Physical Society Awards :

Duddell Medal

THE twenty-third Duddell Medal of the Physical Society has been awarded to Dr. Karl Weissenberg of the Shirley Institute, Didsbury, Manchester, in recognition of his invention and development of X-ray goniometers, the first of which was described in 1924, when he was engaged in the Institute for Fibre Chemistry of the Kaiser Wilhelm Institut. In this instrument the rotation of the crystal is linked to the to-and-fro movement of a cylindrical photographic film parallel to its axis during the exposure. The diffracted spots are thus connected with the orientation of the crystal, are recorded without overlapping, and are readily indexed. The instrument was almost before its time, for the full value of photographic methods, and especially of the rotation method, was not then realized, except perhaps by Weissenberg himself. With the development of the method of the reciprocal lattice and of Fourier synthesis of complex structures, however, the Weissenberg goniometer has become almost indispensable. It is now widely used, and has been responsible for a great advance in our knowledge of crystal structure.

Dr. Weissenberg pointed out at the time that his design embodied only one possible combination of crystal and film movements ; and that others, which he described, were likely to be useful. These have since been embodied in other designs ; in the double Weissenberg goniometer comparison is made with a standard crystal, so that intensity measurements shall be on an absolute scale. But the original Weissenberg goniometer is still that most generally used. The presentation of the Duddell Medal will take place at a science meeting of the Physical Society at the Science Museum, South Kensington, on January 10.

Charles Vernon Boys Prize

THE Council of the Physical Society has made the second (1946) award of the Charles Vernon Boys Prize to Robert William Sutton, superintendent scientist at the Admiralty Services Electronics Research Laboratory, Baldock, Herts, for his work in the development of receiving valves and cathode-ray tubes for radio and radar, notably the velocity-modulated local oscillators (the Sutton valve) for use on centimetric waves, and the Skiatron tube by means of which a picture can be produced from a radar beam. Sutton's research career began in 1929 at the Imperial College of Science and Technology, where he collaborated with Prof. G. I. Finch in a successful study of the induction coil. He afterwards went to Ferranti, Ltd., where he brought the valve factory into efficient operation, to E. K. Cole, Ltd., and to Scophony, Ltd., where he was primarily interested in television research. Early in 1939 Sutton was appointed a senior scientific officer at the Admiralty Signal Establishment (School at that time) and given charge of the research section of the valve division ; he became principal scientific officer in 1944 and superintendent scientist in 1945. The award will be presented to Mr. Sutton at the meeting of the Physical Society on January 10.

British Council Science Office in China : Dr. R. A. Silow

DR. R. A. SILOW, until recently scientific officer of the Agricultural Research Council at the Plant Breeding Institute, Cambridge, has been appointed director of the British Council's Science Office in China, in succession to Dr. Joseph Needham, who is now with the United Nations Educational, Scientific and Cultural Organisation. Dr. Silow is a graduate of the University of Reading in agricultural botany. He did research in genetics at the Welsh Plant Breeding Station, Aberystwyth, during 1929–33. He then went to the Empire Cotton Growing Corporation's Cotton Research Station, Trinidad, B.W.I., remaining there until 1944. He was visiting professor of plant genetics at the Blandy Experimental Farm of the University of Virginia during 1944–45 ; after which he became scientific officer of the Agricultural Research Council, attached to the Plant Breeding Institute, School of Agriculture, University of Cambridge. His work has included investigations on Asiatic cottons in collaboration with the Chinese Agricultural Research Bureau at Nanking.

Trans-uranium Elements in Chemistry

DELIVERING this year's Harrison Howe Lecture on November 18 to the Rochester Section of the American Chemical Society, Prof. G. T. Seaborg referred to the importance which the newly discovered trans-uranium elements may achieve for general chemistry. Those of comparatively short life-time, and therefore high radioactivity, will always require special training for their safe handling ; consequently, neither plutonium (element 94), nor americium (element 95), which only recently has been prepared in pure form, can be handled without certain precautions ; neptunium (element 93), however, with a life-time of more than two million years, may eventually find its way into the ordinary chemical laboratory as one of the rarer elements. Curium (element 96), which so far occupies the last place in the Periodic System, is remarkable in being the element with the highest atomic weight ; Prof. Seaborg expects that, in addition to the isotope 242, which is produced by the neutron bombardment of americium, still heavier ones with atomic masses up to 246 may be obtained.

British Association of Chemists : Annual General Meeting

THE twenty-ninth annual general meeting of the British Association of Chemists was held on December 7. Prof. R. G. W. Norrish, retiring president, presented the Hinchley Medal to Mr. C. S. Garland, and in doing so he paid tribute to the work which Mr. Garland had done for the Association over a long period of years and for the profession of chemistry. The following officers for the ensuing year were elected : *President*, Norman Sheldon ; *Vice-Presidents*, Prof. R. G. W. Norrish, Dr. J. B. Matthews, J. Wilson and C. A. Wylie ; *Hon. Secretary*, J. Stewart Cook ; *Hon. Treasurer*, W. C. Peck ; *Hon. Registrar*, H. L. Howard ; *Hon. Editor*, T. Crosbie Walsh. Two proposed alterations to the rules of the Association were adopted. One gave authority to increase benefits, under the Unemployment Benefit Fund, and the other established the office of honorary life vice-president, to which Prof. E. C. C. Baly was elected, in recognition of the valuable work he had done for the Association during the past years. A resolution, from the Manchester Section, was adopted to put the Association's political fund into active operation. There would be no suggestion of assisting any particular political party ; the object was to assist chemists to play their part in public affairs, and to let them feel that they had the goodwill of their fellows.