

the minimum of material, so arranged that only the best equipped and experienced workers do the operation of analysis in which they are expert. This would require an overall organization that fortunately is to hand in the Commission on Space Research and in its constituent organizations in other countries.

The study of meteorites is one involving nearly all the disciplines in science and, like the International

Geophysical Year, could be another excellent trial ground for co-operation in science.

¹ Anders, E., *Astrophys. J.*, **132**, 248 (1960); *Geochim. Cosmochim. Acta*, **19**, 177 (1960).

² Mason, B., *J. Geophys. Res.*, **65**, No. 9 (September 1960).

³ Duchesne, J., and Depireux, J., *Nature*, **182**, 931 (1958).

⁴ Mueller, G., *Cosmochim. Geochim. Acta*, **4**, 1 (1953).

⁵ *Nature*, **186**, 693 (1960).

NEWS and VIEWS

Bacteriology at St. Bartholomew's :

Prof. L. P. Garrod

FOR more than thirty-five years bacteriology at St. Bartholomew's Hospital has been associated with the name of L. P. Garrod, who is due to retire in this academic year. During all these years, Prof. Garrod has contributed much in the field of medical bacteriology. Anyone who knows the cramped conditions in which he has worked will be astonished at what he has achieved. Prof. Garrod belongs to a generation in which it was still possible to be a first-class pathologist and bacteriologist, as well as a first-class clinician, and any who remember his lectures on 'worms' will agree that he is also no mean helminthologist. He has contributed many important articles or chapters in almost every branch of medical bacteriology—for example, actinomycosis, staphylococcal infections and endocarditis, to mention only a few. But Garrod has also kept abreast or even ahead of new developments. In recent years he has often led the way in the critical appraisal of new antibiotics and sometimes in exposing exaggerated claims that have been made. He has been especially interested in the validity of laboratory tests for the sensitivity of bacteria to antibiotics, and he has always tried to show how these tests should be employed so as to give information which may be of real clinical value. He has also been interested in the mode of action of antibiotics, in the differences in bacteriostatic and bactericidal activity, and in the development of antibiotic-resistant strains. He has exerted a profound influence on the development of bacteriology during what may prove to be the first phase of the era of chemotherapy, which is now showing signs of passing from a medical to a more biochemical and biological phase. It is to be hoped that Prof. Garrod will continue after his retirement to work in the field in which he has contributed so much.

Dr. R. A. Shooter

DR. R. A. SHOOTER, whose appointment to succeed Prof. L. P. Garrod as professor of bacteriology starts in October 1961, has already made his mark in the field of hospital bacteriology. In much of his work he has been closely associated with Prof. Garrod, but in recent years he has developed a special interest in problems of cross-infection and hospital hygiene and epidemiology. This work has been especially important at a time when surgical wards and theatres and medical wards, too, have been invaded by antibiotic-resistant staphylococci and other organisms, and when the first flush of success in the antibiotic era has given place to a more sober realization of what antibiotics can and cannot be expected to do. Dr. Shooter has paid great attention to problems of

staphylococci, of masks, of air and dust and of ventilation in the spread of staphylococcal infection. In the past few months Prof. Garrod and Dr. Shooter have combined with Dr. Blowers and Prof. Williams to produce an excellent book on hospital infection. This has met a very real need and is a fitting conclusion to years of fruitful co-operation in this special branch of bacteriology.

Technical Operations at the International Atomic Energy Agency :

Dr. P. L. Balligand

DR. PIERRE LOUIS BALLIGAND has been appointed to succeed Dr. Hubert de Laboulaye as deputy director general in charge of the Department of Technical Operations of the International Atomic Energy Agency. Dr. Balligand, who is a graduate of the Ecole Polytechnique, is at present head of the Division of Large Research Reactors of the French Commissariat à l'Energie Atomique, which was established to run the operation of the test reactor *EL 2* and the start-up and development of the high-flux reactor *EL 3*. The service will also include the operation of the test reactor *Pegase* at the new French reactor centre at Cadarache. Dr. Balligand was concerned with the organization of a test reactor research group, the function of which was normalizing in-pile experiments and arranging dosimetry and flux measurements studies. This group has collaborated closely with similar efforts in other European countries; an experimental programme is now being organized in Belgium at Mol, and others are being developed in Italy, Switzerland and Yugoslavia. Reactor safety regulations have been a main concern of Dr. Balligand and the development and application of the first provisional safety measures for experimental reactors at Saclay were his responsibility. However, these regulations are now the responsibility of a Reactor Safety Committee, of which Dr. Balligand was a member. Dr. Balligand will commence his new duties towards the end of March, when Dr. de Laboulaye returns to a senior position with the French Commissariat à l'Energie Atomique.

Industrial Engineering at Toronto :

Prof. Arthur Porter

DR. ARTHUR PORTER, dean of the College of Engineering in the University of Saskatchewan, has been appointed the first professor of industrial engineering in the University of Toronto. Prof. Porter is an authority on the electrical control systems which, among other things, make possible large-scale automation of industry. He worked in Toronto during 1949-55 as head of the research division of Ferranti Electrical, Ltd., the company which installed the University of Toronto's first large electronic computer in 1952. Before becoming dean at Saskat-