the Permanent Committee of the International Zoological Congress, and honorary fellow of the Zoological Society and foreign member of the Linnean Society, which awarded him its Gold Medal in 1947. Caullery's 'Jubilé Scientifique' on his seventieth birthday in 1939 was the occasion of remarkable tributes to him and his work paid by many distinguished men of science. His contributions to zoology and general biology are remarkable for their positive and fundamental nature, their wide range and their stimulating character. He has made great contributions to parasitology in a variety of distinct groups of animals. It was he who discovered the Haplosporidia, a new order of Sporozoa. He worked out the life-cycles and relationships of parasites in many groups, particularly Crustacea, Turbellaria and Orthonectidæ. His studies have thrown much light on the biological relations of a parasite to its host.

Prof. L. C. Pauling, professor of chemistry in the California Institute of Technology, is distinguished for his researches on valency and on structural organic and inorganic chemistry. Through his profound knowledge of physics and mathematics he has been able to apply quantum mechanics to problems of chemical valency bonds. His comprehensive work is embodied in his book, "The Nature of the Chemical Bond" (1939), which is now recognized as a classic in chemistry. For this, and other cognate researches, Prof. Pauling was awarded the Davy Medal of the Royal Society in 1947.

## Pontifical Academy of Science : New Members

THE following have been appointed members of the Pontifical Academy of Science: Prof. J. M. Albareda-Herrera, professor of geology and director of the Institute of Edaphology, Ecology and Plant Physiology, University of Madrid; Sir Edward Appleton, secretary of the Department of Scientific and Industrial Research, London; Prof. E. Cruz-Coke, professor of physiological and pathological chemistry, University of Santiago; Prof. A. De Castro, professor of clinical medicine, University of Madrid; Prof. Edward A. Doisy, professor of biochemistry, St. Louis University School of Medicine; Prof. Herbert S. Langfeld, Stuart professor of psychology and chairman of the Department of Psychology, Princeton University.

## Physiology at St. Andrews : Prof. P. T. Herring

THE retirement of Prof. P. T. Herring from the Chandos chair of physiology in the University of St. Andrews brings to a close a long term of office, for he has occupied the chair for forty years. Prof. Herring was educated in New Zealand and later at the University of Edinburgh, where he came under the influence of Sir Edward Sharpey-Schafer, with whom he later collaborated. His first researches, published in 1908, concerning the development and structure of the pituitary gland, quickly gained recognition and gave the histological background for many of the earlier investigations on the function of this body. The colloid bodies he described are still referred to as 'Herring's bodies', and illustrations of his original preparations demonstrating the vascular bed of the pituitary are to be found in current text-Later, the structure and function of the books. thyroid claimed his interest, and again he was responsible for contributing much valuable knowledge. Prof. Herring went to St. Andrews in 1908 with a reputation as a lecturer of great distinction, and during his tenure of the Chandos chair he has

systematically developed the Department of Physiology and the teaching courses in accordance with current physiological thought. He himself has invariably undertaken the greater part of the teaching in his Department, and there will be many at this time who will recall his clear and stimulating lectures. In addition to his other duties, Prof. Herring has taken a large and vital part in the administration of the University of St. Andrews. He acted as dean of the Faculty of Science during 1921–39 and served as an assessor of the Senatus on the University Court for four periods. His colleagues and the many students who have gained so much from his kindly interest and help will wish him long years of quiet and happiness in his retirement.

## Dr. A. E. Ritchie

DR. A. E. RITCHIE, who has been appointed to the chair of physiology in the University of St. Andrews in succession to Prof. P. T. Herring, has had a wide training, having graduated M.A. and B.Sc. in mathematics, zoology and physiology at the University of Aberdeen, and later, in 1940, obtained the M.B., Ch.B. in the University of Edinburgh. In 1945 he was awarded the Gold Medal for his M.D. thesis on the electrical diagnosis of nerve injury. His postgraduate work began when he was holding a Carnegie Scholarship in the Physiology Department of the University of Edinburgh. In that Department he has stayed, combining varied teaching experience with original research. His most important contribution, both to physiology and medicine, has been to design a reliable and relatively simple and compact electronic apparatus for the determination of strength-duration curves, thus converting a laboratory procedure into a practical clinical one. This apparatus is valuable in the diagnosis of nerve injury. Thus Dr. Ritchie's interests lie in the fields both of physiology and of clinical medicine. He has published a number of papers on muscle and nerve reactions both in health and disease, and has contributed an article on muscle reactions in the forthcoming "Encyclopædia of British Surgical Practice".

## Proposed Central Publication of Scientific Papers

MRS. LUCIA MOHOLY, of 127 Sloane Street, London, S.W.1, writes : "In describing American methods of auxiliary publication in Nature of June 5 (p. 896), Mr. Watson Davis speaks with authority on the practical value of certain organised measures adopted in the United States to a larger extent than in some other countries. If corresponding methods have not yet attained comparable popularity in Great Britain, it does not follow that the question of systematically using and organising photographic reproduction to assist science and learning has not been taken care of. Not only have suggestions for extensive uses been put forward on many occasions, but also a specific study has been made of the part photographic reproduction can play in relation to Prof. J. D. Bernal's project. With the Royal Society's Scientific Information Conference in sight, a formal statement setting out the merits of these methods for alternative and supplementary services was drafted and, upon Prof. Bernal's request, submitted to the appropriate quarter. This followed an outline of these methods and their potential uses for the publication and distribution of scientific papers, at a meeting on Apri 21, at the Society for Visiting Scientists. An earlier approach, also with specific reference to Prof. Bernal's project, was made at the Conference on the Publica-