this unit will be housed in the Rothamsted Experimental Station. Dr. Quastel and his staff will, in the first instance, be engaged mainly in the study of the influence on soil fertility of enzyme systems derived from soil bacteria, or from other microorganisms.

## COMMITTEE ON ECONOMIC TRENDS OF THE INDUSTRIAL RESEARCH INSTITUTE

IN a survey of "Science in Industry" in 1941, Dr. Maurice Holland announces that recently the Industrial Research Institute (affiliated with the National Research Council) representing more than forty companies in varied fields of industry, known as leaders in technology in their fields, have appointed a committee on "Economic, Political, and Social Trends Affecting Research Policies" to study the deep and significant national trends in these three categories as they are now affecting and may affect in the future research personnel, organization and appropriations.

The primary purpose of the committee is to devise ways and means to preserve research organizations intact after the war. It is looking toward the formulation of a plan which can be sponsored and backed by the only organized industrial company membership group in the United States for some form or method of accumulating a surplus or sinking fund for research in lean times, or some form of economic security such as irrevocable trust funds for research workers, or some form of group insurance especially designed to fit the needs of creative workers in industry.

The report points out that "with the appointment of Dr. Vannevar Bush as director of the Office of Scientific Research and Development, the entire science resources of the nation, including those of the armed services, are now under the direction of one man. For the first time in the nation's scientific history the resources of government, industry and university are integrated and coordinated for the primary purpose of national defense.

"Substitution of industrial materials come second on the list as a significant trend in the defense-dominated scene—with companies crossing industry boundaries. The search for substitute material in the case of at least one large automobile manufacturer has definitely indicated that the substitute material is functionally better adapted to the purpose, is cheaper and more decorative, with the result that they will probably not go back to the original material.

"The publication of 'Industrial Research. II. A National Resource' by the National Resources Board —a survey made by the National Research Council for that body—has had a marked effect in high places in industry and industrial-financial groups in stimulating interest in technical research as one form of 'industrial insurance.' This is particularly true in the management and executive strata of industry and financial organizations."

## THE COOPERATIVE COMMITTEE ON SCIENCE TEACHING

UNDER the sponsorship of five scientific societies representing biology, chemistry, mathematics, physics and research in science teaching a committee has been formed to work on educational problems of vital interest to all science teachers which no single organization can solve working alone. The committee is known as the Cooperative Committee on Science Teaching.

Two meetings have been held, one in April and one in November, 1941. Work is now in progress on four problems:

1. Licensing or certification of secondary-school science teachers. The committee hopes to work out a solution that will be practicable and that will be adopted by certification authorities.

2. The college training of prospective science teachers. It is desirable to prepare teachers for teaching certain combinations of subjects rather than to prepare intensively in one subject.

3. Exploratory studies of the secondary-school science curriculum. The committee hopes to stimulate a number of colleges and universities to organize workshops and conferences for bringing together secondary-school teachers to work on their educational problems.

4. Problems of state or local agencies needing the services of educational consultants on questions pertaining to science teaching. The committee offers its services as a consultant to state or local agencies working on problems pertaining to science teaching.

The committee consists of the following members:

Representing the American Association of Physics Teachers: K. Lark-Horovitz, Purdue University; Glen W. Warner, Wilson Junior College, Chicago.

Representing the American Chemical Society: B. S. Hopkins, University of Illinois; Martin V. McGill, Lorain High School, Lorain, Ohio.

Representing the Mathematical Association of America: A. A. Bennett, Brown University; Raleigh Schorling, University of Michigan.

Representing the National Association for Research in Science Teaching: G. P. Cahoon, the Ohio State University; Robert J. Havighurst, University of Chicago.

Representing the Union of Biological Societies: Oscar Riddle, Carnegie Station for Experimental Evolution.

Robert J. Havighurst is chairman of the committee and Glen W. Warner is secretary.

## THE AMERICAN FERN SOCIETY

DR. DOUGLAS HOUGHTON CAMPBELL, of Stanford University, has recently (December, 1941) been elected to honorary membership in the American Fern

Society. Dr. Campbell, who has been a regular member of the society for twenty-five years, becomes the fifth botanist to receive this honor during the fifty years' existence of the society, the others being Dr. Carl Christensen, of Denmark; Professor Frederick Orpen Bower, of England; Professor Willard Nelson Clute, of Butler University, Indiana, and Dr. Campbell E. Waters, of Washington. Professor Campbell began his fern work with a research problem on the common sensitive fern, Onoclea, fifty years ago.

The American Fern Society is about to celebrate fifty years of activity relating to ferns. While its official organization and first publication date from 1893, forty-nine years ago, there had been a preliminary gestational period of a year or two before that, during which its nineteen charter members perfected the plans which led to its birth as the "Linnaean Fern Chapter" of the Agassiz Association, and later to an adolescent change into "The American Fern Society." Drs. Waters and Clute have been members for half a century.

From its start with nineteen charter members, the Fern Society has grown to a present membership of over four hundred, comprising fern students from many different professions and walks of life. During 1941, the society's publication, the *American Fern Journal,* completed its thirty-first volume with Dr. W. R. Maxon, of the Smithsonian Institution, as its editor-in-chief. Preceding him, C. A. Weatherby, of the Gray Herbarium, served as editor for a period of twenty-six years. Publication headquarters of the journal are at the Brooklyn Botanic Garden, which also houses its herbarium and library. Before the *Journal* was started (1910), the society sponsored the *Fern Bulletin,* which was edited through twenty volumes by Willard N. Clute.

## THE AMERICAN PHILOSOPHICAL SOCIETY

SINCE 1937 the American Philosophical Society has been holding a general meeting in the month of February, at which meetings such topics have been considered as the "Administration of Funds in Aid of Research," the "Publication of Research," "The Centenary of the Wilkes Exploring Expedition," "The Life and Work of Alexander Dallas Bache" and the "Centenary of Geomagnetism in America."

It is proposed to devote the midwinter meeting on February 13 and 14 to the "Early History of Science and Learning in America" with especial reference to the part played by the American Philosophical Society, which this year completes its bicentenary. At present the program includes the subjects and speakers given below:

Mathematics, Frederick E. Brasch, Library of Congress.
Astronomy, S. A. Mitchell, University of Virginia.
Physics, W. F. Magie, Princeton University.
Chemistry (Joseph Priestley), Detlev W. Bronk, University of Pennsylvania.
Engineering, Dugald C. Jackson, Massachusetts Institute of Technology.
Meteorology, W. J. Humphreys, U. S. Weather Bureau.
Agriculture, M. L. Wilson, under-secretary, United States Department of Agriculture.
Botany, M. L. Fernald, Harvard University.
Natural History (Benjamin Smith Barton as naturalist), Francis Pennell, Academy of Natural Sciences of Philadelphia.
Entomology, Philip P. Calvert, University of Pennsylvania.
Geology and Geophysics, Bailey Willis, Stanford University.
Paleontology, George G. Simpson, American Museum of Natural History.
Medicine, Francis R. Packard, Philadelphia.
The American Indian, Clark Wissler, American Museum of Natural History.
Education, Merle M. Odgers, Girard College.
Michaux and His French Associates, Gilbert Chinard, Princeton University.

This program should prove of unusual interest not only because of the subjects and speakers announced, but also because the theme of this meeting has been proposed as the field which should be especially cultivated by our library. This meeting should enable us to assess the present value of our library in this field and to learn of the gaps which should be filled if it is to be an important aid in this department of historical research.

As usual the society will provide hotel entertainment for non-resident members and specially invited guests.

EDWIN G. CONKLIN,
*Executive Officer*

## OFFICERS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A FULL account of the Dallas meeting of the American Association for the Advancement of Science and the scientific societies associated with it, edited by the permanent secretary, will be printed in the issue of SCIENCE for February 6.

Officers for 1942 were elected as follows:

*President*

Dr. Arthur H. Compton, University of Chicago.

*Vice-presidents and Chairmen of the Sections*

*Mathematics* (A): Marshall H. Stone, Harvard University.
*Physics* (B): A. J. Dempster, University of Chicago.
*Chemistry* (C): J. H. Hildebrand, University of California, Berkeley.