

autoradiography some of the radioactive material may be lost or its position change; and secondly, when isotopes are used as tracers, the amount of isotope necessary to give a satisfactory autoradiograph may be such as itself to produce biological effects.

Various types of autoradiographic techniques are available, differing in sensitivity and resolution, in general a high resolution being obtained only at the expense of sensitivity. By the use of nuclear emulsions a sufficiently high resolution can be obtained to give information on the intracellular distribution of isotopes, such work so far being done using a Kodak nuclear emulsion, 4 microns thick, in stripping form. However, work is now being carried out on the possible use of more sensitive nuclear emulsions poured over the specimen. In this way, individual

electron tracks can be observed for low-energy electrons. This method will undoubtedly be of considerable value for low-energy beta-ray emitters, but its value is problematic for the high-energy beta-ray emitters such as phosphorus-32. An investigation was described which showed the application of various types of autoradiographic technique. This concerned the non-uniform distribution of radioactive phosphate in certain tissues following intravenous administration, and was shown to be due to the concentration of activity on particulate material. It has been shown that the particulate material can arise in the preparation of the active solution and also by allowing the solution to stand in a syringe, unless special precautions have been taken. The non-uniformity of activity resulting may affect considerably the dosage distribution in the tissue.

## NEWS and VIEWS

### Astronomy at University-College, London: Prof. W. C. Allen

A SUBSTANTIAL bequest from the estate of the late Mr. F. Perren has made possible the establishment of the Perren chair of astronomy in the University of London at University College. The chair will be associated with the Observatory at Mill Hill. The first holder of the new chair is Dr. W. C. Allen. Since 1927 he has been on the staff of the Commonwealth Solar Observatory at Canberra. He has also carried out research work at the Solar Physics Observatory, Cambridge, and at Mount Wilson, and later took part in eclipse expeditions to Japan and to South Africa. Prof. Allen has been concerned actively in many different aspects of astronomical research work. He was one of the first to carry out accurate photometric measurement of the Fraunhofer lines in a very thorough investigation, the results of which are still widely referred to as standard. In recent years, Prof. Allen has made many important contributions to the study of solar and terrestrial relations and to solar physics generally. In collaboration with Prof. R. van der R. Woolley he has worked out a theoretical description of the outer region of the sun's atmosphere, and he has been closely associated on the astronomical side with the fruitful developments of radioastronomy in Australia.

### Inter-African Bureau of Epizootic Diseases: Mr. W. G. Beaton

UNDER the auspices of the Commission for Technical Co-operation in Africa south of the Sahara, an Inter-African Bureau of Epizootic Diseases is to be set up in Kenya on the site of the East African Veterinary Research Organization at Mugaga, near Nairobi, and Mr. William Gaudenz Beaton, the retiring director of veterinary services, Nigeria, has been appointed director of the Bureau. Mr. Beaton, who has spent his entire career in Nigeria, was born in 1900 and educated at the Royal Veterinary College, London, the Universities of Edinburgh and Liverpool and at the Pasteur Institute, Paris. He entered the Colonial Veterinary Service as a veterinary officer in 1925, becoming a research officer in 1929 and then senior veterinary officer in 1938. In the same year he became deputy director of veterinary services, and in 1948 was appointed director. Mr. Beaton was delegate for Nigeria to the Anglo-French Colonial

veterinary conference, held at Dakar in 1946, and in 1948 he attended three conferences: the Colonial genetic conference at Edinburgh, the international rinderpest conference at Nairobi and the United Nations Food and Agriculture Organization conference on rinderpest, also at Nairobi.

### Royal Naval Scientific Service: Chief Scientific Officers

THE following promotions to the rank of chief scientific officer in the Royal Naval Scientific Service have been announced:

Mr. J. Anderson, C.B.E., chief scientist at the Admiralty Signal and Radar Establishment, Haslemere. Mr. Anderson was educated at the Royal Technical College, Glasgow. After two years postgraduate training in the Rugby works of the British Thomson-Houston Co., Ltd., he joined the Admiralty Experimental Station at Parkeston Quay, Harwich, in May 1918. Mr. Anderson assisted Prof. R. W. Boyle in the very early stages of the development of Asdic equipment for the detection and location of submarines, and has been associated with the subsequent development of this equipment, first at H.M. Signal School, and later at H.M. Anti-Submarine Experimental Establishment. In 1943 he became chief scientist at this Establishment, which in 1946 was renamed H.M. Underwater Detection Establishment. He went to his present post in May 1951.

Colonel A. V. Kerrison, director of Aeronautical and Engineering Research, Admiralty. After service in France throughout the First World War, and two years on intelligence missions in South Russia, Colonel Kerrison returned to England to work on mathematical analyses of artillery ballistics and anti-aircraft gunnery problems. He eventually became Army liaison officer at the Admiralty Research Laboratory, Teddington, where he initiated systematic research in the development of gunnery fire control. His experimental work on aided laying opened up a new line of development in anti-aircraft gunnery fire control, his design of a close-range predictor based on it being adopted by both the British and United States armies.

Dr. E. C. S. Megaw, director of physical research, Admiralty. After graduation in electrical engineering at Queen's University, Belfast, Dr. Megaw