

## NEWS AND VIEWS

## Royal Society Medallists

HIS MAJESTY THE KING has been graciously pleased to approve the recommendations made by the Council of the Royal Society for the award of the two Royal Medals for the current year to Prof. P. M. S. Blackett, F.R.S., for his studies of cosmic rays and the showers of particles which they produce, for his share in the discovery of the positive electron, for his work on mesons and many other experimental achievements, and to Dr. F. H. A. Marshall, F.R.S., for his contributions to the physiology of animal reproduction.

The following awards of medals have been made by the President and Council of the Royal Society: Copley Medal to Prof. P. Langevin, For.Mem.R.S., for his pioneer work in the electron theory of magnetism, his fundamental contributions to discharge of electricity in gases and his important work in many branches of theoretical physics; Rumford Medal to Prof. K. M. G. Siegbahn for his pioneer work in high precision X-ray spectroscopy and its applications; Davy Medal to Prof. H. C. Urey for his isolation of deuterium, the heavy hydrogen isotope, and for his work on the use of this and other isotopes in following the detailed course of chemical reactions; Darwin Medal to Prof. J. P. Hill, F.R.S., for his contributions to problems bearing on the inter-relationships of the main groups of the Mammalia and on the phylogenetic history of the Primates, a subject with which Charles Darwin himself was so much concerned; Sylvester Medal to Prof. G. H. Hardy, F.R.S., for his important contributions to many branches of pure mathematics; Hughes Medal to Prof. A. H. Compton for his discovery of the Compton effect, and for his work on cosmic rays.

## The Dublin Institute for Advanced Studies

IN Dublin, by an act of the Oireachtas, the Dublin Institute for Advanced Studies was founded in October. For the time being it consists of two constituent schools, the School of Celtic Studies and the School of Theoretical Physics. The general government of the Institute is entrusted to a Council, to which Rev. P. Browne (chairman), Dr. R. I. Best, Prof. D. A. Binchy, Prof. F. E. W. Hackett, Prof. E. Schrödinger were appointed by the President of Eire, whilst the President of University College, Dublin (Prof. A. W. Conway), the Provost of Trinity College, Dublin (Dr. W. E. Thrift) and the President of the Royal Irish Academy (Eoin MacNeill) are members *ex officio*.

The Institute will provide facilities for advanced studies and research in special branches of knowledge and for the publication of the results of such studies, irrespective of whether they have originated from the

Institute or not. In particular, the scope of the School of Theoretical Physics is described as the investigation of the mathematical principles of natural philosophy and their application to the sciences in which they obtain. Both the training of advanced students in methods of original research and the provision of research facilities for professors and lecturers on leave of absence from their academic duties will be included. Seminars and lectures on topics which lie on the frontiers of knowledge are to be held. Financial aid for producing and publishing works within the scope of the School (but not necessarily originating from it) is envisaged. Admission to the Schools is granted by the Council of the Institute, to which applications, or inquiries of any kind, should be directed (64-65, Merrion Square, Dublin). Moderate fees will be charged, but a limited number of scholarships, including a substantial contribution to maintenance, are available. The first senior professor appointed to the School of Theoretical Physics is Prof. E. Schrödinger, formerly of the University of Graz. Apart from the Council of the Institute mentioned above, each School has a Governing Board. This Board, for the School of Theoretical Physics, includes: Prof. A. W. Conway (chairman), Prof. F. E. W. Hackett, Prof. A. J. McConnell, Prof. W. H. McCrea (Belfast), Prof. A. O'Rahilly (Cork), Prof. E. T. Whittaker (Edinburgh).

## Mr. Roosevelt and the "New Order"

WITH remarkable propriety, the occasion for Mr. Roosevelt's first public address after the presidential election was Armistice Day, November 11, when he spoke at the tomb of the Unknown Warrior at Arlington Cemetery. Equally appropriate was his choice of a theme—a review of the progress of democracy since the Declaration of Independence, when, as he said, a New Order came into being. In showing how the gospel of democracy has been carried among peoples, great and small, by the Americas, "all of the Americas" and the British Isles with them, the President brought the War of 1914-18 into a truer perspective, not as a useless sacrifice, but as a phase in the resistance to the doctrine that might is right which then made a definite effort to destroy this New Order after its relatively short trial. The struggle of 1914-18, Mr. Roosevelt continued, preserved the New Order of the ages for at least a generation; and had the Axis of 1918 been successful over the associated nations, resistance on behalf of democracy in 1940 would have been impossible. At the same time, he recognized and impressed upon his hearers the need for great flexibility in the methods of democracy. Certain facts of 1940 did not exist in 1918. There is need for the elimination of aggressive armaments, the breaking down of barriers in a more closely knitted world and a need for restoring honour



in the written and spoken word. To attain these purposes the processes of democracy must be much improved.

In thus foreshadowing in general terms the process of future growth in the democratic idea, Mr. Roosevelt was contemplating democracy as of the spirit, as a way of life and not merely as a political system, contrasting it with another 'New Order' of which much has been heard recently. Of the methods of this latter no graver indictment could be set forth than in the preamble to the proposed post-War agreement of co-operation between Poland and Czechoslovakia, in which it is shown that among its other crimes the Nazi regime is exterminating the intellectual class and all manifestations of cultural life, while despoiling these countries of their treasures of art and science and persecuting all religious beliefs. Against the spirit of these and other Nazi crimes "unparalleled in all human history", the agreement between Poland and Czechoslovakia aims at setting up an association "which would become a new order in Central Europe and a guarantee of its stability", no less than the 'New Order' of the President of the United States, based upon "respect for the freedom of nations, the principles of democracy and the dignity of man".

#### Photographic Exhibitions of Indian Art and Religion

THE exhibition of photographs illustrating Indian art and religion at the Imperial Institute, South Kensington, London, which was opened by Mr. L. S. Amery, H.M. Secretary of State for India, on November 13, will repay careful study. It does, in fact, convey a clearer view of Indian genius and mentality than many collections of a more spectacular and imposing character. As Mr. Amery pointed out in declaring the exhibition open, just as Europe in the Middle Ages had embodied its ideas and ideals in the cathedral, so in India Hinduism had attained the highest artistic expression of its religious conceptions in the temple; and ornamentation and decoration were the natural media in which both the artistic and the mental perceptions of India were illustrated. In order to understand India, Mr. Amery went on to say, it is necessary to have a perception of her architecture, her sculpture and her temple symbolism. The selection and grouping of the photographs in this exhibition, as well as the carefully prepared captions, are such as to give the visitor who examines them with attention, even if his previous knowledge of Indian art be slight, something more than a superficial view of the three aspects of Indian culture to which Mr. Amery referred; moreover, he will be impressed by the subtlety which pervades all Indian religious art, whether Hindu, Buddhist or Jain, and makes it in virtue of its all-pervading symbolism so remarkable a vehicle for conveying theological and philosophical concepts and ideas.

The arrangements for the exhibition have been made by the India Society and the Warburg Institute. The photographs, which attain a high standard of technical skill, are the work of Dr. Stella Kramritsch, lecturer on Indian art in the University of Calcutta. They illustrate developments in Hindu temple

architecture and religious art, inclusive of such reform movements as Buddhism and Jainism from 200 B.C. to A.D. 1700. Broadly speaking, the arrangement is chronological; but since, as already indicated, interest centres upon religious concepts rather than æsthetic principles and achievement, though the latter are by no means passed over, examples are grouped and classified to illustrate these concepts. Naturally, in the early phases the Indianization of classical Greek art in Northern India figures prominently, while the group covering the setting of the temple demonstrates characteristic examples of the geographical environment as well as external form. Attention may be directed in particular, however, to the illustrations of the growth and meaning of symbolism, as well as of the worship of the symbol, and its plan in Indian religion and philosophy, the most striking example of this to the Western mode of thought being the manner in which the rhythms of the body as in dancing, or its functions as in sexual relations, are made to express a state of mind on a cosmic principle.

#### Antiseptics in War-Time Surgery

THE winter session of the Pharmaceutical Society's evening meetings was inaugurated on November 14 by Prof. A. Fleming, professor of bacteriology in the University of London, who delivered a lecture on "Antiseptics in War-Time Surgery". He said that in the present War surgeons should be able to undertake their work more efficiently than they were in 1914 in view of the chemical antiseptics which are now available but were then lacking. Thus the present situation in respect of the treatment of war wounds is infinitely more satisfactory than it was in the War of 1914-18. The antiseptics in use in 1914 have since been shown to be of little value for use in war-time surgery. Carbolic acid, for example, is effective when used otherwise than in connexion with the human body, but inside the body its lack of value is shown by the diminution of its efficiency with increasing concentrations, this being due to its action in destroying the leucocytes. Consequently carbolic acid is not of any great use as an antiseptic in the treatment of wounds.

Prof. Fleming also pointed out that the dyes are of little value as they are absorbed by the cotton wool used in dressing the wounds. Regarding antiseptics belonging to the sulphonamide group, he gave a warning against placing too much faith in them. They are not, he said, general antiseptics but are specific to certain bacteria; further, the action of these antiseptics is neutralized by chemicals, pus and dead bacteria and they are therefore of little value in the treatment of seriously septic wounds, in which pus and bacteria were inevitably present. The virtue of this new group of antiseptics is in their high solubility; they dissolve to form high concentrations in the wound. The sulphonamides are of great value in the treatment of fresh wounds where pus and bacteria are absent, since they inhibit the growth of certain important bacteria, and there is nothing in the fresh wound to inhibit the action of the sulphonamide.