

Sir Robert Robinson still found time for new researches, and it is no secret that for the past five years he has concentrated much attention upon the problem of the structure and synthesis of penicillin. Reference must also be made to his electronic theory of organic reactions which, classifying on a common basis a diverse mass of data, has had a profound influence on the development of chemical thought. Sir Robert Robinson has indeed imprinted his genius upon every branch of organic chemistry. Throughout his career, students have flocked to his laboratory from all parts of the world, and while still less than sixty years of age he has the satisfaction of seeing his former students occupying some of the most prominent positions both in academic life and in industry.

#### Rowett Research Institute : Dr. D. P. Cuthbertson

DAVID PATON CUTHBERTSON, who has been appointed head of the Rowett Research Institute in succession to Sir John Orr, graduated B.Sc. from the University of Glasgow in 1921 as a pure chemist. He was awarded a Ministry of Agriculture scholarship and commenced his research work in the biochemical laboratory of the Institute of Physiology at Glasgow. He soon realized that to carry out effective investigations in biochemistry he must have more biological knowledge, and accordingly he resigned his scholarship and began the study of medicine. He graduated M.B., Ch.B. in 1926 and, shortly after graduation, he was appointed the first clinical biochemist at the Royal Infirmary, Glasgow. He rapidly developed this post and managed to have attached to his laboratory a small number of beds for the study of metabolic disorders. In 1934 he returned to the University of Glasgow as Grieve lecturer in physiological chemistry. The Medical Research Council in 1943 applied for the loan of his services to act on its secretariat. In this last post he was appointed scientific secretary to a number of the Council's sub-committees and thus gained a very wide experience of the varied research work carried out on behalf of the Council. Earlier this year he accepted an invitation from the Government to visit Newfoundland to report and advise on the means requisite to alleviate the recognized nutritional deficiencies. He obtained the degrees of D.Sc. in 1931 and M.D. with honours in 1937. He also worked for a period in the biochemical laboratory of the University of Leipzig under Prof. Karl Thomas. Dr. Cuthbertson's research work has been mainly in the metabolic field, and particularly that of protein metabolism. His most interesting and outstanding contribution has been a series of papers on the metabolic reactions of tissues to injury with special reference to the effects of fracture of bones and of the immobilization of limbs.

#### Physical Society Awards : Duddell Medal

THE Duddell Medal of the Physical Society is awarded at suitable intervals, usually annually, for the invention of scientific instruments or of materials used in their construction. The Council of the Society made the twenty-ninth (1945) award to Prof. J. T. Randall, professor of natural philosophy in the University of St. Andrews, for his very valuable work on phosphors and the cavity magnetron. The presentation is to be made on December 12, when Prof. Randall will deliver an address at a meeting of the Society at the Science Museum.

Before the War, Prof. Randall had made important

contributions to the X-ray study of structure (notably those of carbon, graphite and glasses) and was also an early worker in electron diffraction. His investigation of luminescence just before and during the early part of the War, and his elucidation of the nature and depth of the 'electron traps' in phosphors, was a fine piece of work on the experimental side, and showed a complete grasp of theory. During 1939-43 he worked for the Admiralty as a member of the special team at Birmingham under Prof. M. L. E. Oliphant, mainly concerned with the research and development of valves for operation on high powers for centimetric radar. Assisted by Boot, Randall was responsible for the very brilliant adaptation of the already-known split-anode magnetron into the cavity magnetron, which enabled exceedingly high powers to be provided on centimetric waves. Randall's cavity magnetron and Sutton's *V-M* valve are basic to the present high pitch of perfection attained in British radar technique and in that of the United States; without them radar might have been relatively ineffective. Both units are destined to play important peace-time parts, particularly in air and sea navigation.

#### Charles Vernon Boys Prize

By the will of Sir Charles Boys, provision was made for the foundation by the Physical Society of a memorial to one of its most distinguished past presidents, and the Council of the Society decided that it should be a prize to be awarded annually for experimental work either still in progress or completed not earlier than ten years before the date of the award. The first (1945) prize has been awarded to Dr. A. H. S. Holbourn, of the Clarendon Laboratory, Oxford, for his successful measurement of the angular momentum of circularly polarized light. Before this work, it was uncertain whether this momentum really was  $h/2\pi$ . Holbourn succeeded in suspending a half-wave plate on a  $\frac{1}{2}\mu$  silica fibre and, working under good vacuum conditions, he was able to measure the torque produced when the direction of rotation of circularly polarized light was reversed in its passage through the plate; torques as small as  $2 \times 10^{-11}$  dyne cm. were measured with an accuracy of 3 per cent. Apart from its great theoretical significance, this experiment represents a most delicate piece of manipulative work comparable with Boys' construction of the radiomicrometer. It was described briefly in *Nature* (137, 31; 1936) and the *Journal of Scientific Instruments* (16, 331; 1939) and at greater length in a D.Phil. thesis (Oxford, 1938). Historically, it is interesting to note that the work was carried out in a compartment of the same cellar of the Old Clarendon Laboratory in which Boys himself measured the mean density of the earth. The presentation will be made at the meeting on December 12.

#### Organic Chemistry at the Royal Technical College, Glasgow : Appointment of Dr. F. S. Spring

THE chair of organic chemistry at the Royal Technical College, Glasgow, last occupied by the late Forsyth James Wilson, has now been filled by the appointment of Dr. F. S. Spring, of the University of Manchester. Dr. Spring graduated with honours in chemistry at the University of Liverpool in 1928, and while holding a United Alkali research scholarship followed by a University fellowship he carried out research on the chemistry of the sterols with Prof. I. M. Heilbron, being duly awarded the Ph.D.