national officers, the visiting delegates and the college members of Sigma Xi followed.

Dr. Shapley and Dr. Baitsell officiated at the formal installation ceremonies, which took place at 3 p.m. in one of the small college chapels. The new charter was accepted in behalf of the Tufts Chapter by President Carmichael, while Dr. Ellery responded for the society. The newly installed chapter elected the following officers:

President, Dr. Basil G. Bibby, dean of the Tufts College Dental School; Vice-president, Dr. Katharine F. Billings, instructor in geology; President-elect, Dr. Paul Warren, professor of botany; Treasurer, Dr. Herman Sweet, assistant professor of biology; Secretary, Dr. Nils Y. Wessell, dean of men.

A tea and reception followed at the home of President and Mrs. Carmichael. In the evening a dinner in honor of the national officers was attended by delegates and Tufts Chapter members. A public lecture followed, with Dr. George David Birkhoff delivering an address on "The Mathematical Nature of Modern Physical Theories."

NILS Y. WESSELL,

Secretary

## SUMMER SESSION IN APPLIED MATHE-MATICS AT BROWN UNIVERSITY

For the third summer, Brown University in its program of advanced instruction and research in mechanics, offers instruction and research direction in a twelve-weeks session beginning on June 14. A dozen graduate courses of a variety of grades are offered. These are largely in subjects related to mechanics, such as elasticity, fluid dynamics, theory of flight and partial differential equations; but there is one comprehensive course in mathematics of ultra-high frequencies in radio, which is particularly designed for those who expect to engage in research in that field. The staff in residence consists of Stefan Bergman, Lipman Bers, L. N. Brillouin, Willy Feller, G. E. Hay, Witold Hurewicz, P. W. Ketchum, Willy Prager and J. D. Tamarkin. In addition a dozen lectures each are scheduled for K. O. Friedrichs, R. E. von Mises and S. P. Timoshenko.

This program is supported by the U. S. Government, the Carnegie Corporation and the Rockefeller Foundation; tuition fees are remitted. There is an overwhelming demand from government agencies and industries for men from this school to do research in the mathematics underlying engineering.

Inquiries may be directed to the Dean of the Graduate School, Brown University, Providence, R. I.

## THE COLUMBUS MEETING OF THE AMER-ICAN PHYSICAL SOCIETY

The two hundred and fifty-fourth meeting of the American Physical Society will be held at the Ohio

State University on April 30 and May 1. The departure from the Eastern seaboard is due to the unavailability of Washington and Baltimore, to the fact that the last meeting was in New York and the next one will be in Pennsylvania, and to the courtesy of the Ohio State University in offering its hospitality for the second time in less than four years. The meeting will be held jointly with the Ohio Section of the society and Section F (Physics) of the Ohio Academy of Science. The first session will begin at 10:30 o'clock on Friday morning. The headquarters hotel will be the Deshler-Wallick.

A lecture by Dr. Peter Debye, chairman of the department of chemistry of Cornell University, on "The Magnetic Approach to the Absolute Zero of Temperature" will be given at 8 o'clock on Thursday evening before the Ohio Chapter of Sigma Xi. Contributed ten-minute papers will be given in two sessions—on Friday morning at 10:30 and on Saturday afternoon at 2:00. An invited paper by K. Lark-Horovitz, head of the department of physics at Purdue University, on "Semi-Conductors: Their Properties and Their Uses" will be given on Friday afternoon at 2:00.

A part of the symposium in honor of Galileo (who died in 1642) and Newton (born in 1642), which was arranged by the American Association for the Advancement of Science for its New York meeting of December last and which was abandoned when that meeting was called off, will be given at the Columbus meeting through the courtesy of Professors Henry Crew and Louis T. More, who have consented to make available papers that were originally to have been read at the New York meeting. These will be presented on Friday afternoon, beginning at 3:30. Dr. Crew will speak on "Galileo, the Pioneer Physicist" and Dr. More will discuss "Newton's Philosophy of Nature."

A symposium on applied infra-red spectroscopy will be held on Saturday morning at 10:00. The speakers and their topics are: R. Bowling Barnes, American Cyanamid Company, "Applied Infra-Red Spectroscopy"; J. R. Downing, du Pont Experimental Station, "Applications of Infra-Red Spectroscopy to Chemical Research"; H. H. Nielsen and Ely E. Bell, of the Ohio State University, "Automatic Recording Vacuum Infra-Red Grating Spectrometer."

The annual dinner will be held at the Deshler-Wallick Hotel at seven o'clock on Friday evening, when Dr. Charles F. Kettering, of the General Motors Corporation, will speak on "Looking Forward through Research." Members and guests are requested to make advance reservations by letter or card addressed to Dean Alpheus W. Smith at the Mendenhall Laboratory of Physics, the Ohio State University, Columbus.

The council of the society will meet on Friday morn-

ing at 10:45. The annual luncheon for members and guests of the Sigma Pi Sigma, held in conjunction with the spring meeting of the society, will be given at 12:15 o'clock on Friday, April 30.

## FIRST CHARLES L. MAYER AWARD OF THE NATIONAL SCIENCE FUND

Dr. Charles B. Huggins, professor of surgery at the University of Chicago, has been selected as the recipient of the prize of \$2,000 given by Dr. Charles L. Mayer and administered by the National Science Fund of the National Academy of Sciences. The award was offered for the most outstanding contribution made during 1942 to present-day knowledge of factors affecting the growth of animal cells with particular reference to human cancer, and as a new type of prize for the advancement of fundamental scientific research administered under a new type of philanthropic foundation.

The advisory committee assisting the National Science Fund in selection of the prize winner consisted of Dr. George H. Whipple, dean of the School of Medicine and Dentistry of the University of Rochester, Nobel prize winner in medicine (joint award) in 1934; Dr. R. R. Williams, chemical director of the Bell Telephone Laboratories, discoverer of Vitamin B<sub>1</sub>; Dr. Alan Gregg, director for the medical sciences of the Rockefeller Foundation, and Elihu Root, Jr. The committee decided that the 1942 award should go to Dr. Huggins for his studies of the human prostate, with special relation to the cancers taking origin from this gland. Dr. Huggins has shown that certain hormones ("chemical messengers" produced by the body), which regulate the normal activities of prostatic cells, have a marked influence as well on many of the cancers that derive from them. By the utilization of this knowledge he has been enabled to control the growth of the cancers and of such secondary tumors as may already have formed in distant organs. These discoveries have large theoretical as well as practical implications.

Dr. William J. Robbins, chairman of the National Science Fund and director of the New York Botanical Garden, said that formal presentation of the award will be made to Dr. Huggins later this spring at the annual dinner meeting of the board of directors of the fund. Dr. Robbins also announced that a second Charles L. Mayer award of \$2,000 for an outstanding study made in the same field in 1943 will be given and that entries and recommendations for consideration for this award should be in the office of the National Science Fund, 515 Madison Avenue, New York City, by January 15, 1944. He also emphasized that the advisory committee is interested primarily in fundamental studies on the factors influencing growth of

animal cells rather than applications to any particular aspect of normal or abnormal growth.

## ELECTION OF FELLOWS OF THE ROYAL SOCIETY

THE Royal Society, London, on March 18 elected the following scientific men into the Fellowship:

Bhatnagar, Shanti Swarupa, Kt. Director of scientific and industrial research, India. Distinguished for his numerous contributions to physical chemistry, more especially to magneto-chemistry. As professor of chemistry in the University of the Punjab he built up a flourishing school of research. Since the outbreak of war he has organized a new scientific department of the Government of India.

Buxton, Patrick Alfred. Director of the department of entomology, London School of Hygiene and Tropical Medicine. Distinguished for his researches in medical entomology with special reference to the conditions under which insects responsible for the transmission of diseases multiply and the measures which must accordingly be adopted for their control.

Daly, Ivan de Burgh. Professor of physiology, Edinburgh. Distinguished as an originator of essential items of modern physiological technique and for his important contributions to the physiology of the circulation in the lungs and the bronchial tubes.

Edgell, John Augustine, K.B.E. Vice-Admiral R.N. Hydrographer of the Royal Navy. Distinguished for the organization and encouragement of work in tidal research, in determining gravity at sea and in magnetic and electric survey of the oceans.

Ewins, Arthur James. Director of research, May and Baker Ltd. Distinguished for his chemical and biochemical researches. His work in organizing an industrial research laboratory has led to the production of some of the most important synthetic remedies in recent years.

Felix, Arthur. Bacteriologist, Lister Institute. Distinguished for his contributions to serology and bacteriology. He is particularly associated with the Weil-Felix reaction for the diagnosis of typhus fever and with the antigenic analysis of bacteria.

Fleming, Alexander. Professor of bacteriology, St. Mary's Hospital. Distinguished for his contributions to bacteriology, immunology and chemotherapy. His work includes the very important discoveries of lysozyme and penicillin.

Fox, John Jacob. Government chemist. Distinguished for his application of physical methods to the discovery of the structure of chemical substances and for his work on new analytical methods and chemical processes.

Greaves, William Michael Herbert. Astronomer Royal for Scotland. Distinguished for his contributions to stellar spectro-photometry and for the discussion of the color temperatures of early type stars.

Harland, Sidney Cross. Plant breeder. Distinguished for his contributions to the study of genetics and especially of the cotton plants. His researches have not only been of practical value for tropical agriculture but have led to