

of incidence from a spherical concave mirror, the result of the superposition of beams which have undergone different numbers of reflections. Two, three or more beams may contribute. An examination is made of the conditions for the occurrence of the bands and of the ranges over which those due to particular pairs of beams are observed. The band interval for a given system is  $a\lambda/\theta^2$ ,  $\theta$  being the deviation of the light and  $a$  depending on the numbers of reflections of the two beams concerned. The factors controlling intensity are investigated. A convenient and reasonably accurate method for the determination of wave-length is based on the effect.

J. C. EARL and N. G. HILLS: The action of nitrous acid on amines. A comparison has been made of the behaviour of aniline and methyl aniline, respectively, with nitrous acid. The possibilities of interference by secondary reactions in the case of aniline has to be kept in view. Allowing for this the experimental results recorded indicate that the reactions are essentially similar. Dilatometric and conductimetric methods were used in making the comparison.

## Forthcoming Events

[Meetings marked with an asterisk are open to the public.]

### Monday, February 22

VICTORIA INSTITUTE, at 4.30.—Alan Stuart: "Science and the Interpretation of Scripture".

BEDFORD COLLEGE FOR WOMEN, at 5.15.—Dr. Friedrich Zeuner: "Some Aspects of Evolution revealed by the Study of Fossils".\*

UNIVERSITY OF LEEDS, at 5.15.—Prof. F. A. Lindemann, F.R.S.: "Low Temperature Research".\*

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Eric Shipton: "More Explorations round Nanda Devi".

### Tuesday, February 23

WARBURG INSTITUTE, at 5.30.—Prof. J. Huizinga: "The Play Element in Culture".\*

### Wednesday, February 24

SOCIETY FOR THE STUDY OF ALCHEMY AND EARLY CHEMISTRY, at 8—(at University College, Gower Street, W.C.1).—Discussion on "Alchemical and Chemical Symbols".

ROYAL SOCIETY OF ARTS, at 8.15.—Prof. W. L. Bragg, F.R.S.: "Alloys".

### Friday, February 26

INSTITUTION OF CHEMICAL ENGINEERS, at 11 a.m.—Fifteenth Annual Corporate Meeting to be held at the Hotel Victoria, Northumberland Avenue, London, W.C.2.

GEOGRAPHICAL DISCUSSION, at 4.30—(at the Royal Astronomical Society).—Discussion on "Radio Observations in High Latitudes" to be opened by Prof. E. V. Appleton, F.R.S.

UNIVERSITY OF OXFORD, at 5—(in the Museum).—Prof. The Svedberg: "Sedimentation, Diffusion and Electrophoresis Technique for the Study of High-Molecular Compounds" (succeeding lecture on February 27 at 11.15 a.m.).\*

BRITISH PSYCHOLOGICAL SOCIETY, at 8.30—(at the London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1).—Prof. T. H. Pear: "Psychological Problems of Television".

ROYAL INSTITUTION, at 9.—Lord Horder: "Old Diseases and New".

ASSOCIATION OF TECHNICAL INSTITUTIONS, February 26–27.—Annual General Meeting to be held in the Carpenters' Hall, Throgmorton Avenue, London, E.C.2.

February 26, at 10.45.—The Right Hon. Lord Kennet: Presidential Address.

## Appointments Vacant

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

ASSISTANT IN MATHEMATICS AND ENGINEERING SCIENCE and ASSISTANT IN ELECTRICAL ENGINEERING in the Willesden Technical College.—The Secretary, Willesden Local Higher Education Committee, Education Offices, Dyne Road, Kilburn, N.W.6 (February 26).

SCIENTIFIC OFFICER (BALLISTIC PROBLEMS) in the Air Ministry.—The Secretary, Air Ministry S.2.D., Adastral House, Kingsway, W.C.2. Quote No. B348. (February 26).

LECTURER IN CHEMISTRY in the Wigan and District Mining Technical College.—The Principal (February 27).

INSPECTOR OF MINES, BURMA.—The High Commissioner for India, General Department, India House, Aldwych, London, W.C.2 (February 27).

SENIOR AGRICULTURAL ADVISORY OFFICER for West Norfolk.—The Director of Agricultural Education, Agricultural Station Offices, Sprowston, Norwich (February 27).

PHARMACIST in Runwell Hospital, near Wickford, Essex.—The Clerk to the Visiting Committee (February 27).

GOVERNMENT CHEMIST, CYPRUS.—The Director of Recruitment (Colonial Service), 2 Richmond Terrace, London, S.W.1 (March 6).

ASSISTANT LECTURER IN MATHEMATICS and ASSISTANT LECTURER IN ZOOLOGY in University College, Exeter.—The Registrar (March 6).

X-RAY AND RADIUM PHYSICIST in the National Research Council of Canada.—The Secretary, National Research Council, Ottawa (March 15).

PROFESSOR OF PHYSIOLOGY in the Lady Hardinge Medical College, New Delhi, India.—The Principal (April 15).

LECTURER IN DOMESTIC SCIENCE in the Gloucestershire Training College of Domestic Science, Barrack Square, Gloucester.—The Secretary.

## Official Publications Received

### Great Britain and Ireland

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1687 (1792): Performance and Longitudinal Stability of a Single-Engine High Wing Monoplane; Experiments on a Quarter Scale Model with Aircrow Running. By L. W. Bryant, D. H. Williams and A. F. Brown. Pp. 31+41 plates. 3s. 6d. net. No. 1691 (2238): Comparison of Drag of Trussed and Retractable Undercarriages. By Dr. R. Jones, A. H. Bell and A. F. Brown. Pp. 6, 1s. net. No. 1701 (2004): The Effect of Central Cutaway in Split Flaps on the Trim of a Low Wing Monoplane. By D. W. Bottle, C. Callen and K. W. Kirkby. Pp. 17. 3s. net. No. 1704 (2212): Structure of Turbulence in a Natural Wind, with a Description of a Sensitive Pressure Gauge. By A. Graham. Pp. 16. 2s. 6d. net. No. 1707 (1939): Trailing Edge Flaps in relation to Take-off and Landing of Landplanes. By S. B. Gates. Pp. 31. 4s. 6d. net. No. 1711 (2072): A Successive Approximation Process for Solving Simultaneous Linear Equations. By J. Morris. Pp. 12. 2s. net. No. 1712 (2107): Full Scale and Model Porpoising Tests of the Singapore IIc. By W. G. A. Perring and J. L. Hutchinson. Pp. 26. 3s. 6d. net. No. 1713 (2087): Full Scale Tests of Slots and Flaps on a Heinkel He.64, with Special Reference to Landing. By J. E. Serby and H. B. Squire. Pp. 15. 2s. 6d. net. No. 1718 (2186): The Use of Dynamically Similar Models for Determining the Porpoising Characteristics of Seaplanes. By L. P. Coombes, W. G. A. Perring and L. Johnston. Pp. 14. 2s. 6d. net. No. 1719 (2146): Full Scale Tests of the Hendy Heck with an Appendix giving Pilot's Notes. By A. E. Woodward Nutt and P. A. Hufton. Pp. 18+2 plates. 3s. net. No. 1722 (2038): The Effect of a Reduction of Aileron Torsional Stiffness on the Flutter of a Model Wing. By V. M. Falkner, W. P. Jones and C. Scruton. Pp. 8. 1s. 3d. net. (London: H.M. Stationery Office.) [281]

### Other Countries

Commonwealth of Australia: Council for Scientific and Industrial Research. C.S.I.R.: Ten Years of Progress, 1926–1936. Pp. 67. (Melbourne: Government Printer.) [251]

Mikrochemie: Internationale Zeitschrift für deren Gesamtgebiet. Festschrift zum 80 Geburtstag von Prof. Dr. Hans Molisch. Pp. viii+454+1 plate. (Wien und Leipzig: Emil Haim und Co.) 28 gold marks. [281]

U.S. Department of the Interior: Office of Education. Leaflet No. 37: Physique of School Children. By Dr. James Frederick Rogers. Pp. 17. 5 cents. Bulletin, 1936, No. 9: Testing Practices of High School Teachers. By J. Murray Lee and David Segel. Pp. v+42. 10 cents. (Washington, D.C.: Government Printing Office.) [271]