

small crystallite size and shape, crystal texture and imperfections of crystal lattices. In order to facilitate this work he has constructed two powerful X-ray generators, with copper-copper oxide rectifiers; and has experimented in the production of a very fine focus in his X-ray tubes. He has also made and cut curved quartz crystal monochromators, by means of which a powerful focused monochromatic beam of molybdenum or copper  $K$  radiation can be obtained, and he has used these to investigate the small-angle scattering from catalysts, colloids and the lamellae produced during the age-hardening of alloys. He has studied the non-Laue scattering associated with age-hardening and order-disorder phenomena in various alloys, defects of periodicity in fibrous structures, lattice deformations under mechanical stresses, and atomic movements associated with thermal vibration in crystal, the standard of his experimental work being uniformly high. He is now devising ingenious methods of wide- and narrow-beam Laue photography for the investigation of twinned and distorted crystals. It is hoped that Dr. Guinier may receive the *Wade* during his visit to England in November.

Botany at the Royal Holloway College, London :  
Dr. F. W. Jane

DR. F. W. JANE, who has recently been appointed to the newly created chair of botany at the Royal Holloway College, London, has accordingly resigned the readership in botany which he held at University College, London. Dr. Jane's scientific work has been noteworthy for the variety of its interest. It has dealt particularly with the smaller algae and with the structure and properties of wood. He has considerably enlarged our knowledge of the Chrysomonadineae and Volvocales, as well as promoting research among other algal types and more recently in algal ecology. His interest in wood has centred on its structural properties and on problems associated with timber utilization. Dr. Jane recently visited West Africa to study certain forest areas and timber trees in the Gold Coast, and he has conducted courses on the structure and properties of timber and cognate subjects at London, Oxford and Cambridge for the Timber Development Association's new national education scheme. Dr. Jane is widely known outside university circles in the vicinity of London as one of the leading all-round naturalists, possessing a detailed knowledge of birds and beasts which rivals his interest in field botany. He has long been editor of the *Transactions of the Hertfordshire Natural History Society* and was also president of the Essex Field Club. He has taken a great interest in Blakeney Point, Norfolk, where he has been supervising and continuing the work started at the field laboratory by Prof. F. W. Oliver.

Chelsea Polytechnic: Dr. F. J. Harlow, M.B.E.

DR. F. J. HARLOW is retiring after twenty-one years as principal of the Chelsea Polytechnic, London, to which post he was appointed from the Wigan Technical College. Throughout his service at Chelsea, Dr. Harlow has taken a lively interest in matters concerning education generally and technical education in particular. He has held high office in the Association of Technical Institutions and the Association of Principals of Technical Institutions, and has served on most of the important committees of these associations. During his time at Chelsea the Polytechnic has made marked progress and ranks at present as one of the most important technical

institutions in the country. Its association with the University of London is particularly strong, as evidenced by the large number of internal students and the number of higher degrees which are gained annually.

Mr. N. M. H. Lightfoot

MR. N. M. H. LIGHTFOOT has been appointed to succeed Dr. Harlow as from January 1, 1950. He is the present principal of the South-East Essex Technical College and School of Art, Dagenham, Essex, to which post he was appointed after service as lecturer in mathematics in the Universities of Manchester and Sheffield and the Heriot-Wade College, Edinburgh. At the Heriot-Wade College he was head of the Mathematics Department for five years prior to his principalship at Dagenham.

### Equipment for $\gamma$ -Radiography

WITH the increasing use of  $\gamma$ -radiography for the inspection of metal castings, forgings, and welds, attention has been rightly directed to the necessity of providing adequate protection for personnel against excessive exposure to  $\gamma$ -radiation. This is somewhat more difficult to achieve with portable  $\gamma$ -ray sources than with permanent X-ray installations, and a need has long been felt for a well-designed protective carrier and exposure unit for use with radium or radon. The announcement that Johnson Matthey and Co., Ltd., are manufacturing protective equipment for industrial radiography is therefore welcome. The basic unit is a portable carrier, constructed of copper tungsten alloy so as to provide adequate screenage for sources up to 250 millicuries. The beam may be directed accurately and safely with the aid of a periscopic device, and the unit is conveniently mounted on a mobile stand. For taking panoramic radiographs of a number of objects simultaneously, a time-controlled exposure unit is available. Although equipment of this kind cannot absolve the user from taking the routine precautions which are necessary for all radiation work, the Johnson Matthey units, which are clearly the result of considerable experience of industrial radiography, will certainly make his task easier; with them there should be no difficulty in complying with accepted protection standards. They will assist the industrial radiologist to take advantage of the improved supplies of radium and radon which are now available (*Nature*, June 4, 1949, p. 867).

### The World Health Organisation

DURING its first year of work the efforts of the World Health Organisation were concentrated on the organisation of control-measures against malaria, tuberculosis and venereal diseases, on the improvement of maternal and child health and of environmental hygiene, and on problems relating to nutrition. These, and other activities such as international epidemiology, biological standardization and the unification of pharmacopoeias, were decided at the meetings of the First World Health Assembly and have been reported in previous issues of the *Chronicle of the World Health Organisation*. In the latest issue of the *Chronicle* (3, No. 4; April 1949) an account is given of the preparations made for the Second World Health Assembly to be held in Rome. This forecasts increasing activities by the World Health Organisation to combat the ravages wrought by pest diseases in many countries of the world and to tackle the general health problems of under-developed