

NEWS and VIEWS

Science in the U.S.S.R.

IN his presidential address to the Royal Society, delivered on November 30 (see p. 872), Sir Robert Robinson refers to the restrictions which have been placed on biological teaching and research in the U.S.S.R. Also simultaneously, his predecessor in the presidential chair of the Royal Society, Sir Henry Dale, has resigned his honorary membership of the Academy of Sciences of the U.S.S.R., because, as he says in a letter to the president of that Academy, "I believe that I should do a dis-service even to my scientific colleagues in the U.S.S.R. if I were to retain an association in which I might appear to condone the actions by which your Academy, under whatever compulsion, is now responsible for such a terrible injury to the freedom and the integrity of Science". In his announcement of his resignation, Sir Henry recalls that his election took place while he was president of the Royal Society, and that it was widely welcomed among British scientific men "as the symbol of a community of purpose between the scientists of our two nations . . . in defending, as we believed, the freedom of Science, as of all man's proper activities, from the threat of an aggressive tyranny". He points out that in the same year, 1942, N. I. Vavilov was elected a foreign member of the Royal Society in recognition of his contribution, by research in the U.S.S.R., to advances in genetics. But Vavilov had fallen into disfavour, and even now the Royal Society does not know whether he was alive at the time of his election to foreign membership. "More recent events, of which full reports have come to hand, have made it clear what has happened. The late N. I. Vavilov had been replaced by T. D. Lysenko, the advocate of a doctrine of evolution which, in effect, denies all the progress made by research in that field since Lamarck's speculations appeared early in the nineteenth century. Though Darwin's work is still formally acknowledged in the U.S.S.R., his essential discovery is now to be rejected there. The whole great fabric of exact knowledge, still growing at the hands of those who have followed Mendel, Bateson and Morgan, is to be repudiated and denounced; and the last few, who were still contributing to it in the U.S.S.R., have now been deprived of position and opportunity. This is not the result of an honest and open conflict of scientific opinions; Lysenko's own claim and statements make it clear that his dogma has been established and enforced by the Central Committee of the Communist Party, as conforming to the political philosophy of Marx and Lenin. . . . It remains to be seen whether such compliance with dogma is to be exacted in other departments of Science. So far as we know only that of the genetics encouraged by Lenin is now prohibited as alien to his political philosophy."

Dr. H. J. Muller, the distinguished American geneticist, has also resigned his honorary membership of the Academy of Sciences of the U.S.S.R.

Royal Society: Officers for 1949

AT the anniversary meeting of the Royal Society on November 30, the following were elected as officers and council for the ensuing year: *President*, Sir Robert Robinson; *Treasurer*, Sir Thomas Merton; *Secretaries*, Sir Edward Salisbury and Prof. D. Brunt; *Foreign Secretary*, Prof. E. D. Adrian; *Other Members*

of Council, Prof. J. D. Bernal, Prof. G. R. Cameron, Sir James Chadwick, Prof. S. Chapman, Prof. H. Davenport, Sir Frank Engledow, Prof. W. E. Garner, Prof. A. C. Hardy, Dr. C. H. Kellaway, Prof. G. F. Marrian, Sir William Stanier, Dr. H. G. Thornton, Prof. C. E. Tilley, Dr. A. E. Trueman, Prof. S. Zuckerman.

British Association: Newcastle Meeting, 1949

NEXT year the British Association for the Advancement of Science will meet in Newcastle-upon-Tyne (August 31–September 7). The Council has completed appointments to the various offices in the Association; these include: *President*, Sir John Russell; *General Treasurer*, M. G. Bennett; *General Secretaries*, Dr. Edward Hindle and Sir Richard Southwell; *Presidents of Sections*, Sir Harold Spencer Jones (Physics and Mathematics); Sir Alfred Egerton (Chemistry); Prof. W. J. Pugh (Geology); Prof. A. C. Hardy (Zoology); Prof. L. Dudley Stamp (Geography); Sir Alexander Gray (Economics); Sir Arthur Fleming (Engineering); Mr. M. C. Burkitt (Anthropology and Archæology); Prof. R. A. Peters (Physiology); Prof. Godfrey H. Thomson (Psychology); Prof. Lily Newton (Botany); Sir Fred Clarke (Education); Prof. N. M. Comber (Agriculture). The chairman of the Local Executive Committee is Lord Eustace Percy. The Lord Mayor of Newcastle has issued an appeal for a local fund of £4,000, and more than two hundred local volunteers are already making preparations for what is expected to be one of the largest meetings in the history of the British Association.

Unesco: New Director General

AT the Third General Conference of Unesco now being held in Beirut, M. Jaime Torres Bodet, Mexican Foreign Minister, has been elected director general in succession to Dr. Julian Huxley, who has held office since the inception of Unesco two years ago. M. Bodet, who is forty-six years of age, was head of the library department of the Mexican Ministry of Education during 1922–24. From 1924 until 1928, he was professor of French literature in the University of Mexico. In 1929 he entered the Foreign Service and successively held positions in Mexican legations in Spain, Holland and France. During 1936–37 he was director of the Diplomatic Department of the Ministry of Foreign Affairs and the following two years he spent as *chargé d'affaires* in Brussels. From 1940 until 1943 he was Under-Secretary for Foreign Affairs, after which he was appointed Minister of Education. In this capacity he conducted a campaign against illiteracy, founded circulating libraries, organised a system of rural education, and devoted his whole time to the orientation and administration of education in Mexico.

Bicentenary of Berthollet

CLAUDE LOUIS BERTHOLLET, the associate of Lavoisier and himself a distinguished chemist, was not a native of France but was born at Talloires, near Annecy, in Savoy, on December 9, 1748. He was educated at Chambéry and at Turin. After taking his doctor's degree at the latter place he became physician to Philip, Duke of Orleans, in which capacity he made a name for himself as a chemical discoverer. In 1781 he was made a member of the Academy of Sciences of Paris and afterwards became director of the Government dye works. His discovery of the

composition of ammonia was made in 1785 and that of the bleaching power of chlorine in 1786. With Lavoisier, Fourcroy and Guyton de Morveau he compiled the "Methode de Nomenclature Chimique" in 1787. He was one of the first to become a convert to the views of Lavoisier. The Revolution, while it brought him into danger, also called forth his organising powers, and it was largely due to his efforts that the saltpetre supply of France was maintained at a critical time. With Monge and Clouet he did much to improve and extend the manufacture of steel. In the reorganisation of the Academy and the inauguration of the Institute in 1795 Berthollet took an active part. Napoleon appointed him and Monge as heads of a Commission to select from the spoils of Italy the choicest works of art, and Berthollet was one of the group of French men of science who accompanied him to Egypt. In 1803 he published his well-known "Essai de statique chimique". Four years later he founded the famous Société d'Arcueil, comprising as members Laplace, Biot, Gay Lussac, Thenard and one or two others. After the suicide in distressing circumstances of Berthollet's son, the Society was broken up and from that time Berthollet lived in retirement. He was a senator, a grand officer of the Legion of Honour, and under the empire was created a count. He died at Arcueil after a long and painful illness on November 6, 1822. His character was amiable, frank and sincere. Though he enjoyed a great reputation in his time, he was modest and unostentatious and his honesty and courage were sufficient to impress even Robespierre. His eulogy was pronounced before the Academy of Sciences by Cuvier.

Radioactive 'Tracers' for Germany

A CONTRACT for the supply of radioactive tracers to approved research institutes in the Bizone of Germany has recently been placed with the Atomic Energy Research Establishment, Harwell, by the Joint Export-Import Agency, following the decision of the Isotope Allocation Committee of the Ministry of Supply in January last that radioactive 'tracers' produced in the Harwell Gleep could be made available for research work in Germany. The decision of the Isotope Allocation Committee was communicated to the authority responsible for the control of research in the British Zone, who immediately informed the U.S. Research Control Group. Together they approached the board of the import agency, supported by their respective public health advisers: and with the minimum of delay the Board authorized the import of radioactive tracers from Harwell into the Bizone.

Research institutes in the Bizone thus gain access to a range of radioactive tracers, the indigenous production of which is denied to Germany under Control Council Law No. 25 for the Control of Research. Their allocation within the Bizone is the responsibility of a small German committee, competent to decide where proper use will be made of the small total supply of 'tracers' at present available from Harwell to Germany. In order to assist the Committee in its task, a team of experts from Harwell visited Germany during October and demonstrated the latest ancillary equipment. Thus everything possible has been done to ensure that the maximum use shall be made of the limited quantities of radioactive 'tracers' which can be spared by the Atomic Energy Research Establishment at Harwell for export to the Bizone.

Research Council of Alberta

THE twenty-eighth annual report of the Research Council of Alberta (King's Printer: Edmonton) summarizes the work of the Council for 1947. All investigations in progress in 1946 were continued and a new project involving a survey of road surface conditions existing at selected places on the main highways of the Province, both where there was evidence of deterioration of the pavement and where the road appeared to be standing up satisfactorily in service, was commenced. The Council has continued to take a close interest in the bituminous sand separation plant being erected at Bitumount on the Athabaska River, and further laboratory work has shown that the loss of oil in the hot separation process is not due to filming on to particle surfaces but to the flecks below a critical size being enmeshed among the particles and afterwards, on redispersion of the tailings, settling with the clay, increase of clay content in the bituminous sand decreasing the oil recovery. Work on the applicability of water-flooding to the bituminous sands has continued, as well as on the systematic examination of Alberta coals and on the carbonization of low-grade sub-bituminous coals in the pilot plant low-temperature retort designed on the principle of a vertical shaft carbonizer. Investigations on the preparation of Alberta coals for the market and on some aspects of the chemical constitution of coal have been commenced. The Gasoline and Oil Testing Laboratory has widened its scope and now includes the examination of aviation, jet, Diesel and other fuel oils, petrol, lubricating oils, hydraulic fluids and solvents. Geological work included investigations of coal, clays, sand, water and miscellaneous mineral investigations, the major project being a survey along Evans-Thomas, Ribbon and Pigeon Creeks to determine coal measures in that area. Under the natural gas project for the conversion of carbon monoxide and hydrogen, from natural gas and oxygen, into a product resembling crude oil, the influence of operating conditions, catalyst structure and composition on the yields of liquid hydrocarbons was further studied, and a modified Emmett apparatus used to measure the surface areas of various catalysts. A market survey of poplar products was conducted, and the soil survey programme was continued in co-operation with the Dominion Department of Agriculture and the University Department of Soils. Tests were also made on the utilization of quartz sand and of straw.

Field Archæology in Great Britain

A NEW report, the "Survey and Policy of Field Research in the Archæology of Great Britain. I: The Prehistoric and early Historic Ages to the Seventh Century A.D.", has recently been published by the Council for British Archæology, Institute of Archæology in the University of London (1948; price 5s.). The object of this publication is to consider briefly—in only 120 pages—the present state and future desirable direction of British field research. A number of archæologists have epitomized, without references, their present ideas about the periods under review and have pointed out where further work should be undertaken to settle doubtful questions and to fill in gaps. The idea of giving a present starting point and of suggesting where investigators should concentrate their efforts in the future is excellent. But it is not easy of execution. A volume issued under the auspices of the Council for British Archæology might be considered as indeed author-