



Philip McCord Morse

the discovery of means to counter acoustic mines. In 1942 he resigned from this post to accept an invitation to organize and become director of the U. S. Navy Operations Research Group, whose initial task was to counter the German submarine threat. He continued in this activity till the end of the war in 1945. One of the three volumes describing the work of the group—written jointly by Morse and G. E. Kimball and mentioned above—was released from classification and published in 1950.

In the spring of 1946 Morse was asked to organize and direct the nuclear research laboratory at Upton, Long Island, which was to become the Brookhaven National Laboratory. He continued in this post until the fall of 1948, when he returned to MIT in the hope of resuming his teaching and research, but he was again called upon to serve the government. James Forrestal, Secretary of Defense, prevailed upon Morse to organize and to be the first director of research for the Weapons Systems Evaluation Group. He returned to MIT in the fall of 1950 and has remained in residence since.

He has held numerous additional positions of trust and responsibility. He is currently a member of the board of trustees of the Rand Corporation and the council of the American Physical Society and has been on the board of trustees of the Institute for Defense Analyses and of the American Institute of Physics.

He is a member of the National Academy of Sciences, the American Acad-

emy of Arts and Sciences, the American Physical Society, the American Acoustical Society (president in 1948), and the Operations Research Society of America (president in 1952) and is a fellow of the American Association for the Advancement of Science.

His most recent extramural assignment has been to organize and direct the Panel on Operations Research of the North Atlantic Treaty Organization.

In addition to the honors already mentioned or implied above, Morse was awarded the D.Sc. degree by Case Institute of Technology in 1940 and the U.S. Medal of Merit for his work in operations research in 1946.

Morse has had varied experience in editorial functions. He is currently a member of the editorial board of *Physics Today* and is on the advisory board of the *Bulletin of Atomic Scientists*. He was associate editor of MIT's magazine, *Technology Review*, from 1936 to 1946 and has been editor of *Annals of Physics* since it was founded in 1957.

We are glad to welcome Dr. Morse to our editorial board.—G.DuS.

News Notes

News Briefs

Basic research conference. Progress in basic research in areas ranging from anatomy to nuclear energy will be considered in Seattle on 15 August by nine leading American scientists who will take part in a day-long program marking the dedication of the new \$2,250,000 Boeing Scientific Research Laboratories in Seattle. "Frontiers of Basic Research" will be explored in the morning program. The participants will be Walter O. Roberts, director of the High Altitude Observatory at Boulder, Colorado; Glenn T. Seaborg, professor of chemistry and chancellor of the University of California at Berkeley, and John C. Fisher, of the General Electric Research Laboratory in Schenectady, N.Y. Brief talks by six other scientists and a panel discussion of other areas of basic research will highlight the afternoon program.

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Marine laboratories. The North American section of the Directory of Marine and Freshwater Biological Laboratories of the World, is near completion. Directors of such laboratories who have not received the brief ques-

tionnaire issued by the international committee in charge of the preparation of the directory should write immediately to the editor, Professor Robert W. Hiatt of the University of Hawaii. The committee hopes to make the directory as useful as possible, and requests the cooperation of laboratory directors in calling attention to institutions inadvertently overlooked.

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Canada-India reactor. The Canada-India reactor went into operation last month at Trombay, India, according to a recent announcement by India's Atomic Energy Commission and the Atomic Energy of Canada Limited. The start-up of the research and engineering test reactor, which is a modified version of the NRX reactor at Chalk River, Canada, climaxes 5 years of close cooperation between engineers, scientists, and technicians of the two nations.

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New medical school. A "regional" school of basic medical sciences is to be established at the University of New Mexico. A \$1,082,300 grant from the W. K. Kellogg Foundation will assist the university over a 5-year period to establish a school covering the first 2 years of the medical curriculum. About half of the grant will be spent to meet, in part, the planning and operating costs for the school's first 5 years, and the other half will be used for construction of facilities on the Albuquerque campus.

Other Western states—Arizona, California, Hawaii, Idaho, and Montana—also are taking new steps to meet their medical education needs.

Grants, Fellowships, and Awards

Arthritis and rheumatism. The Arthritis and Rheumatism Foundation offers predoctoral, postdoctoral, and senior investigatorship awards in the fundamental sciences related to arthritis for work beginning 1 July 1961. Deadline for applications is 31 October. These awards are intended as fellowships to advance the training of young men and women of promise for an investigative or teaching career. They are not in the nature of a grant-in-aid in support of a research project. Stipends range from \$2000 to \$10,000 per year. For further information and application forms, address the Medical Director, Arthritis and Rheumatism Foundation, 10 Columbus Circle, New York 19, N.Y.

Cardiovascular research. Men and women with doctor's degrees who are interested in conducting cardiovascular research at Central Ohio institutions have until *15 September* to apply for fellowships with the Central Ohio Heart Association. Applicants must have served at least a year of internship or the equivalent. In exceptional cases, a fellowship may be awarded to an individual with a bachelor's or master's degree who has shown unusual promise. Qualified nonmedical personnel will be given equal consideration, provided their projects are related to cardiology. Both clinical and basic-science fellowships will be awarded, for a period of 1 year at annual stipends ranging from \$2800 to \$8000. Requests for application forms should be directed to the Central Ohio Heart Association, 145 North High Street, Columbus 15, Ohio.

Life sciences. The Division of Biological and Medical Sciences of the National Science Foundation announces that the next closing date for receipt of basic research proposals in the life sciences is *15 September*. Proposals will be reviewed at the fall meetings of the foundation's advisory panels, and disposition will be made approximately 4 months after the closing date. Proposals received later than 15 September will be reviewed after the spring closing date of 15 January 1961. Inquiries should be addressed to the National Science Foundation, Washington 25, D.C.

Reproduction. In recognition of the world-wide need for scientific training in reproductive physiology, the Worcester Foundation for Experimental Biology plans to initiate, on 1 January 1961, a postdoctoral program in this field under a grant from the Population Council. Fellowships for the program will be awarded to candidates possessing the Ph.D. or M.D. or their equivalents. These fellowships will carry a stipend of \$5500 per annum and will be for a 12-month period. An allotment will also be made for round-trip travel to the foundation headquarters. Application blanks may be secured from the Research Director, Worcester Foundation for Experimental Biology, Shrewsbury, Mass., and should be returned *at an early date*. The fellowship awards for the first year will be announced late in 1960. Applicants for participation in the program in 1962 and later years may communicate with the director at any time, but their applications will not be acted upon in 1960.

Scientists in the News

At a recent ceremony to mark the 300th anniversary of the founding of the Royal Society of London, the Queen Mother, chancellor of the University of London, presented honorary degrees to the King of Sweden, **Detlev W. Bronk** of the United States, **Homi J. Bhabha** of India, **Sir Macfarlane Burnet** of Australia, **George Charles de Hevesy** of Sweden, and **Sir Thomas Merton** of England.

The following scientists from the United States were among those who received honorary degrees at the recent 500th anniversary celebration of the University of Basel, Switzerland: **Emil Witschi** of the State University of Iowa, **Ray Herb** of the University of Wisconsin, and **Kenneth Thiman** of Harvard University.

Otto Struve, director of the National Radio Astronomy Observatory, received an honorary degree from the University of Kiel, Germany, on 8 July. A month earlier he also received an honorary degree from Wesleyan University, Middletown, Conn.

The National Academy of Sciences-National Research Council has announced the appointment of new chairmen to four of the academy's eight divisions. The appointments are for 2 years.

Edward P. Espenshade, Jr., chairman of the department of geography at Northwestern University, is chairman of the Division of Earth Sciences. He succeeds **John N. Adkins**, director of the earth sciences division, Office of Naval Research.

Emil W. Haury, professor and head of the department of anthropology at the University of Arizona, is chairman of the Division of Anthropology and Psychology. He succeeds **Neal E. Miller**, James Rowland Angell professor of psychology at Yale University.

J. Barker Rosser, professor of mathematics at Cornell University, is chairman of the Mathematics Division. He succeeds **Samuel S. Wilks**, professor of mathematical statistics at Princeton University.

Robert C. Elderfield, professor of chemistry at the University of Michigan, is chairman of the Division of Chemistry and Chemical Technology. He succeeds **Ernest H. Volwiler**, president of Abbott Laboratories, North Chicago, Ill.

Harriet B. Creighton, professor of botany at Wellesley College and secretary of AAAS Section G-Botanical Sciences, has just returned from a year as Fulbright lecturer in genetics at the University of Cuzco, Cuzco, Peru.

Jacques Van Mieghem of Brussels University (Belgium) has received the International Meteorological Organization Prize, which is awarded for outstanding work in meteorology and in international collaboration. Van Mieghem has published many papers, particularly on the general circulation and thermodynamics of the atmosphere and on energy transfer in large atmospheric disturbances.

His contribution to international coordination of research in meteorology is considerable. He was elected in 1951 as president of the Commission of Aerology of the World Meteorological Organization and was designated by WMO as its representative on the Special Committee of the International Geophysical Year. He represented the organization at various international scientific meetings. Further, he served as secretary and subsequently as president of the International Association for Meteorology and Atmospheric Physics of the International Union for Geodesy and Geophysics.

S. E. Gould, professor of pathology, Wayne State University College of Medicine, and pathologist, Wayne County General Hospital, Eloise, Mich., has been invited by the Polish Academy of Sciences to serve as representative from the United States to the first International Conference on Trichinosis, to be held in Warsaw on 12 and 13 September. The conference will observe the 100th anniversary of Zenker's discovery of *Trichinella spiralis* as the causative agent of trichinosis.

J. B. Adams, acting director-general of the European Organization for Nuclear Research (CERN) and director of CERN's proton synchrotron division, has been awarded the Roentgen Prize by the Justus Liebig University of Gießen (Germany).

Presentation of the prize was made on 1 July during a ceremony in commemoration of the 350th anniversary of the university, whose Physical Institute was headed by Wilhelm K. Roentgen until 1885. The award will be given annually for outstanding contributions in fundamental research in particle physics.

Alfred H. Washburn has resigned as director of the Child Research Council, University of Colorado School of Medicine, effective 1 October. He will remain an active member of the research staff of the institute, participating in its studies of the development of individuals throughout their life span.

Washburn is succeeded by **Robert W. McCammon**, who has been with the Child Research Council since 1949, first as assistant and then as associate director.

Thomas W. Kethley, of the staff of the Engineering Experiment Station, Georgia Institute of Technology, has been appointed research professor of applied biology and head of the newly formed Bioengineering Branch.

This fall **Robert S. Ingols**, at present professor and head of the institute's department of applied biology, will become director of the new School of Applied Biology, which will offer undergraduate and graduate degrees in the fields of experimental and applied biology.

C. M. Pomerat, professor of cytology and director of the tissue-culture laboratory of the Medical Branch, University of Texas, has been appointed director of biological research at the Pasadena Foundation for Medical Research, Pasadena, Calif. He has also accepted appointments to serve as adjunct professor of anatomy at the School of Medicine, University of Southern California, and clinical professor of pathology at the College of Medical Evangelists in Los Angeles.

William G. McGinnies, director of the Central States Forest Experiment Station, Columbus, Ohio, for the past 6 years, has been appointed director of the Tree Ring Laboratory and coordinator of the Arid Land Research Program at the University of Arizona in Tucson. Retiring from the U.S. Forest Service after 30 years in research, McGinnies assumed his new duties on 1 August.

As director of the Tree Ring Laboratory he will carry forward and expand investigations correlating tree growth and weather. The Arid Zone Program, administered by the University of Arizona and sponsored by the Rockefeller Foundation, is part of a worldwide project of the United Nations Educational, Scientific, and Cultural Organization and is devoted to finding new and better ways to use arid land.

Robert S. Mulliken, Ernest De Witt Burton professor in the physics department of the University of Chicago, has recently received several honors. In February he was presented with the Gilbert Newton Lewis Medal of the California Section of the American Chemical Society "for achievement in theoretical aspects of chemistry." In May he received the Theodore William Richards Medal of the Northeastern Section of the ACS "for conspicuous achievement in chemistry." During the spring he spent 5 weeks at Cornell University as George Fisher Baker non-resident lecturer in chemistry, where he discussed the interaction of electron donors and acceptors.

Hans Meier of the Children's Cancer Research Foundation, Boston, has been appointed a staff member at the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me.

Albert J. Rohlfs, meteorologist on the Pacific Weather Project, has recently been transferred from Honolulu to the U.S. Weather Bureau's marine center at New Orleans, where he has been appointed marine meteorological assistant to George L. Canaday, marine meteorological supervisor for the Gulf of Mexico, the Caribbean Sea, and West Indian waters.

Joseph H. Gerber has been named director of the Center for Aging Research of the National Institutes of Health. He was formerly medical officer in charge of the Public Health Service's Indian Health Area Office, Aberdeen, S.D. He succeeded **G. Halsey Hunt**, who is now chief of the Division of General Medical Sciences.

Recent Deaths

Harlan H. Barrows, Chicago, Ill.; 83; professor of geography at the University of Chicago and coauthor of widely used textbooks; June.

Saul R. Buc, New York; 45; research fellow at the Central Research Laboratories, General Aniline and Film Corporation, Easton, Pa.; 5 June.

Bernard H. Dawson, La Plata, Argentina; 69; astronomer associated with the National University Observatory, La Plata, since 1912; specialist in variables, double stars; discoverer of Nova Puppis, 1942; president of the professional astronomers' group of Argentina; 18 June.

Vernor C. Finch, Madison, Wis.; 77; for many years a professor of geography at the University of Wisconsin; co-author of *Geography of World Agriculture*, published by the U.S. Government, and of two widely used college textbooks; 23 October 1959.

Brenton R. Lutz, Melrose, Mass.; 70; emeritus professor of biology and formerly department chairman at Boston University (1928-1956); noted for his work on the evolution of the carotid sinus reflex and on respiration and circulation in fishes, and, more recently, for research on the physiology of small blood vessels by means of micromanipulative and cinephotomicrographic procedures; 22 June.

Franz Marschall, Easton, Pa.; 62; for 25 years research chemist of the Central Research Laboratories of General Aniline & Film Corporation; 20 May.

Walter B. Pillsbury, Ann Arbor, Mich.; 87; professor emeritus and former chairman of the department of psychology at the University of Michigan; 3 June.

Norman L. Schmidt, Stamford, Conn.; 63; urologist who practiced in New York and Stamford; was a special fellow in oncology and a research associate in cancer at the Yale University School of Medicine; 20 July.

Frank E. Williams, Phoenix, Ariz.; 83; professor emeritus of geography at the University of Pennsylvania's Wharton School of Finance and Commerce; 9 July.

Erratum: The meeting of the American Institute of Biological Sciences (28 Aug.-1 Sept.) will be held at Stillwater, Okla., and not at Norman, Okla., as incorrectly indicated in the 22 and 29 July issues.

Erratum. The note that announces E. L. Reynolds' visiting appointment to Hiroshima Women's College [*Science* 132, 213 (22 July 1960)] indicates that Reynolds is a member of the staff of the Fels Research Institute, when in fact he has not been actively associated with the institute for a decade. During the past 10 years he has been employed by the Atomic Energy Casualty Commission in Japan and self-employed as a freelance author and lecturer and owner-navigator of the yacht *Phoenix*.

Erratum. In the report "Reversible inhibition of beef heart cytochrome c oxidase by polyionic macromolecules" by P. Person and A. Fine [*Science* 132, 43 (1960)], it is incorrectly stated in the next-to-last sentence in the legend of Fig. 2 that protamine sulfate (final concentration 33 μ g/ml) was added to the cuvette. Polyglucose sulfate, rather than protamine sulfate, was added.

Erratum. In the report "Complementation at the maroon-like eye-color locus of *Drosophila melanogaster*" by E. Glassman and W. Pinkerton [*Science* 131, 1810 (1960)], the genetic designations of the stocks used in the work (given near the top of column 1, page 1811) were made unclear by our insertion of explanations for the symbols *v* and *f* in the designation. The sentence should have read "The stocks used were *v f Bx³ ma-l*, which was made from the *ma-l* strain at California Institute of Technology, and *v ma-l^{bs}*, which was made from the bronzy stock kindly made available by Fahmy." (*v*, vermilion eye color; *f*, forked bristle; *Bx³*, Bead wing; *ma-l*, maroon-like eye color; *ma-l^{bs}*, bronzy allele of maroon-like eye color)