

with inspection processes, and remarked that radiological examination is now compulsory in the case of certain important components of aircraft. Many thousands of light alloy castings are inspected by radiological methods every week.

Mr. Harper laid down certain rules which should govern the radiography of light alloys, and explained how radiographic technique has to be modified to yield the best results in different types of alloys. In some cases, fluoroscopic methods are used in the examination of certain castings, and the author remarked on the importance of suitable apparatus for this purpose, which must embody maximum sensitivity with complete safety for the operator; in this connexion, it was pointed out that the fluorescent screen should never be viewed directly but indirectly by means of an inclined mirror. A very large number of firms throughout Great Britain have now installed X-ray equipment and employ trained radiological operators in this work. He contrasted this state of affairs with that obtaining but a few years ago, when the radiological method was yet in its infancy and its potentialities were largely unrecognized.

In the very encouraging and stimulating third paper, Dr. L. Mullins, of the Research Department of Messrs. Kodak, Ltd., described some of the latest research work carried out in the Kodak Research Laboratories on the photographic materials specially adapted to the needs of industrial and engineering, as apart from medical, radiology. Dr. Mullins first dealt with these specialized requirements and explained how particular emulsions are being devised to meet the needs of the radiologist specializing either in heavy engineering work, or in the examination of light alloys and built-up articles, also in the realm of crystal analysis. He went on to explain some of the technical difficulties inherent in this highly differentiated research, and to describe the methods that are being developed to overcome them. In the final section of his paper he dealt with the general question of processing, and was able to give the meeting some useful advice on this highly important aspect of the work.

To most of those present, it was very gratifying indeed to know that the question of photographic research directed to the particular problems of industrial radiology is being so intensively studied. This development was evident from the comprehensive and careful outline which was presented by Dr. Mullins.

Mr. E. J. Tunnicliffe showed a slide of a piece of apparatus designed by him to facilitate the continuous movement of a specimen under fluoroscopic X-ray examination. A sphere of aluminium, which contains the specimen, is made to rotate in any desired manner in a beam of X-rays; the fluoroscopic image is thrown on to an inclined mirror and is observed in perfect safety by the operator. The whole operation is one of remote control and combines perfect safety with a high degree of sensitivity and efficiency.

The papers provoked a lively discussion in which the authors were kept busy in answering a diversity of questions. It was evident that the Conference had achieved its object in affording practical help to those engaged on this work and, at the same time, many questions were raised that will undoubtedly stimulate further research and experiment.

V. E. P.

FORTHCOMING EVENTS

[Meeting marked with an asterisk is open to the public.]

Monday, February 10

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, London, S.W.7), at 3 p.m.—Prof. F. Debenham: "A Laboratory for Physical Geography".

Tuesday, February 11

ILLUMINATING ENGINEERING SOCIETY (at the E.L.M.A. Lighting Service Bureau, 2 Savoy Hill, London, W.C.2), at 2.30 p.m.—Mr. J. G. Holmes: "The Recognition of Coloured Light Signals".

ROYAL INSTITUTION (at 21 Albemarle Street, London, W.1), at 2.30 p.m.—Prof. G. I. Finch, F.R.S.: "Explosives".*

WARBURG INSTITUTE (at the Imperial Institute Buildings, South Kensington, London, S.W.7), at 2.30 p.m.—Dr. F. Saxl: "Mithras—The History of an Indo-European Divinity".

Wednesday, February 12

ROYAL SOCIETY OF ARTS (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Mr. G. V. Jacks: "Humus and the Farmer".

PHYSICAL SOCIETY (COLOUR GROUP) (at the Polytechnic, Regent Street, London, W.1), at 2.0 p.m.—Four Papers on "Colour Tolerance" (1, "Introductory"; 2, "The Commercial Aspect"; 3, "The Technical Aspect"; 4, "The Physical Aspect").

Thursday, February 13

ROYAL COLLEGE OF SURGEONS OF ENGLAND (at the Royal Society of Medicine, 1 Wimpole Street, London, W.1), at 2.30 p.m.—Prof. A. H. Burgess: The Hunterian Oration.

Friday, February 14

ASSOCIATION OF APPLIED BIOLOGISTS (in the Congregational Hall, Victoria Road, Harpenden), at 12 noon.—Annual General Meeting. 12.30 p.m.—Dr. J. Macleod: "Recent Work on the Sheep Tick and its Bearing on Control Measures". 2.15 p.m.—Dr. R. P. Hobson: "Recent Work on the Sheep Maggot Problem"; Dr. I. Thomas: "Some Practical Aspects of the Sheep Blowfly Problem".

ROYAL SOCIETY OF ARTS (INDIA AND BURMA SECTION) (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Diwan Bahadur S. E. Runganadhan: "Research Work in Indian Universities".

NORTH-EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (in the Mining Institute, Newcastle-upon-Tyne), at 6 p.m.—Mr. Leslie T. Morton: "Ships' Cargo-Handling Gear".

APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

LECTURER IN ELECTRICAL ENGINEERING at the Constantine Technical College—The Director of Education, Education Offices, Woodlands Road, Middlesbrough (February 15).

ASSISTANT LECTURER IN THE DEPARTMENT OF MATHEMATICS—The Principal, Technical College, Huddersfield (February 20).

DEMONSTRATOR IN THE DEPARTMENT OF PHYSIOLOGY—The Secretary, Bedford College for Women, Regent's Park, London, N.W. (February 22).

HEADMASTER OF THE KING'S SCHOOL, ELY—The Bursar, The King's School, Ely, Cambs. (March 1).

CHIEF EDUCATION OFFICER to the Portsmouth Education Committee—The Chief Clerk, Education Offices, Northern Secondary School, Mayfield Road, North End, Portsmouth (March 3).

LECTURER AND/OR INSTRUCTOR IN RADIO ENGINEERING AND SERVICING—The Director of Education, The Polytechnic, 309 Regent Street, London, W.1.

EDUCATION OFFICER—The Acting Secretary, Educational Advisory Board of the British Social Hygiene Council, Tavistock House South, Tavistock Square, London, W.C.1.

ELECTRICAL ENGINEER for the Public Works Department of the Government of Nigeria—The Crown Agents for the Colonies, 4 Millbank, London, S.W.1 (quoting M/9422).