

others in many countries. He was appointed assistant director of the then Bureau of Entomology in 1913, and filled that position until July 1942, when he succeeded Sir Guy Marshall as director of the present Institute. Dr. Neave's name is inseparably associated with the growth and outstanding reputation of the Institute's Publication Office. In particular the *Review of Applied Entomology* and the *Nomenclator Zoologicus* (in four volumes) are constant reminders of the debt which not only entomologists but also general zoologists owe to Dr. Neave. In addition, during the four years he was director of the Institute, Dr. Neave supervised the production of the bulky "Insecta" part of the annual *Zoological Record*, besides editing the *Bulletin of Entomological Research*. He carries with him the good wishes of a wide circle of entomologists, and many others, on his retirement. He is succeeded as director of the Imperial Institute of Entomology by Dr. W. J. Hall, who was appointed assistant director in 1944 (see *Nature*, 153, 649; 1944).

Astronomical Institute at Amsterdam :

Prof. A. Pannekoek

THE Astronomical Institute of the University of Amsterdam has a unique reputation in the astronomical world as a centre for research in both stellar physics and stellar statistics. This is due to the work of its first director, Prof. A. Pannekoek, whose retirement has just been announced (*Nature*, Nov. 9, p. 662). Noteworthy among his investigations was that which first established a wide dispersion in the absolute magnitudes of the hot, B-type stars, and so led to the now generally accepted view of the existence of these stars in highly localized clusters. Equally significant was his work on Saha's theory of thermal ionization and on the theory of stellar line contours. He is one of the three pioneers—McCrea and Unsöld being the others—responsible for developing a wholly deductive theory of the model stellar atmosphere, while his more recent spectroscopic work on the brighter Cepheids has already led to interesting developments in spectrophotometric technique.

Prof. H. Zanstra

PROF. PANNEKOEK'S successor as director of the Institute is Prof. H. Zanstra, well known in Great Britain as the first Radcliffe Travelling Fellow in astronomy. Zanstra's work has been inspired by a keen physical insight, and has led to the widely accepted quantitative theory of the luminosity of the gaseous nebulae. Equally significant have been his investigations of the dynamics of radiation pressure in diffuse and planetary nebulae, and his discussion of the probable expansion of the latter objects. In recent years his interest has been awakened in solar physics, and he has been responsible for investigations on the hydrodynamics of solar prominences and the polarization of resonance radiation from the limb of the sun. In Prof. Zanstra the Institute has a director who may be expected to maintain its great reputation.

Fourth Centenary of the Birth of Tycho Brahe

THE Rev. P. Antonio Due Rojo, S.J., has an article with the title, "En El Cuarto Centenario Del Nacimiento de Tycho-Brahe" in *Euclides* of January 1946, No. 59, which briefly outlines the main features in the astronomical work of Tycho Brahe. As a practical astronomer, Tycho realized that the question of the true system of the world could be settled only by amassing evidence from the positions and motions

of the planets. His long series of observations made possible the discovery of Kepler's laws of planetary motion and also the final proof of the heliocentric theory—a theory which Tycho himself had rejected. The author refers to his relations with astrology, and mentions one of his books which was published after his death, with the expressive title, "Tychonis Brahe de disciplinis mathematicis oratio, in qua simul astrologia defenditur et ab objectionibus dissentientium vindicatur". A similar vindication of astrology was the subject of one of his conferences in the University of Copenhagen, and his position at the Court required an annual compilation of prognostications for the year following as well as horoscopes of each member of the royal family. It is interesting to know that the foundation stone of Uraniborg was laid on August 8, 1576, at a time when Jupiter and Regulus were in conjunction and the moon was in Aquarius, that is, when the celestial influences were most favourable. Whatever may have been the real views of some eminent astronomers on the subject, necessity sometimes compelled them to cast horoscopes as a means of livelihood. A well-known instance of this is seen in the case of Kepler, who cast horoscopes for princes and other important people. Probably astrologers in those days were able to ease their consciences by quoting the saying of the classical poet, "Mundus vult decipi: ergo decipiatur". In spite of his astrological practices, Tycho stands before the world as a renowned astronomer and an example of what can be accomplished by patient and persistent observation.

University Grants Committee

SIR ROBERT GREIG and Sir Henry Tizard have resigned from the University Grants Committee. The Chancellor of the Exchequer has appointed the following new members: Miss D. Dymond, principal of Portsmouth Training College; Mr. H. L. Elvin, principal of Ruskin College, Oxford; Mr. H. S. Magnay, director of education, Liverpool; and Prof. E. K. Rideal, director of the Davy Faraday Laboratory, Royal Institution. These appointments broaden the membership of the committee by going outside the strictly academic field of university education.

Commonwealth Travelling Fellowship for the Royal College of Surgeons

A PROMINENT New Zealand industrialist has made an anonymous gift to the Royal College of Surgeons of England for the endowment of a Commonwealth Travelling Professorship. The endowment will provide an income of about £2,000 a year, and the benefaction is to be known as a gift from "A New Zealand Family". A Commonwealth professor will be appointed each year and will generally be a prominent physician, surgeon or scientific worker resident in Great Britain or in Australia or New Zealand. The appointing authorities are also empowered, however, to elect as a professor a distinguished teacher from one of the other Dominions. The professor will be required to travel from the country where he or she is ordinarily resident to Great Britain, or to Australia and New Zealand, and to any other Dominion of the British Commonwealth, for the purpose of assisting in the advancement of medical science either by lecturing, teaching or engaging in research. It is hoped that the institution of this professorship will not only lead to the establishment

of closer links between scientific workers in the Dominions and in the older seats of learning and centres of research, but also that the people of all nations will benefit. It is also hoped that it will be an important contribution to Imperial unity.

Scientific Approach to Foreign Affairs

In the latest and final "Looking Forward Pamphlet" (No. 9) of the Royal Institute of International Affairs, under the title "Foreign Affairs and the Public", Mr. John Price deals with the connexion between foreign affairs and the daily interests of the individual citizen. Explaining first the subject-matter of foreign affairs, he shows how the human element as well as questions of trade and security enter into it. Considerations of human conduct and morality complicate international affairs, and the greatest difficulties arise not from the problems themselves but from the policies of nations and governments determined to pursue their selfish ends by every possible means. The study of international affairs is not an exact science, nor concerned with the relations between nations in the abstract: it is a study of human affairs. That must be remembered in appraising the machinery for the conduct of foreign affairs, whether at the national or the international level. This machinery is well reviewed by Mr. Price in his next section, which gives a very clear picture of the limitation and purposes of world organisation. The new international organisations are being established in one sphere after another where the need for them is clearly felt, and machinery for collaboration at different levels and in all spheres must be provided if the tasks of maintaining security and promoting peace are to be accomplished.

The purpose of security, however, is to provide the conditions in which civilization and culture can prosper, and Mr. Price then reviews both the methods and policies by which foreign affairs are conducted, and emphasizes finally the need for pursuing actively policies based upon international co-operation and world organisation. The fundamental difficulty the nations have to face is the reconciliation of national self-interest with the common good of the world as a whole. That is why public interest in foreign affairs is so important. We need experts, but we need also citizens who are able to see clearly, to judge shrewdly and to realize whether they are being given the essential facts. We have to ensure that there are enough experts in the foreign service, and that they possess the requisite qualifications; but it is equally important that the ordinary citizen should have access to accurate, abundant and up-to-date information to enable him to understand more about the problems and difficulties, the needs and aspirations, the history and traditions of other countries and nations.

East African Industrial Research Board

THE third annual report of the East African Industrial Research Board (P.O. Box 1587, Nairobi, Is. 6d.) covers the year ended December 31, 1945, and includes in addition to the chairman's report, those of the Tanganyika Industrial Committee and the Uganda Industrial Committee. Dr. A. J. V. Underwood continued to serve as overseas consultant, and the main preoccupation of the Board has been planning for the future of industrial research in East Africa. So far the governments concerned have not all accepted the proposals formulated by the chairman for an East African Department of Industrial Research

and Development. The Board's research organisation continued on its war-time basis, but staff difficulties are expected to restrict its services in 1946. The technical publications of the Board appear to be meeting a public need, and a small technical library has been built up. While much of the time of the Chemical Laboratory has been occupied by analytical work, important work has been done on the development of phosphatic fertilizers, and a new product, 'Silicophosphate', is now undergoing extensive field trials. Methods of mining salt from the salt lakes of Uganda have been under examination, and the improved quality of domestic pottery is largely due to the work of the Ceramics Branch. Attention was also given to the improvement of oil milling and soap manufacture, and draft specifications for soaps were prepared by the Panel on Oils and Fats and later adopted by the Government of Kenya.

The report of the Tanganyika Industrial Committee reviews the activities of the Hones factory, including slate pencil manufacture, which was closed on October 15, and of the Totauquina factory where a study of the quality and efficiency of extraction has established the relation between the total alkaloidal content of the bark and the quality and efficiency of extraction of the total alkaloids. The Uganda Industrial Committee is being disbanded this year, and the pottery, which did not enjoy a prosperous year, will then come under the direction of the Geological Survey.

Proceedings of the Academy of Sciences, Vienna

VOLUMES 148-151 inclusive, covering the years 1939-42, of Section IIa of the *Proceedings* of the Academy of Sciences, Vienna, in which are published articles on astronomy, mathematics, meteorology, physics and technology, have recently been received. The number of articles contained in each volume is substantially the same; but this is considerably less than for volume 147, for 1938. A reduction in the page size of the pamphlet was made in 1940, and, in addition, in the following year, paper of an inferior and darker quality was introduced. The majority of the articles are theoretical. Of the experimental articles, those on the light properties of stars by K. Graff, and the "Communications from the Institute of Radium Research", of which several appear in each volume, are worthy of special mention. As is to be expected, the latter deal mainly with the properties of uranium and thorium, fission products and the effects of neutron bombardment. The purely mathematical papers include one on Laguerre's polynomials by A. Erdélyi, on the Euler-Maclaurin series and Bernoulli's numbers by A. Klingst, and on differential geometry by K. Strubecker.

Modern Views on Geography

IN an inaugural address at the University of Liverpool entitled "The Theory and Practice of Geography" (University Press of Liverpool; London: Hodder and Stoughton, Ltd. Is. net), Prof. H. C. Darby stressed the changes in ways of thought of the late eighteenth and early nineteenth centuries which had made place for the modern geographical outlook. He cited specially the widening of the scope of history, the rise of the social sciences and particularly the writings of F. Le Play, and the voyage of the *Beagle* with Darwin's stress on the importance of environment. Thus there was prepared the way for such geographical writers as A. von