curiosity aroused by the icebergs and aurora borealis of his native province, ran away to school in Moscow at the age of nineteen. He entered the German-staffed Academy of Sciences set up by Peter the Great, being the first Russian to do so, and the first to lecture in his native tongue instead of in Latin.

He propounded theories on the structure of matter, the kinetic theory of gases, and the mechanical theory of heat, a hundred years in advance of their general introduction; he built a 'thunder-machine' to study electricity; he wrote about the physical condition of the sun, the atmosphere of Venus, metallurgy, and gravity; he was the first to point out the possibility of the passage now established as the Great Northern Sea Route; he published the first Russian grammar and founded the University of Moscow. Because he was only one outstanding figure in an age of absolutism, much of his work perished with him, and his importance as a pioneer has only recently been recognized. Further information concerning the lecture can be obtained from the Secretary, S.C.R., 98 Gower Street, London, W.C.1.

The British Pharmaceutical Conference

THE seventy-sixth annual meeting of the British Pharmaceutical Conference was the briefest in its annals. It was held at the headquarters of the Pharmaceutical Society on the afternoon of June 11, and the proceedings were limited to the address of the chairman, Mr. H. Humphreys Jones. The theme of the address was the role of pharmacists in relation to the food problem. He said that physiology is an integral part of the curriculum of study of the pharmaceutical student. Items in the syllabus are the physiology of the alimentary tract, comprising a knowledge of the control of salivary, gastric, pancreatic and biliary secretion. The chemistry of certain specified food sustances and the properties of the digestive juices and bile are also subjects of the curriculum. The main reason for their inclusion is, he said, the acceptance of the fact that pharmacists must keep pace with medical progress, and a further reason is the necessity for the pharmacist to be alive to the general awakening regarding food values. He must know not only the pharmacopœia —in which standards are laid down for certain organo-therapeutical substances, such as insulin, pituitary and thyroid as well as sera and vaccines— but also the chemistry of meat, eggs and bread and the properties of the digestive juices.

Mr. Humphreys Jones argued that, while in the past the aim of pharmacy has been to provide drugs to cure diseases rather than to prevent them, a wider vista has been opened up which invites the application of the knowledge of food values with a view to the prevention of disease and the maintenance of a general high standard of health at all periods of life. It has long been recognized that rickets, scurvy and many other diseases are due to the absence of certain food constituents; this emphasizes the desirability of the close study by students of this part of the curriculum. In this connexion he said, "The [Pharmaceutical] Society has already done good work in connexion with vitamins. But why regard vitamins as the only important ingredients in real food?" Hitherto, he said, the pharmacist has depended almost exclusively upon his own initiative and ingenuity; as a servant of the State, his main privilege is that he can sell and dispense scheduled poisons and dispense medicines under the National Health Insurance Act. In Mr. Jones's view, there ought to be an avenue through which the pharmacist's knowledge of nutrition would be similarly recognized; if a person is compelled by the State to pass an examination in a subject of first-class importance, he should be provided with the opportunity of utilizing that knowledge in the public service. In short, the public should be taught to regard the pharmacist as a dietitian.

The Institution of Professional Civil Servants

THE twenty-first annual report of the Council of the Institution of Professional Civil Servants, presented to the annual general meeting on April 25, indicates that in spite of the pre-occupation of Government departments, and especially the defence departments, with more pressing issues than service conditions, the Council has been available to secure a considerable number of increases in salary and other improvements in the conditions of employment. The report gives a review of activities which shows that the Council has fully maintained its vigilance over the interests of members in the difficult conditions of war-time, despite the removal to temporary offices and the heavier responsibilities falling on the honorary officers since the usual method of control by Council and its committees came in abeyance, and that claims or representations have been preferred with a sense of proportion and balance highly creditable to the Institution.

Special attention is given in the report of the Institution to numerous problems arising out of the evacuation of civil servants, of whom to date about 20,000 have been transferred to provincial towns. Concessions have been secured in regard to visits to families, billeting payments, daily travelling expenses and the like, and the formation of committees of the staffs of evacuated departments in the reception towns is being attempted. Numerous details are included in the report of representations on matters affecting the staffs of Government scientific establishments.

Scientific Films in War-Time

THE London Scientific Film Society gave four shows last winter of scientific and documentary films and received encouraging support. A new form of programme was generally appreciated. Several films with a common subject or theme were shown together; programmes on contrasting or complementary treatments of psychology, civics in Great Britain, and agriculture being presented. All films shown by the Society are approved by the Scientific Films Committee of the Association of Scientific Workers, 30 Bedford Row, London, W.C.1. This body was set

up in 1937 to further the interests of the scientific documentary film, to encourage the making and to sponsor the exhibition of such films. The films are broadly of three kinds : interpretative films, which bring out the relations of science to society and which try to smooth out the difficulties arising from developments and changes in science and social life ; educational films, aiming simply to instruct ; and research films, serving as a scientific instrument in the hands of the research worker. The Scientific Films Committee grades films into classes in this way, and also appraises their scientific value. The Committee's lists can be obtained on application ; universities, schools and scientific societies can use them to help in making up programmes of scientific films. The work of appraising films will go on through the summer. In addition, the Committee's advice is available to producers, and recommendations for new films are to be made ; certain subjects, such as chemistry, are very inadequately covered. The Committee wants the opinions of teachers and heads of scientific departments on what is needed, and the special requirements of war-time will be borne in mind.

Radiotherapeutic Panel of Physicists

SINCE the gift of a large sum of money to the King Edward's Hospital Fund by Sir Otto Beit in 1928 for the purchase of radium for use in the treatment of cancer, the Fund has taken an ever-increasing practical interest in the work associated with this and other gifts especially reserved for radium. When the National Radium Commission came into being in 1929, working arrangements were soon made between it and the Fund whereby the latter body became responsible for seeing that the radium needs of the London area were satisfied. In the developments of the last few years, the Fund has been assisted by an expert Radium Committee, which is now presided over by Sir Cuthbert Wallace. Recently this Committee has been considering in what way radiological treatment could be improved, and the Fund has approved the formation of a panel of consultant physicists. The chief reason that has led to this step is the realization that radiotherapy should be, can be, and is at some centres carried out on a quantitative basis, and that for this purpose the services of a physicist are necessary. The panel is designed to serve the needs of the many hospitals in which radium and X-ray treatment is carried out, but at which the employment of a physicist is precluded by expense. The groups of physicists constituting this panel are as follow : Dr. H. T. Flint and colleagues, Physics Department, Westminster Hospital, S.W.1 ; Mr. L. G. Grimmett and colleagues, Physics Department, Radium Beam Therapy Research, Radium Institute, Ridinghouse Street, W.1 ; Prof. F. L. Hopwood and colleagues, Physics Department, St. Bartholomew's Hospital, E.C.1 ; Dr. W. V. Mayneord and colleagues, Physics Department, Royal Cancer Hospital, Fulham Road, S.W.3 ; Prof. S. Russ and colleagues, Physics Department, Middlesex Hospital, W.1.

African Studies in War-time Paris

WHILE the intellectual and scientific activities of Paris, like those of London, suffered dislocation at the outbreak of war, efforts have been and continue to be made to resume them in as full a measure as is compatible with the demands of war on the resources of the city. In a review of what has been accomplished so far, with special reference to the facilities for African studies, Prof. Henri Labouret (*Africa*, **13**, 2 ; 1940) refers to the action of the Government in sanctioning the reopening of the École Nationale de la France d'Outremer (École Coloniale). As an adjunct, the public as well as the students have been readmitted to the facilities for reading and study in the libraries and exhibition galleries of the Musée de l'Homme (Trocadéro) and the Institut d'Ethnologie. The Institut Français d'Anthropologie, the Société des Africanistes and the Société d'Anthropologie have resumed work and are to continue their meetings.

In view of the need for the extension of the co-operation of French and British authorities in Africa to the field of scientific research—a need which should be self-evident—it is interesting to note that M. Labouret is able to record that the Institut Français d'Afrique Noir, although it has lost a number of its most prominent supporters, has survived the crisis. This body was founded in 1938 only, but is already recognized as an important centre of African research. It will continue to publish its substantial *Notes Africaines*, and has taken over the responsibility of issuing the *Bulletin du Comité d'Études Historiques et Scientifiques de l'Afrique Occidentale Française*, founded by Prof. M. Delafosse in 1915. It will appear, however, in a new and enlarged form.

Daytime Lighting of Blacked-out Factories

THE Industrial Health Research Board is at present investigating the effects of complete obscuration of daylight on health and output, and also the problem of securing the best artificial lighting during the hours of daylight. R. Maxted and J. Bertram, who have been associated with this work, have written an interesting account in the *Electrical Times* of June 6 of experiments in factory lighting, reproducing by artificial means the most desirable features of natural lighting. Normal modern practice, based on pre-War experience, dwells on the importance of adequate illumination levels and of limitation of glare. But war-time conditions have greatly accentuated defects which were tolerable under peace conditions of working. In addition, the blacking-out of windows and skylights has usually resulted in conditions such that the psychological effect is of a magnitude creating an entirely new factor. It is unavoidable that operatives are required to work longer hours. It is obviously vital to ensure that any sense of strain is not associated in their minds with factory conditions, which should clearly be designed to conserve both mental and physical reserves. No other factor is more potent psychologically than the lighting installation. Diagrams are given showing the objectionable tunnel effect pro-