attracted people to visit museums and see the actual objects. Dr. Swinton emphasized the close relation between science and the arts and stated that whereas thirty years ago they were pleading for more science in museums, which were then chiefly artistic, in this scientific age there was some need for a reversal of the process.

The main subject of the Conference was museums and finance, introduced by Lord Rosse, chairman of the Standing Commission on Museums and Art Galleries. After recalling the increase of grants from the government which had recently taken place, he emphasized particularly the need for more staff in museums. The present shortage of staff was both absolute, because there were not enough qualified people, and comparative, because museum rates of pay were not competitive with comparable professions. He felt that museums should not depend too much on the Exchequer but that local authorities and others should do their share. Dr. Barnett Stross hoped that curators would use the increased grant of £15,000 made available through the Victoria and Albert Museum. He felt that the chief needs of the museum movement were for staff of high status with adequate pay, a high standard of conservation and for more realistic purchase grants. Sir Hamilton Kerr thought that two stages were necessary, an immediate first aid operation and secondly an expert committee to consider all the problems confronting museums in Britain. Sir George Dyson outlined the help that the Carnegie United Kingdom Trust had given to museums over the past thirty years, and Sir Philip Hendy gave some striking facts of the magnitude of the loss suffered by the decay of private patronage since 1914. Sir John Hobhouse outlined the initial steps taken by the newly formed South-West Regional Council, and Mr. E. M. Hutchinson, National Institute of Adult Education, was anxious that local authorities should use to the fullest extent the power to raise money that has already been vested in them.

At the close of the discussion resolutions were passed endorsing the recommendations of the Standing Commission relating to tax reliefs on gifts and bequests which should be made applicable to all museums; urging the Standing Commission to form a joint committee with the Museums Association to advise on all professional matters and requesting the Joint Committee on Government Assistance to make a survey of existing conditions in museums and art galleries.

In a discussion on the country house and the museum, Mr. R. Romilly Fedden, secretary of the Historic Buildings Committee of the National Trust, emphasized that the great country house with its contents formed a living organism, and stated that the trust had close relations for expert advice and so on with museums. Lord Methuen suggested that the Government might take over some of the empty great houses not too far from London and use them for showing secondary pictures from the National Gallery. He also advocated the co-operation of persons with specialized knowledge on local authority committees. Mr. Philip James, director of Waddesdon Manor, stated that the crux of the problem for using furnished country houses as museums was how to get as many people as possible round the house without destroying its atmosphere as a home.

At the annual general meeting Dr. W. E. Swinton was re-elected president, Mr. G. L. Conran was elected secretary and Sir John Rothenstein, editor. Mr. Charles Carter (Aberdeen), Mr. R. R. Clarke (Norwich), Dr. D. Dilwyn John (Cardiff) and Dr. Mary Woodall (Birmingham) were the newly elected professional councillors and Sir Hamilton Kerr, the Institutional councillor. The Earl of Rosse and Dr. D. B. Harden were appointed as additional vice-presidents. It was decided to hold the 1960 Conference at Stoke-on-Trent during July 4–9.

The concluding day was devoted to field meetings to inspect the historic and archæological wealth of Sussex.

THE INTERNATIONAL VETERINARY CONGRESS

THE sixteenth International Veterinary Congress, held in Madrid during May 21–27, was attended by nearly 2,000 members of the veterinary profession from all continents, including official delegates from fifty-two countries and more than one hundred from the United Kingdom. The Congress, under the patronage of the members of the Spanish Government, enjoyed the hospitality of the University of Madrid. The inaugural general assembly and plenary session meetings took place in the large hall of the new and magnificent building of the Faculty of Law. The variety of the papers—about 400 in all—presented during the Congress was very great. They were concerned with physiology, nutrition, pathology, public health aspects of animal diseases, food products and veterinary education. A balanced review is not practicable here, but a few papers of greater general interest and a few more interesting papers presented by British delegations can be mentioned.

As a result of the extensive public interest and concern there has been considerable research and investigation into contamination of the Earth's surface with radioactivity, and its subsequent effect on farm animals, as well as on man and human food of animal origin. It has been found that an extremely heavy environmental contamination with fission products would be necessary to produce any significant damage as a result of external exposure of farm animals to β- or γ-rays. The radiation exposure of farm animals from grazing in contaminated areas presents no significant hazard to the animals, except perhaps in localities very close to test sites. Cows contaminated with radionuclides may become a potential hazard to man through milk, in which they are secreted in more significant quantities than in any other animal food product. Papers on this problem were presented by American, German, Dutch and Swedish workers. It was generally agreed that in order to be able to appraise continually the effects of fall-out from atomic-weapon tests, and of the discharge into air and water of waste from all plants where nuclear energy is produced and applied, it is necessary to make regular measurements of the radioactivity present in soil, water, air and food.

A role of the veterinary profession which has not yet been fully exploited is that concerning public

health, and particularly the problem of diseases which are transmissible from animals to man. Nearly one hundred diseases are known to be so transmissible, and additional ones are still being found. Some of these diseases are transmitted by direct contact of man with live animals, others are transmitted indirectly to people through the consumption of milk, eggs or meat. Diseases transmitted from animals to man are defined as 'zoonoses'. At present there are many international groups or agencies that are concerned with the control of the zoonotic diseases, but still closer collaboration is necessary between the medical and the veterinary professions in protecting man from zoonoses.

One subject which has not before been discussed was that of blood groups of domestic animals. In dogs, six distinct blood group factors are recognized.

As is the case with newly born babies, it is possible for newly born foals and pigs to die from hæmolytic disease, which is a pathological condition resulting from the union of maternal antibodies with blood-group factors of the red cells of the fœtus.

There were several interesting contributions from Great Britain. Workers at the Research Institute for Animal Virus Diseases (Pirbright) reported new knowledge on living attenuated vaccines which gives hope of a method of combating foot-and-mouth disease in countries where it is widely spread. Foot-and-mouth disease is one of the most serious viral diseases affecting cattle in nearly every country of the world.

Workers of the Glasgow Veterinary School have reported successful trials with a vaccine produced against lung-worm infection, which causes great losses in cattle and sheep. Immunological basic work concerning parasites was reported by workers from Cambridge. They also demonstrated a correlation between immunity and chemotherapy. From the Cambridge Veterinary School there also came an important paper classifying respiratory diseases in poultry.

A paper on the international standardization of veterinary biological products was delivered by the director of the Veterinary Laboratory of the Ministry of Agriculture and Fisheries.

At a charming ceremony during the Congress the president of the Royal College of Veterinary Surgeons presented honorary associateships, awards usually made during the Congress, to five eminent foreign veterinary scientists.

The Spanish people were the most hospitable hosts and, in addition to the well-organized scientific site of the Congress, they had prepared a very full programme of evening receptions and other social functions that were greatly enjoyed and appreciated by the members of the Congress. At the closing general session of the Congress an invitation conveyed by the German delegation to hold the seventeenth International Congress in Hanover, in order to celebrate there the centenary of the Congress which first started in Germany, was received with acclamation. The first International Congress on animal diseases was held in Hamburg in 1863. It was initiated by an English veterinary surgeon, Prof. John Gamgee. The principal subjects of discussion during the first congress were rinderpest, also called cattle plague, contagious pleuropneumonia of cattle and sheep pox. All these diseases ceased to exist in Britain many years ago.

The veterinary profession combating many devastating diseases of animals plays an important part, not only in the improvement of the health of animals, but also the health of man. M. A. Soltys

PLANT GROWTH REGULATION

THE fourth International Conference on Plant Growth Regulation was held at the Boyce Thompson Institute for Plant Research, Yonkers, New York, during August 10–14. The Conference was sponsored jointly by the Institute and by the New York Botanical Garden and the Brooklyn Botanic Garden. The programme was co-ordinated with the ninth International Botanical Congress held in Montreal, Canada, during August 19–29.

The Conference was attended by many invited participants from seventeen countries. The United Kingdom was represented by sixteen participants. The last conference was held at Wye College (England) in 1955, and before that conferences were held at the University of Wisconsin in 1949 and in Paris under the auspices of the League of Nations in 1937.

The first day of the Conference was devoted to naturally occurring growth substances, the second to the gibberellins, the third to the synthetic auxins, and the fourth to other plant growth substances. Chairmen of the various sessions included, Prof. K. V. Thimann (Cambridge, Mass.), Dr. H. Burström (Lund, Sweden), Dr. P. W. Brian (Welwyn, England), Prof. F. Lona (Parma, Italy), Prof. R. L. Wain (Wye, England), Dr. J. Henderson (Tuskegee, Alabama), Dr. P. E. Pilet (Lausanne, Switzerland) and Dr. J. van Overbeek (Modesta, California). Major evening addresses were given by Dr. William J. Robbins, director emeritus of the New York Botanical Garden, on the "Expanding Concepts of Plant Growth Regulation", and by Dr. James Bonner (California Institute of Technology) on the "Probable Future of 'Auxinology' ".

In addition to the scheduled papers ample time was provided for discussion. The papers presented and the discussion remarks will be published in book form by the Iowa State College Press in May 1960. Copies will be sent to each participant and will be available to others at nominal cost.

Among the new advances reported at the Conference was the isolation of a new class of auxins from Maryland Mammoth tobacco by Dr. D. G. Crosby (Union Carbide Chemicals, South Charleston, West Virginia) and Dr. A. J. Vlitos (Caroni, Ltd., Trinidad, formerly at the Boyce Thompson Institute). About 10 mgm. of active chemicals were obtained from a ton of tobacco leaves and growing tips. One of the chemicals was identified as 1-docosanol and the other as a long-chain fatty acid not yet fully characterized. Bruce Stowe (Harvard) also presented results showing the growth-promoting activity of long-chain aliphatic compounds.

Prof. T. A. Bennet-Clark (University of London) reported on the effect of gravity on the distribution of auxins. The metabolism of indole auxins in plants was discussed by C. H. Fawcett, R. L. Wain and