 cents.

## News Briefs

Francis Perrin, high commissioner for Atomic Energy of France, has been selected as president of the Second International Conference on the Peaceful Uses of Atomic Energy to be held 1-13 September 1958 in Geneva. The selection was made at a recent meeting of the United Nations Advisory Committee on the Peaceful Uses of Atomic Energy. The president of the first Conference on the Peaceful Uses of Atomic Energy, which met in Geneva in August 1955, was Homi Bhabha of India.

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The Science Council of Japan adopted at its 25th general meeting on 4 October a "Resolution in Support of the Statement of the International Meeting of Scientists at Pugwash" [*Science* 125, 199 (2 Aug. 1957)].

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The School of Mathematics of the Institute for Advanced Study, Princeton, N.J., will allocate a small number of grants-in-aid to gifted young mathematicians and theoretical physicists to enable them to study and conduct research at Princeton during 1958-59. Candidates must have given evidence of ability in research comparable at least with that expected for the Ph.D. degree. Application blanks may be obtained from the School of Mathematics; they must be returned by 1 January 1958.

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The third atoms-for-peace mission to the American republics arrived in Managua, Nicaragua, on 9 November for a 3-week trip through Nicaragua, El Salvador, Guatemala, and Honduras. The seven-man U.S. group met with scientists, educators, and government officials to exchange ideas on practical applications of nuclear energy. Adaptation of existing educational facilities to provide specialized training, and possible U.S. cooperation in this effort, was on the agenda for discussion with each country.

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A new type of written science test is being devised by the College Entrance Examination Board to find true potential scientists as opposed to "gadgeteers." The plans for the test were described at a recent conference of the New York Association of Biology Teachers.

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Carpenter Hall, new library and administrative center for the College of

Engineering at Cornell University, was dedicated recently by the donor, Walter S. Carpenter, Jr., chairman of the board of E. I. du Pont de Nemours & Co.

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The Health Information Foundation has announced that in 1958 it will sponsor and jointly conduct with the National Opinion Research Center of the University of Chicago another nationwide survey of medical costs and voluntary health insurance coverage. The new study will be a resurvey of the HIF-NORC study of 1953, which provided basic health insurance data.

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A dinosaur egg has been presented to the Harvard University Museum of Comparative Zoology by the city of Aix-en-Provence, France. The 20-pound egg is one of a new find of whole eggs of a hypsilosaurus, one of the large dinosaurs. Until the discovery at Aix-en-Provence by Raymond Dughi, only whole eggs of one small dinosaur had been available for study. These Aix-en-Provence dinosaur eggs are the largest reptile eggs known to science.

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The Franklin Institute Museum, Philadelphia, Pa., has planned a new two-floor basic chemistry exhibit to be opened early in 1958. It is estimated that the exhibit will cost in the neighborhood of \$100,000 to build and another \$70,000 to operate for the next 5 years. Supporting funds are being solicited from industry.

## December Scientific Monthly

Articles appearing in the December issue of *The Scientific Monthly* are: "Outlook to Space Travel," E. Stuhlinger; "Scientist in Contemporary Fiction," B. Glass; "The Last Geographic Frontier: the Sea Floor," E. L. Hamilton; "Scientific Progress and Political Science," B. Brodie; "Course Requirements for Future Science Teachers," F. G. Watson. Thirteen books are reviewed.

## Scientists in the News

GARTH J. THOMAS has been appointed research professor jointly in the Bioacoustics Laboratory and the department of physiology, University of Illinois, Urbana. His research will be concerned with studies of behavioral effects of brain lesions produced by focused ultrasonic energy.

HANS A. BETHE of Cornell University recently completed a series of four Morris Loeb Lectures in physics at Harvard University. He discussed "The Nuclear Many-Body Problems."

WALTER M. BEJUKI, formerly research associate at the Prevention of Deterioration Center, Division of Chemistry and Chemical Technology, National Academy of Sciences-National Research Council, has been appointed assistant director of the center.

JAMES B. McNAUGHT, professor and head of pathology at the University of Colorado Medical Center, Denver, has received the Certificate of Highest Merit and a gold medallion "in recognition of contributions made to the science of Clinical Pathology and to the American Society of Clinical Pathologists." The presentation was made during the joint annual meeting of the American Society of Clinical Pathologists and the College of American Pathologists that took place recently in New Orleans, La.

PAUL K. KURODA, formerly associate professor of chemistry at the University of Arkansas, has joined the staff of Argonne National Laboratory as associate chemist. Kuroda, who is the only naturalized citizen of Japanese birth on the Argonne staff, will be especially concerned with problems of low-level radioactivity.

GEORGE B. KOELLE, professor of pharmacology in the department of physiology and pharmacology in the University of Pennsylvania's Graduate School of Medicine, has been elected dean of that school. He succeeds GEORGE M. PIERSOL, who has served the university for 50 years as a teacher and administrator in the field of medical education.

Coincident with Koelle's election, which became effective on 1 Nov., it was announced that a revised curriculum will be instituted in the Graduate School of Medicine in September 1958. The new curriculum, formulated by a faculty committee of which Koelle was chairman, is designed to meet changing requirements for medical specialty training both in this country and abroad. At present, the Graduate School of Medicine conducts an 8-month program in which study of the basic medical sciences is carried on concurrently with clinical training in 22 specialties.

In place of this combined program, the new and more flexible curriculum to be established next year provides for two separate semesters of 4 months each. All the basic medical sciences, as well as those sciences that a physician requires for his specialty, will be offered during the first semester. The second semester will be devoted entirely to clinical training.

ALBERT C. ZETTMLOYER, professor of chemistry and director of the