G. M. ADAMSON, JR., has been appointed head of the homogeneous reactor program of the metallurgy division, Oak Ridge National Laboratory. He succeeds J. L. GREGG, who has returned to Cornell University after a year's leave. J. H. DEVAN has replaced Adamson as head of the dynamic corrosion section.

Other changes in the metallurgy division include the resignation of w. o. HARMS, who has accepted a teaching post at the University of Tennessee. M. L. PICKLESIMER SUCCEEDS HARMS.

E. C. ELTING has been appointed deputy administrator for Experiment Stations in the U.S. Department of Agriculture's Agricultural Research Service, a post left vacant by the retirement of the late R. W. Trullinger. Elting joined the Department of Agriculture in 1936 as a specialist in dairy husbandry on the staff of the Office of Experiment Stations.

The following appointments to assistant professor have been announced. University of Alabama: Gray c. Buck and Orville Clayton, surgery; robert earl Roth and Harold Schneider, pathology. University of Pittsburgh: Phillip Bacon, geography; John Cameron, physics; John Ulrich, speech; Ian Mitchell Sussex, biological sciences. University of Mississippi: James L. Kline, physics; Malcolm Robertson, psychology.

## Necrology

WAYNE ARNOLD, Ridgefield, Conn.; 35; physicist for Schlumberger Wells Survey Corp.; former member of the staff of the Los Alamos Scientific Laboratory; 15 Nov.

ALFRED T. BEALS, Hackensack, N.J.; 85; photomicrographer; expert on mosses and lichens; 8 Nov.

ALBERT E. BOTHE, Merchantville, N.J.; 64; professor of urology, Graduate School of Medicine, University of Pennsylvania; 11 Nov.

ALVA CLARK, Washington, D.C.; 65; director of research and development in a sector of the U.S. Department of Defense; retired vice president of Bell Telephone Laboratories; 14 Nov.

SAMUEL J. CROWE, Baltimore, Md.; 72; emeritus professor of laryngology at Johns Hopkins University; 13 Nov.

ARTHUR H. CURTIS, Evanston, Ill.; 74; former head of the department of obstetrics and gynecology of the Northwestern University Medical School; 13 Nov.

BERNARD DE VOTO, Cambridge, Mass.; 58; Pulitzer prize-winning historian who was an emphatic proponent of conserva-

tion of the nation's natural resources; 13 Nov.

JONAS FRIEDENWALD, Baltimore, Md.; 58; associate professor of ophthalmology at Johns Hopkins University, Baltimore; 5 Nov.

PAUL F. GAEHR, Auburn, N.Y.; 75; professor emeritus of physics at Wells College; 12 Nov.

WARDLAW MCGILL HAMMOND, Philadelphia., Pa.; 75; photomicrographer; honorary research associate at the Farlow Herbarium of Cryptogamic Botany, Harvard University; 9 Nov.

ELY C. HUTCHINSON, Washington, D.C.; 73; management consulting engineer; World War II consultant on scientific and technical affairs in the Office of Research and Development, the War Production Board, and the Office of Technical Services; 12 Nov.

JOHN J. HYLAND, New York, N.Y.; 51; electronics expert; founder and chairman of the board of Control Instrument Company of Brooklyn; 11 Nov.

JAMES M. SWAINE, Ottawa, Canada; 77; former Dominion entomologist; 11 Nov.

## Education

■ Vernon Lippard, dean of the Yale University School of Medicine, recommended recently that medical schools should be "in physical proximity" to the rest of the university and not far distant from the central university campus. In his address as retiring president of the Association of American Medical Colleges, Lippard urged a closer integration between medical schools and the universities with which they are associated.

He contended that a medical school is often more concerned with its hospital than with its university obligations. Blaming both the medical schools and the universities for this situation, he said that "the day has passed when medical education and research can be carried on efficiently in isolation."

Lippard also pointed out that a college education generally has been accepted as a prerequisite for admission to medical school but that the methods of medical instruction have too many of the characteristics of undergraduate education.

"Our curricula are crowded from early morning until late at night with required exercises, the compulsion of frequent and detailed examinations in course is considered necessary, little time or incentive is provided for the pursuit of special interests, and participation in the advancement of knowledge is relegated to the postdoctoral level." He stressed that such practices are "not compatible with graduate study in a university where introduction of the student to severe and

self-reliant intellectual effort is the major purpose."

Pointing out that current practices of medical education were conceived before the internship and residency were accepted, he said "the medical student continues to expend what I believe to be an inordinate proportion of his efforts in pursuit of the urine specimen and the hemocytometer, with no decrease in time devoted to these chores as participation in new diagnostic procedures is imposed upon him."

■ The Albert Einstein College of Medicine of Yeshiva University was formally dedicated last month before an audience of 5000 people. Congratulatory messages, including one from President Eisenhower, came from all over the country.

Symbolic of the dedication was an inscribed plaque that was presented by the college's first class of 53 men and 3 women to Hans Albert Einstein, Albert Einstein's son. The plaque included the pledge that the students would "carry on in the spirit of warm humanity and scientific integrity exemplified by Albert Einstein, justifying his high hopes for the college as a valuable instrument for advancing medical science and the national welfare."

Although the school has just opened, it starts more or less full fledged, with adequate teaching and laboratory facilities and the hospitals, and other auxiliaries that usually are acquired slowly through the years.

The college is the heart of a new medical center that is to cost \$100 million. It will be open to all who are academically qualified, without regard for race, creed, or nationality.

- Lehigh University has received a private grant sufficient to support the full expenses of the bioelectric laboratory of the department of psychology for the next 10 years. The primary research program of the laboratory is the study of muscle action potentials in muscular fatigue, with Arnold M. Small, Jr., and Nathan B. Gross as principal investigators.
- A lecture series designed to acquaint high-school science teachers with recent developments in science has been undertaken by Washington University in cooperation with the St. Louis Public Schools Advisory Committee. It is hoped that the monthly series, entitled the "Frontiers of science," will add to the teachers' ability to stimulate an interest in science among high-school students.

The lectures are open to all teachers in public, private, and parochial schools in the St. Louis area. The St. Louis Public School System is permitting teachers to take time from their regular duties to attend the lectures. Two meetings have already taken place, each being attended by about 200 teachers, or nearly two-thirds of the science teachers in the area.

The program was arranged by a Washington University faculty committee consisting of Barry Commoner (chairman), Viktor Hamburger, Herbert A. Potratz, Robert D. Sard, H. LeRoy Scharon, and Sidney F. Velick. It is hoped that the series will become a regular annual activity.

## Grants, Fellowships, and Awards

■ In its recent report covering the years 1953 and 1954, the Alfred P. Sloan Foundation, Inc., listed some 80 educational, medical, and other institutions as recipients of its grants. These grants totaled more than \$6.5 million. When added to the commitments made since the foundation began an active program early in 1937, these additional grants bring the total foundation commitments as of 31 Dec. 1954, to somewhat in excess of \$27 million.

Despite the fact that a relatively large number of institutions received support from the foundation during the biennium under review, far the larger share of the dollar value of the commitments went to a relatively few recipients. Such action was dictated by the foundation's desire to continue its long-time policy of concentrating support in a few large projects. Thus almost two-thirds of the funds committed during the biennium, or somewhat more than \$4 million, went to nine recipients.

More than \$2 million went for cancer research, the funds being given to the Sloan-Kettering Institute for Cancer Research and to institutions affiliated with the Sloan-Kettering program, including the Memorial Center for Cancer and Allied Diseases in New York and the Southern Research Institute of Birmingham, Ala. Approximately \$1.25 million was donated to various foundation-supported enterprises at Massachusetts Institute of Technology. There the foundation's chief current interest continues to be the School of Industrial Management, which was organized with foundation assistance in 1952. Special research projects, a project for foreign scientific and engineering students, and various scholarship and fellowship programs account for the remaining funds committed to M.I.T.

Other large projects that accounted for sizable portions of the foundation's gifts were the Council for Financial Aid to Education, Inc., \$155,000; Teleprograms, Inc., \$400,000; New York University, \$253,000; Institute for Atmospheric Physics at the University of Ari-

zona, \$150,000; the Brookings Institution, \$163,000; the National Bureau of Economic Research, Inc., \$118,000; and Tuskegee Institute, \$100,000.

During the two-year period reported, the foundation developed three new areas of activity in which it intends to commit funds in the future. The first of these involves a national scholarship program for undergraduates in selected American colleges of liberal arts and technological institutions.

The second new area involves a program that seeks to advance knowledge of the cause, treatment, and cure of glaucoma and related diseases of the eye. Under this program, grants are currently being made to medical schools and other institutions conducting research projects in this general area. Currently, annual expenditures approximate \$150,000. For the administration of this project, a special organization, known as the Council for Research in Glaucoma and Allied Diseases, has been set up with headquarters at 111 E. 59 St., New York 22. The chairman of this council is Conrad Berens, professor of ophthalmology, New York University-Bellevue Medical Center.

The third of the three new areas added to the foundation's scope of operations during the biennium relates to the foundation's new program to stimulate basic research in physical science. This program originated in a special gift of \$5 million made to the foundation in 1954 by Mr. and Mrs. Alfred P. Sloan, Jr.

This gift, and such additions as may be made to it in the future, will be administered as a special fund of the foundation. Grants will draw on both the fund's principal and income. In time such grants are expected to approximate \$500,000 per annum.

This new activity will fall under the direction of the foundation's recently appointed administrator for this program, Richard T. Arnold. He will be assisted by an advisory group of five scientists. The chairman of this group is Arthur C. Cope, professor and head of the department of chemistry, Massachusetts Institute of Technology.

Grants under this program, which is limited initially to chemistry, physics, and mathematics, will seek to support scientists—particularly young scientists in universities—who are engaging in qualified research projects. It is unlikely that the fund will support large research programs.

In a preface to the report, Alfred P. Sloan, Jr., president of the foundation, reiterated the foundation's adherence to the policy of using its funds to assist in the discovery of new knowledge and for the promotion of research and investigation.

The report pays tribute to the late Karl T. Compton, former head of the Massachusetts Institute of Technology, who joined the board of trustees of the Sloan foundation at an early date and who served until his death in 1954.

■ Eleven National Science Foundation grants-in-aid will be made for research work at the Highlands Biological Station, Highlands, N.C., for the summers of 1956 through 1958. Applications for awards will be reviewed by the Board of Managers of the station. Research proposals must be concerned with the fauna or flora of the Southern Appalachians; they may involve any of the various fields of biology. Applications must be submitted in triplicate not later than 1 Mar. of each year.

The following grants will be available: (i) four postdoctoral grants of \$500 each, open to advanced research investigators; (ii) three predoctoral grants of \$400 each, open to advanced graduate students capable of engaging in independent investigations; and (iii) four graduate-student grants, open to graduate students with little experience in independent research and who must carry out their research proposal under the direct supervision of a principal investigator.

Application blanks will be available about the end of November. Further information may be obtained from the executive director of the Highlands Biological Station, Prof. Thelma Howell, Department of Biology, Wesleyan College, Macon, Ga.

■ The Ciba Foundation has announced its 1955–56 award program for experimental research in problems of aging. Papers descriptive of work in the field should be submitted before 10 Feb. 1956 to G. E. W. Wolstenholme, Ciba Foundation, 41 Portland Place, London, W.1, who also will provide details of the conditions of the contest.

Five awards, of an average value of £300 each, are available. Entries will be judged by an international panel of scientists that will include C. H. Best (Toronto), E. Braun-Menendez (Buenos Aires), E. J. Conway (Dublin), G. W. Corner (New York), A. Haddow (London), V. R. Khanolkar (Bombay), R. Nicolaysen (Oslo), A. S. Parkes (London), and F. G. Young (Cambridge). In making recommendations, this group will also have power to suggest variation in the size and number of the awards according to the standard of entries. Preference will be given to younger workers. The article, which may not exceed 7000 words, should not have been published before 31 July 1955, although it may have been under consideration for publication on that date.