

## NEWS and VIEWS

## Scientific Research and Development in Northern Ireland

In accordance with its policy of encouraging the increased application of the results of scientific and industrial research by industry in Northern Ireland, the Ministry of Commerce has formed a Council of Scientific Research and Development. The work of this Council, which will be closely linked with that of the Directorate of Scientific Development of the Ministry of Commerce, will be carried out under the following terms of reference: (1) to advise the Ministry of Commerce on all scientific questions connected with the utilization and development of the natural resources of Northern Ireland; (2) to promote the increased application by industry in Northern Ireland of the latest discoveries and developments in the fields of pure and applied science with the object of improving present industrial methods and processes, creating new industries and expanding existing ones; (3) to arrange, through the Director of Scientific Development, for such investigations and research work as the Council may consider desirable in the best interests of Northern Ireland; (4) to promote the wider dissemination of scientific knowledge throughout Northern Ireland.

The composition of the Council is as follows: Sir David Lindsay Keir, president and vice-chancellor of the Queen's University, Belfast (*chairman*); Mr. D. H. Alexander, Belfast College of Technology; Prof. R. G. Baskett, professor of agricultural chemistry, Queen's University; Mr. O. F. Brown, Department of Scientific and Industrial Research; Mr. H. Bryson (Spence Bryson and Co., Ltd.); Prof. J. K. Charlesworth, professor of geology, Queen's University; Mr. M. Eitel (Stevenson and Son, Ltd.); Prof. K. G. E. Emeléus, professor of experimental physics, Queen's University; Prof. D. C. Harrison, professor of biochemistry, Queen's University; Mr. A. J. Howard, Ministry of Commerce; Prof. K. S. Isles, professor of commerce, Queen's University; Mr. B. M. Cance (Kirkpatrick Bros., Ltd.); Prof. A. H. Naylor, professor of civil engineering, Queen's University; Mr. D. Rebbeck (Harland and Wolff, Ltd.); Dr. A. J. Turner, Linen Industry Research Association; Mr. R. C. Wilson (Newforge, Ltd.); Mr. D. E. Wiseman (Short and Harland, Ltd.); and Prof. A. R. Ubbelohde, professor of chemistry, Queen's University. All inquiries in connexion with the activities of the Council should be addressed to the Director of Scientific Development, Ministry of Commerce, 20 College Gardens, Belfast.

## Generation of Electricity from Wind Power

THE work of the Section on Rural Electrification of the British Electrical and Allied Industries Research Association has already included research on the small-scale generation of electricity, principally by wind power. Recent shortages of power and fuel have aroused interest in the possibility of utilizing wind power on a large scale for the generation of electricity in Great Britain. Following earlier discussions with the relevant Ministries and other interested parties, the Association has established a new Section on Power Generation with the following terms of reference: "To study the technical and economic problem of large-scale aerodynamic generation in Great Britain; including the collection of all available information and evidence, the principles of

the selection of sites and the wind energy derivable therefrom, the co-ordination of wind-driven generators with supply systems, the essential design features of wind-driven generators and the design problems which remain to be solved". The chairman of the new Sectional Committee is to be Mr. T. G. N. Haldane of Messrs. Merz and McLellan. The Committee is expected to comprise representatives from electricity supply, electrical manufacturers, consulting engineers, the Department of Scientific and Industrial Research and the Lord President's Office, the Meteorological Office, the Ministry of Fuel and Power and the Ministry of Supply. Representatives of the aircraft industry will also be invited, as may seem desirable. The research officer for the new Section will be Mr. E. W. Golding, who is in charge of the Association's work on rural electrification and its field station at Shinfield Green, near Reading.

## Medical Research in South Africa

THE annual report of the South African Institute for Medical Research for 1946 records activities so various that a short note cannot mention them all. Mr. G. H. Beatty, chairman of the Board of Management since 1939, retired in 1946 and was succeeded by Mr. E. H. A. Lawrence. The Institute's close co-operation with the University of the Witwatersrand continues. Increased attention is being given to the problem of the universal donor of blood for transfusion, and studies of the Rhesus factors have been continued. Work on the vole tubercle bacillus has included a continuation of immunization experiments previously carried out to include *Cercopithecus* monkeys and rodents. Two species of gerbils have proved equally susceptible to *Mycobacterium tuberculosis* and the vole bacillus, so that they cannot be used for cross-immunization work. Work on leprosy included treatment of lepers with 'Promin', a new sulphone; but blood examinations showed no significant change over a period of four months. Considerable work has been done on diphtheria, dysentery, tetanus, gas gangrene, relapsing fever, typhus fever and other diseases; a plague-like epizootic occurring among gerbils in the Johannesburg area was, after investigation, ascribed to *Listeria monocytogenes*, and further study of this organism, which influences the wild rodent population and is also present in domestic rats, gave interesting results which are outlined in this report. Entomologists will be interested in the list of vectors of yellow fever, which records thirty-four species of mosquito new to northern Bechuanaland, also in the work on the physiology of *Cimex lectularius* and the larvæ of *Aedes aegypti*. Standard bed bugs are being reared for the biological assay of insecticides. Work has also been done on nutrition, venoms and antivenenes, and allergy, and a considerable volume of routine work accomplished.

## Evolution: An International Journal of Organic Evolution

WORKERS in various fields such as taxonomy, palæontology, cytology, genetics, comparative anatomy, etc., besides the problems inherent in their own fields, often have to take into account and make contribution to the wider field of thought covered by the term 'evolution'. The interest in this major subject has increased noticeably in recent years, and it was with the object of facilitating this modern synthesis that a Society for the Study of Evolution



was founded in the United States in March 1946. A grant from the American Philosophical Society has enabled this new society to launch a quarterly publication termed *Evolution: an International Journal of Organic Evolution*, and thus supply a noticeable want. The first number was issued in July 1947 and it is edited by Dr. Ernst Mayr, of the American Museum of Natural History, assisted by associate editors which include representatives of Great Britain, France, and the U.S.S.R. The journal is of convenient size, 25 cm. × 17 cm., well printed on paper that allows the use of half-tone blocks without undue loss in reproduction, and contains 112 pages. In general, contributions are limited to twenty pages, but shorter "Notes and Comments" are also published. They are accepted from any field of biology so long as they have a bearing upon evolution. The contributions in the first number include several papers on *Drosophila*, cytology, Hawaiian birds, adaptive evolution in sticklebacks, hybrids in oak-tree populations and evolutionary rates in hypsodonty in horses and beavers. The subscription-rate for the volume is 6.00 dollars, or membership of the Society, which includes the journal, is 5.00 dollars, and the business manager is Mr. K. P. Schmidt, Chicago Natural History Museum, Chicago 5, Ill., U.S.A.

#### Disposal of Effluents from Harwell

THOROUGH precautions are being taken by the Ministry of Supply to ensure that the Thames water used at the Atomic Energy Research Establishment at Harwell is returned to the river free from risk of harmful radioactivity. These precautions are being adopted after close consultation between Harwell experts and experts of the Ministry of Health, the Metropolitan Water Board and the Thames Conservancy, and on the advice of the Medical Research Council's Research Committee on the Medical and Biological Applications of Nuclear Physics. A certain amount of radioactivity in drinking water can be tolerated by human beings, and the tolerances laid down by the Medical Research Council for the Thames water are such that the medical and biological effects due to the consumption of water during the life-span of human beings would be for all practical purposes negligible. Roughly one million gallons of water a day will be involved. The greater part will be used for the cooling of plant and ordinary domestic requirements at the Establishment. The remainder of the water will be used for research processes, some of them radioactive, and a carefully controlled separate water system will be installed to deal with it. The most highly active portion will be segregated and will not be returned to the river. The remainder will be delivered to storage tanks where it will be tested by medical officers for compliance with the agreed tolerances, treated for chemical impurities and then mixed with the domestic waste water before being discharged into the Thames at Sutton Courtenay.

The system of treatment and examination has been designed so that several operations have to be carried out before the water actually passes into the six-mile long discharge pipe. Moreover, a new weir is being constructed at the point of discharge into the Thames, and the Harwell water will thus be turbulently mixed with much greater quantities of river water immediately it joins the main stream. These safeguards have received the approval of the Ministry of Health. The Thames Conservancy has decided to raise no objection to the proposals, so far as their interests are concerned, in view of the safeguards

agreed to be adopted and having regard to the assurances they have received from the Ministries concerned. By arrangement with the Ministry of Supply, the Thames Conservancy will be able to have samples taken at regular intervals for test purposes; the Ministry of Supply is providing facilities for testing such samples at a small riverside laboratory where Ministry of Supply scientific workers will themselves make sample tests and assist the Thames Conservancy.

#### Grants for Veterinary Education

THE University Grants Committee, the Ministry of Agriculture and Fisheries and the Department of Agriculture for Scotland have appointed an Inter-Departmental Committee to inquire into the financial needs of veterinary education in Great Britain and to make recommendations to the University Grants Committee, in respect of universities, and to the appropriate Agricultural Minister, in respect of other educational institutions, as to the application of any moneys provided by Parliament towards meeting these needs. The Committee is constituted as follows: Dr. A. E. Trueman (*chairman*), deputy chairman of the University Grants Committee; T. Dalling, director of the Veterinary Laboratories of the Ministry of Agriculture and Fisheries; H. W. Dawes, president of the Royal College of Veterinary Surgeons; Sir John Fryer, secretary of the Agricultural Research Council; Dr. Thomas Loveday, chairman of the Joint Advisory Committee on Agricultural Education; Prof. G. W. Pickering, professor of medicine in the University of London; J. N. Ritchie, deputy chief veterinary officer, Ministry of Agriculture and Fisheries; W. L. Weipers, member of the boards of governors of the Royal (Dick) Veterinary College, Edinburgh, and of the Glasgow Veterinary College. The secretary to the Committee is Mr. E. Earnshaw Smith, of the University Grants Committee, 38 Belgrave Square, London, S.W.1. The Ministry of Agriculture and Fisheries and the Department of Agriculture for Scotland will each appoint an assessor to the Committee.

#### French Conference on Ageing of Population

THE French National Union for Prevention of Depopulation and the French National Demographic Institute are organising a three-day conference on scientific research on ageing in the population of France, to be held in Paris during April 22-24. The programme of the conference is comprehensive: it includes sections of (1) demography, (2) economic and (3) social aspects of the problem, (4) physiology, psychology and pathology of old age, (5) organisation of work and occupation for old people, (6) rejuvenation of population. The conference will not be an international one; all reports will be by French workers, and discussions will be in French. Although only a few foreign specialists in demography, social and economic sciences, and gerontology have been invited, specialists in these subjects can attend the conference without a special invitation and, provided they will speak in French, take part in discussions. The president of the Organisation Committee is M. F. Boverat, 217 rue de Faubourg St. Honoré, Paris, 8e.

#### International Conference on Large Electric Systems

AN International Conference on Large Electric Systems (C.I.G.R.E.) will be held in Paris during June 24-July 3. Matters relating to the British