

NEWS and VIEWS

Sexcentenary of the University of Prague

THE decree of Charles IV, king of Bohemia, founding the Universitas Carolina, now the University of Prague, was dated April 7, 1348. Its sexcentenary was to have been celebrated by an international gathering; but events in Czechoslovakia have led to the withdrawal of acceptances of invitations by universities of Britain, on the ground that the University no longer enjoys its academic freedom. Charles' decree appointed the archbishop, Arnošt of Pardubice, as chancellor and stipulated that it should "serve the cultural needs of the Bohemian people, that they should no longer beg at foreign tables but have a worthy feast brought to their own table". At first, instruction was in Latin, and being one of the few educational centres it attracted many German and other students. During the rectorship of John Hus at the beginning of the fifteenth century, the Czechs were outvoted in administrative appointments. This led to the famous Kutná Hora decree of King Wenceslas, in 1409, giving the Czech 'nation' three votes and the others (German, Polish and Silesian) one each, an action that led to the departure of the Germans and hastened the founding of the University of Leipzig in 1411.

Religious matters often dominated university life, and many *magisters* found themselves against ecclesiastical and royal authority, especially after the advent of the Habsburg rulers in 1526. The botanist, Zaluzianský, was rector about 1600 and tried in vain to secularize the University; when the Czechs lost their independence in 1620, Ferdinand II installed Jesuit teachers and it became the Charles-Ferdinand University. A long period of stagnation followed, but eventually it regained some of its earlier significance, and during the nineteenth century several professors achieved world-wide reputations. Czech was again used by some, and in 1882 the University was divided into Czech and German institutions. These endured through the period of the first republic until Czech higher educational establishments were closed by the Nazis in 1939. The Charles University reopened in 1945 and had to cope with six years accumulation of students and with teaching staff depleted through age and executions. In the present academic year there are altogether 23,977 students (including 5,423 medical, 4,977 philosophy, 2,181 science) and provision has been made for research work in practically every subject.

Duddell Medal of the Physical Society: Dr. R. J. Van de Graaff

THE Duddell Medal for 1947 of the Physical Society has been awarded to Dr. R. J. Van de Graaff, of the Massachusetts Institute of Technology, in recognition of the invention and development of the high-voltage electrostatic generator already known by his name. To Van de Graaff belongs the credit of making a type of particle accelerator based on the simplest possible conception. Electric charge, sprayed on to a moving belt, is carried into a sphere, acting as a Faraday cage, until the potential rises to the desired value. The full potential to be applied to the particles thus exists between the sphere and the earth, and the great practical difficulty is to avoid discharges at undesired positions and corona losses. Van de Graaff overcame all these difficulties

and so long ago as 1937 he exhibited at the Paris Exhibition an apparatus producing 4,000,000 volts. Sets for 10,000,000 volts have more recently been built and operated successfully. Dr. Van de Graaff will receive the Medal at a meeting of the American Physical Society in Washington, D.C., on April 29; the presentation will be made by the British Ambassador, Lord Inverchapel.

Chemistry at University College, London: Prof. E. D. Hughes

RECENTLY the Chemistry Department of University College was reinforced on the side of inorganic and physical chemistry by the addition to the staff of Dr. Kathleen Lonsdale; now organic chemistry in the Department is to be strengthened by the appointment of Prof. E. D. Hughes to the additional chair of chemistry which the Senate of the University has just created. The other professors in the Department are Prof. S. Sugden and Prof. C. K. Ingold. Prof. Hughes was originally trained in the University of Wales. His first researches were carried out during 1927-30 at Bangor under the leadership of the late Prof. Kennedy Orton and Dr. H. B. Watson. In 1930 he went to London to work with Prof. Ingold at University College, and in 1934 joined the staff of that College. There he formed an active research group, closely integrated with that of Prof. Ingold. In 1936 he received the Meldola Medal, which is awarded for the most distinguished chemical work carried out under the age of thirty. In 1943 he was appointed professor of chemistry at University College, Bangor, thus succeeding to a chair which his former master, Prof. Orton, was the first to make famous.

Prof. Hughes is distinguished for his researches on the mechanism and kinetics of organic reactions, particularly in relation to substitution and elimination. He discovered and firmly established the uni-molecular forms of these reactions, and made many extensions of these basic observations, for example, to the elucidation of the multiform mechanisms of carboxyl esterification and hydrolysis, and to the clarification of the conditions for the Walden inversion. In these studies he has made considerable use of both radioactive and non-radioactive tracers: the stills at Bangor for the production of heavy oxygen are probably the most powerful in existence. His most recent work refines the concept of steric hindrance, provides direct evidence concerning the formation and stability of the nitronium ion and its role in nitration, and defines the mechanisms operative in anionotropic change. He has published more than ninety original papers.

Geography at Bedford College, London: Mr. Gordon Manley

MR. GORDON MANLEY will go to the newly created chair of geography at Bedford College, University of London, with wide experience of university life in Britain and as an acknowledged authority on climatology. Mr. Manley graduated at both the Universities of Manchester and Cambridge, where he was an exhibitor of Gonville and Caius College, and he has held university posts successively at Birmingham, Durham—as first head of the Geography Department—and Cambridge. His interests in the meteorological aspects of snow-cover may have derived from his enthusiasm for the Pennines and the Lake District