1906 professor of mathematics at the University of Wisconsin, died on November 19 at the age of ninety-four years.

THE death is announced at the age of sixty-six years of Dr. Clarence S. Yoakum, professor of per-

sonnel management, dean of the Graduate School and vice-president of the University of Michigan.

Dr. Louis Maxwell Potts, research engineer of the Teletype Corporation, Chicago, died on October 23 at the age of sixty-nine years.

SCIENTIFIC EVENTS

ROYAL SOCIETY MEDALISTS

THE King of England has approved the recommendations made by the council of the Royal Society for the award of the two Royal Medals for the current year as follows:

To Professor J. D. Bernal, F.R.S., for his work on the structure of proteins and other substances by x-ray methods, and for the solution of many other problems requiring a physical approach.

To Dr. E. J. Salisbury, C.B.E., F.R.S., for his notable contributions to plant ecology and to the study of the British flora generally.

The following awards of medals have been made by the president and the council of the Royal Society:

The Copley Medal to Dr. O. T. Avery, For. Mem. R.S., for his success in introducing chemical methods in the study of immunity against infective diseases.

The Davy Medal to Professor Roger Adams, for his extensive researches in the field of organic chemistry and of his recent work in the alkaloid field.

The Hughes Medal to Professor B. F. J. Schonland, O.B.E., F.R.S., for his distinguished work on atmospheric electricity and of his other physical researches.

John D. Griffith Davies,

Assistant Secretary

THE PROMOTION OF SCIENCE BY THE GOVERNMENT

A SPECIAL meeting was called on Monday, November 19, by the Western Reserve University Chapter of the Society of Sigma Xi for consideration of the bills now before Congress on governmental promotion of science. The Case Chapter of Sigma Xi and the Cleveland Physics Society cooperated in the meeting, which was attended by seventy-five scientists of the Cleveland area. The program, under the chairmanship of Dr. Helen A. Hunscher, president of the Western Reserve Chapter, was as follows:

- Summary of Vannevar Bush's Report to the President. H. S. Booth, professor of chemistry, Western Reserve University.
- Discussion of the need for federal support of research and of the merits and dangers of the proposed bills. Discussion leaders:
 - W. G. Leutner, president of Western Reserve University

Webster G. Simon, educational vice-president of Western Reserve University

Elmer Hutchisson, dean of the Case School of Applied Science

Leonard O. Olsen, associate professor of physics of the Case School of Applied Science and president of the Cleveland Physics Society

A. Sidney Harris, associate professor of physiology of Western Reserve University, chairman.

3. Recommendations of the Western Reserve Chapter Committee on Science Legislation.

The recommendations presented in part 3 of the program had already been sent under the signatures of the committee to President Truman, Senators Magnuson, Kilgore, Taft and Huffman, and to Mr. John Teeter, executive secretary for Senator Magnuson in organizing the hearings. These recommendations, as given below, were endorsed without dissent by those present at the meeting.

To the Senate Subcommittees which are conducting Hearings on Science Legislation

The undersigned members of the Committee on Science Legislation of the Western Reserve University Chapter of Sigma Xi submit the following statement of recommendations:

For reasons which have been ably stated by Dr. Vannevar Bush in his report to President Truman, "Science, the Endless Frontier," we strongly endorse the principle that a National Research Foundation for Federal promotion and support of scientific research be established.

After having studied the several bills for the establishment of a national organization or foundation, we recommend and urge that the bill which is finally reported to the Congress for adoption shall contain, among others, the following provisions.

- That the powers of the foundation shall be vested in a board of nine members appointed by the President on the basis of a demonstrated capacity for the job and without regard for political affiliation. The director should be appointed by the board.
- That researches shall be supported through contracts, grants or other forms of assistance. We oppose the principle that support shall be available to nonprofit institutions on a rigid contract basis only.
- 3. That the foundation, like other government agencies, be given the power to negotiate such patent arrangements with research contractors and grantees

as particular situations may require in the public interest.

Since these provisions are contained in the Magnuson Bill, and since other provisions of this bill are, in our judgment, equal or superior to parallel provisions in other proposed bills, we hereby endorse the Magnuson Bill and recommend its enactment. Before this bill is enacted, however, we recommend two additions which are in the nature of safeguards:

- To insure that the appointments to the board shall be nonpolitical and based upon ability, they should be made from a list of names submitted by the National Academy of Sciences or other national body or bodies of scientists representing all major fields.
- 2. To protect the freedom of scientists to choose the nature, scope, and methods of their researches, a specific statement for this purpose should be written into the bill.

If a compromise bill is to be worked out, we urge that the provisions named above and the recommendations of Dr. Vannevar Bush in "Science, the Endless Frontier," and in his testimony before the Subcommittee of the Senate, be included in the new bill.

(Signed) A. Sidney Harris, Chairman
A. H. Hersh
Frank Hovorka
Frederick R. Mautz
Harry Goldblatt

REPORT OF GENERAL ARNOLD ON THE NEED FOR MAINTAINING ADE-QUATE AIR POWER

In the report to the Secretary of War of General Henry H. Arnold, Commander in Chief of the United States Army Air Forces, among the recommendations made are the following:

The Air Force must be authorized to expand existing research facilities and create and take advantage of new ones to accomplish applied research and to make such facilities available to scientists and industrial concerns working on problems for the Air Force. Further, the Air Force must have the means of recruiting and training personnel who have full understanding of the scientific facts necessary to procure and use the most advanced equipment. Although basic scientific research should not be undertaken by the Air Force in its own organization, it must encourage and sponsor such basic research as may be deemed necessary for the defense of the nation. We must depend on scientific and technological advances requiring us to replace about one fourth of our equipment each year.

In the accomplishment of its fundamental responsibility for insuring that the nation is prepared to wage effective air warfare, the Air Force must be able to call on all talents and facilities existing in the nation and sponsor further development of the facilities and creative work of science.

It is in the national interest to establish a national

research foundation composed of the most highly qualified scientists in the United States and charged with the responsibility of furthering basic research and development in all fields of science and the scientific training of adequate numbers of highly qualified men. Scientific planning must be years in advance of the actual research and development work.

RECENT GIFTS TO THE ARNOLD ARBORETUM OF HARVARD UNIVERSITY

Under the provisions of the will of the late Miss Marian Roby Case, the Arnold Arboretum of Harvard University is named as beneficiary to the extent of her real estate, about 90 acres and all improvements, in Weston, Mass., \$150,000 to its capital account, and also the residuary legatee for the entire estate. The indications are that this may prove to be the largest single gift to the Arnold Arboretum in the seventy-three years of its existence. Title has already been taken to the real estate involved which adjoins the sixty-acre estate presented to the Arnold Arboretum three years ago by the decedent's sister, Miss Louisa W. Case, together with an outright gift of \$50,000 to capital. While no restrictions were specified, the hope was expressed that with the additions to institutional income the two adjoining estates could be maintained and developed as an adjunct to the Arnold Arboretum.

The will of the late Mrs. Katherine T. Balch, wife of the late John Balch, of Milton, Mass., now in probate, provides that the Arnold Arboretum is to be the recipient of one half of her residuary estate, which may amount to more than \$100,000.

SCIENCE AWARDS OF THE GUGGENHEIM FOUNDATION

The John Simon Guggenheim Memorial Foundation has awarded thirty-six post-service fellowships amounting in value to \$94,000 to young scholars and artists who have served in the Army and in other Government services. The recipients, each granted approximately \$2,500, range from private first class, to lieutenant colonel, and, in the Navy, from specialist third class, to lieutenant commander.

The original appropriation of \$200,000 for postservice fellowships, which are granted on the same basis as the other fellowships of the foundation to those who have demonstrated unusual capacity for research and artistic creation, was doubled. This was done because of the high ability of the applicants.

Awards in the sciences are as follows:

Dr. Lewis H. Kleinholz, Captain, Army; instructor, Cambridge (Mass.) Junior College—Studies of physiological and chemical interrelationships in the fields of crustacean endocrinology.

Dr. G. La Verne Freeman, Lieutenant Commander, Navy; associate professor of psychology, Northwestern