

views, which had considerable influence on Czech free religious movements.

During his life Uzel collected at home and abroad much entomological material. This is deposited in the Prague Museum, the Agricultural Museum in Prague, the Natural History Museum in Vienna and in the Museum at Peradeniya. His collections in the Zoological Institute at Prague were destroyed by the Germans during the occupation of the country.

Altogether Uzel published some four hundred papers; a chronological survey of them has been published in Czech: "Work and Life of Prof. Dr. J. Uzel" (Prague, 1938).

K. ČERMÁK

~~WE regret to announce the following deaths:~~

Mr. G. H. J. Adlam, O.B.E., editor since 1919 of the *School Science Review*, on July 30, aged seventy.

Mr. Asa Binns, formerly chief engineer to the Port of London Authority, and a past president of the Institution of Mechanical Engineers, on July 2, aged seventy-two.

Sir Francis Carnegie, C.B.E., during 1926-44 chief superintendent of ordnance factories, Royal Arsenal, Woolwich, on August 3, aged seventy-two.

Prof. J. Laird, regius professor of moral philosophy in the University of Aberdeen, on August 5, aged fifty-nine.

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NEWS and VIEWS

Mathematical Physics at Cambridge:

Prof. D. R. Hartree, F.R.S.

PROF. D. R. HARTREE, who has been appointed Plummer professor of mathematical physics in the University of Cambridge, in succession to the late Sir Ralph Fowler, was born in 1897 and educated at Bedales. During the First World War he was a lieutenant in the R.N.V.R., and worked at the Anti-Aircraft Experimental Section at Whale Island as a member of a famous team of scientific men under the direction of Prof. A. V. Hill. Going to Cambridge, he took the Natural Sciences Tripos in 1922 and was elected a fellow of St. John's College in 1924. After one year (1928-29) as University demonstrator in physics, Hartree was elected Beyer professor of applied mathematics in the University of Manchester, which post he held until 1937, when he became professor of theoretical physics in the Physical Laboratory at Manchester.

Prof. Hartree's earlier work was mainly connected with the calculation of the energy-levels and wave-functions of atomic structures. He possesses a great gift and liking for numerical mathematics, and this aptitude he displayed to the full in this field, which he has made peculiarly his own. Later on, when he felt that he had sufficiently exploited 'pencil and paper' methods, he decided that a differential analyser was needed to develop the work further. Taking as a model that of Prof. Bush at the Massachusetts Institute of Technology, a differential analyser was built by Metropolitan-Vickers for Prof. Hartree and housed in the Physical Laboratories, Manchester. This instrument, the first made in Great Britain, has been used for very many other purposes than calculating atomic properties. For example, it has been fully employed during 1939-45 on technical problems for the Services and for industry. During the Second World War, Hartree was employed by the Ministry of Supply on very many problems of importance, particularly in the field of internal ballistics of rockets, of the propagation of radio waves, and of the theory of the magnetron. He was chairman of the Ministry of Supply Panel on servo mechanisms, which has played a very valuable part in co-ordinating work on servo mechanism throughout Great Britain. In 1939 he gave the Kelvin Lecture to the Institution of Electrical Engineers. Recently Hartree's interests in calculating machines have led him to study American work on electronic calculators. He has just returned from a visit to the United States, where

he worked at the University of Pennsylvania with the E.N.I.A.C. (see *Nature*, April 20, p. 527). Hartree's appointment to the Cavendish Laboratory will bring him into touch with many fields of physics where his mathematical and computational ability will find full scope.

Bacteriology at the University of Sheffield:

Prof. C. P. Beattie

PROF. C. P. BEATTIE has been appointed professor of bacteriology in the University of Sheffield in succession to Prof. Wilson Smith, who recently left the University to occupy the chair of bacteriology at University College Hospital Medical School, London. Prof. Beattie was educated at Fettes College and the University of Edinburgh. After clinical and bacteriological experience in the hospitals and University of Edinburgh, he spent a period of study and research in the United States and in France with a Rockefeller fellowship, returning to Edinburgh to be lecturer in bacteriology in 1933. In 1937 he was appointed professor of bacteriology in the Royal Faculty of Medicine of Iraq and director of the Government Bacteriology Laboratory, Baghdad, which he started and organised as the bacteriological centre for the whole of Iraq, charged with the preparation of protective vaccines and sera as well as the conduct of bacteriological examinations. Prof. Beattie's own researches have covered a wide field of diseases, some common in Great Britain, some peculiar to Iraq; among his many other duties was the setting up of a quarantine laboratory for the examination of pilgrims returning from Mecca. Prof. Beattie will take up his duties at Sheffield at the beginning of October.

Anti-Locust Research Centre

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DURING the War, the Anti-Locust Research Centre concentrated on forecasting and advisory services for anti-locust campaigns in Africa and the Middle East; but now a grant for developing research activities has been made under the Colonial Research and Development Act, and Dr. D. L. Gunn, formerly of the University of Birmingham, has been appointed principal scientific officer to take charge of this side of the work. It is hoped that the co-operation of university departments, mainly in zoology, can be enlisted, as funds are available to provide some grants to research students willing to undertake laboratory work on selected problems, or to take part in field investigations abroad, particularly in connexion with

aircraft methods of locust control. Both fundamental problems of locust physiology, behaviour, etc., and the problems of control are in the programme. Workers interested in such problems and heads of university departments who may be able to offer laboratory facilities are invited to write to the Director of the Centre, British Museum (Natural History), London, S.W.7.

Accommodation for Scientific Workers in Danish Laboratories

THE Preparatory Commission of the United Nations Educational, Scientific and Cultural Organisation, 47 Belgrave Square, London, S.W.1, has received from Denmark an offer to accommodate free of charge up to two hundred graduate scientific workers from war-devastated countries in Danish laboratories and technical colleges. The invitation, which is not open to students, applies particularly to graduate scientific workers who, due to the effects of war, are unable to obtain the requisite laboratory facilities in their own countries, whether in Europe, the United Kingdom, China, the Philippines or Iran. All tuition and laboratory fees will be waived for a period up to two years. Travel and living expenses are expected to be met by the visitors' government. In exceptional cases the Danish authorities will consider defraying these expenses also. On a reasonable scale a single person can live for about Kr. 5,000 (about £250) a year in Denmark. The scheme is being sponsored by the Danish Committee for the Training of Foreign Scientists in Danish Laboratories.

Recent Earthquakes

AN earthquake with probable epicentre in the Strait of Georgia 20 miles west of the City of Vancouver and of some severity shook central districts of Vancouver Island on June 23. Buildings, especially in the north and west of Vancouver Island, swayed considerably and some chimneys collapsed. The depth of water in lakes in the interior of Vancouver Island and also the depths of water along the eastern coast of the Island changed considerably. Several beaches became submerged to a depth of 100 ft., and the Canadian Hydrographic Department has ordered the taking of new soundings in the strait for navigational purposes. Dr. E. A. Hodgson has pointed out that there was no immediate aftershock to this earthquake. The earthquake was registered on the seismographs in Switzerland, preliminary pulses arriving at Zurich at 17h. 25m. 05.2s. G.M.T. They were also recorded at Toledo in Spain at 17h. 25m. 13s. G.M.T.

On July 1 an earthquake originated near Fairbanks, Alaska (U.S. Coast and Geodetic Survey), and on July 18 an earthquake at 6h. 07.1m. G.M.T. with aftershock at 7h. 16.5m. G.M.T. had their epicentres at lat. 50° N., long. 129° W., which is in the Pacific Ocean just off Cape Cook (north-west Vancouver Island) and north-west of the earthquake of June 23. The epicentre of the July 18 shock was determined by the U.S. Coast and Geodetic Survey in co-operation with Science Service and the Jesuit Seismological Association from instrumental readings from fifteen observatories. The depth of focus was estimated to have been rather less than 100 km., which is deeper than normal.

The slight earth tremor which was felt at Leyland in Lancashire about 7 a.m. B.S.T. on July 21 is now believed to have been caused by an explosion in a

100 ft. borehole. Prospecting for oil by seismic means was proceeding. The effect at Leyland was greater than expected for a normal shot.

On August 4 an earthquake of considerable severity originated in the Atlantic Deep, north-west of Puerto Rico. Severe shocks were felt at Puerto Rico, Trinidad, and Ciudad Trujillo on Haiti, and high waves swept into the ports of Matanzas, Puerto Plata, and Ciudad Trujillo. The docks and some ancient churches in this latter city were slightly damaged, and the telephone service was temporarily interrupted at Puerto Rico; but considering the energy of the shock as registered on seismograms throughout the world, surprisingly little damage was done in towns near the epicentre. Strong aftershocks of the earthquake continued at intervals for a week.

Flight Research Section of the Canadian National Research Council

A ~~FLIGHT RESEARCH SECTION~~ of the Division of Mechanical Engineering of the National Research Council is being set up at the Royal Canadian Air Force Station at Arnprior, Ontario. This Section will be financed and operated by the National Research Council. The aerodrome will remain the property of the Department of National Defence for Air, but is leased to the Research Council. The R.C.A.F. will supply flying personnel, aircraft and maintenance staff. Research activities will be under the direction of the National Research Council. It will be a small establishment with probably not more than a hundred men and five aircraft. It is to contain a nucleus of trained flight research personnel and equipment, the object being to do basic research without the interference of normal air traffic. In the laboratories of the Division of Mechanical Engineering of the National Research Council near Ottawa three wind tunnels—two horizontal and one vertical—provide excellent facilities for studies on models of aircraft to determine the probable performance of full-scale aircraft in flight. The Flight Research Section will provide the means of securing necessary additional information to supplement and amplify the results obtained on model tests in the wind tunnel.

Scientific Work in Germany

DR. H. KALMUS, of the Galton Laboratory, University College, London, W.C.1, has received the following information from the French zone of occupation of Germany, in a letter from Prof. Alfred Kühn. Prof. Alfred Kühn left the Zoological Institute in Göttingen in 1937 and went to the Kaiser-Wilhelm Institut für Biologie in Berlin. In the autumn of 1943 he was able to evacuate his department from there to Hechingen, Hohenzollern, and thus all his apparatus and library have been saved. Work in this institution has continued since the occupation first by the Americans and then by the French under the protection of the American T-force and the Mission Scientifique. In December 1945, Prof. Kühn was appointed to the chair of zoology in the University of Tübingen in the French zone of occupation, and he is now trying to move the other biological departments of the Kaiser-Wilhelm Institute to Tübingen. A botanical department under Melchers, working on plant hormones and plant viruses, has provisional quarters in the botanical department of the University. Hartmann and Bauer are working in Hechingen, Hohenzollern, and Hämerling in Langenargen am Bodensee in