

NEWS and VIEWS

Organic Chemistry at Belfast : Prof. R. A. Raphael

DR. RALPH ALEXANDER RAPHAEL has been appointed to the recently created professorship in organic chemistry in The Queen's University, Belfast. Part of Dr. Raphael's schooldays were spent at Wesley College, Dublin. He graduated from the Imperial College of Science and Technology, London, in 1941 with first-class honours, and was awarded the Ph.D. degree in 1943. During the years 1943-46 he took part in the Anglo-American co-operative research on penicillin, as a departmental head in the Chemotherapeutic Research Division of Messrs. May and Baker, Ltd. He returned to the Imperial College in 1946 with an Imperial Chemical Industries research fellowship, and proceeded in 1949 to Glasgow to the post he now holds as lecturer in organic chemistry. He was awarded the Meldola Medal in 1948. The main course of his research work has entailed the study of the properties of acetylenic compounds, especially in their deployment as synthetic tools for a wide range of organic compounds of biological importance. Successful syntheses during the course of this work include penicillinic acid, histamine, linoleic acid, 2-deoxyribose, and the rare branch-chain sugars, apiose and cordycepose. Dr. Raphael's devising and carrying out of numerous ingenious and original syntheses of a wide variety of near-biological compounds gives promise of much important research work in the future. His investigations have been published in some forty research publications. He is also the author of significant contributions on alicyclic chemistry to the series of text-books on the "Chemistry of Carbon Compounds", and has been occupied in researches on tropolones. The capacity Dr. Raphael has already shown of teaching organic chemistry to students and of imparting enthusiasm for research should find fresh scope in the development of the School of Chemistry at Belfast.

John Innes Horticultural Institution : New Director

DR. K. S. DODDS, who has been appointed director of the John Innes Horticultural Institution, Bayfordbury, Herts, in succession to Prof. C. D. Darlington, is a botanist with wide knowledge of economic plants and particular interests in the field of cytogenetics bearing on their evolution. After graduating at Armstrong College, University of Durham, he spent some time in Indiana State University as the holder of an Earl Grey Memorial Fellowship, and in 1937 joined the staff of the Imperial College of Tropical Agriculture in Trinidad. There he became interested in the breeding of bananas and devoted most of his research time for the next ten years to cytogenetical problems in *Musa*, with outstanding success in elucidating breeding behaviour in that complex and important group. He visited the Western Pacific on an official mission in 1945, and in 1947 was appointed professor of botany in the College, adding research on cacao and other tropical crops to his duties. Dr. Dodds left tropical agriculture in 1949 to take charge of the Commonwealth Potato Collection at Cambridge, now the Agricultural Research Council's Potato Genetics Station. At Cambridge his researches on potatoes and related species have been, like his earlier studies of bananas, chiefly directed to explaining breeding behaviour in a crop plant of complex genetical history.

American Association for the Advancement of Science : Awards

THE Prize Committee of the American Association for the Advancement of Science announced during the recent annual meeting that the twenty-sixth Newcomb Cleveland Prize of 1,000 dollars had been awarded to Prof. Barry Commoner for his paper entitled "Studies on the Biosynthesis of Tobacco Mosaic Virus". Prof. Commoner is professor of plant physiology at the Henry Shaw School of Botany, Washington University, St. Louis, Missouri, and for some years he has been studying the changes in the metabolism of tobacco leaves produced by infection with tobacco mosaic virus. His results have led him to conclude that virus formation starts from simple ammonia compounds, and that the developing virus does not incorporate amino-acids and other intermediates that already exist in cells at the time they become infected. He considers that synthesis occurs in a series of steps, and that the virus nucleic acid is made first, to be followed shortly by a range of proteins that are not identical but are all serologically related to the infective virus. Prof. Commoner and his colleagues have previously shown that tobacco mosaic virus can be prevented from multiplying in tobacco leaves by treating the leaves with thiouracil or certain other analogues of pyrimidines and purines.

The ninth Theobald Smith Award in Medical Sciences for 1953, comprising 1,000 dollars and a bronze medal, has been awarded by the Association to Dr. Irving M. London, of the College of Physicians and Surgeons, Columbia University. This award was established in 1936 by Eli Lilly and Company. Dr. London received the award in recognition of his significant contributions in the fields of porphyrin, cholesterol, and protein metabolism. He has studied the life-span of the red blood cell in normal and pathological states, such as sickle cell anaemia, polycythemia vera, and pernicious anaemia. Using isotopic tracers, he has developed a technique for the study of antibody formation in surviving tissue. This provides not only a method for studying the capacity of individual tissues to form antibodies, but also a controlled system for the study of protein synthesis *in vitro*.

Declassification of Atomic Information

As a result of the recommendations made by the sixth Tripartite Declassification Conference held at Chalk River, Canada, during April 8-10, 1953, amendments have been made to the Declassification Guide used to decide what atomic energy information may be published and what must remain secret. Dealing with reactors, a major difficulty in formulating policy has been that no sharp dividing line can be drawn between such power-producing reactors and reactors for plutonium production or military purposes, and indeed designs have been discussed for dual-purpose reactors for producing power and plutonium. It was agreed that while information of critical importance for the design or operation of reactors for plutonium production or military purposes must still be kept secret, information required for studies of the economics of power reactors should so far as possible be released. Up to the present, all work in production establishments, such as the Windscale and Capenhurst works, has been treated as classified. It has been agreed that many of the less important details and processes can now be released, while maintaining secret the production