

### The Night Sky in February

NEW moon occurs on Feb. 15d. 08h. 11m. U.T.; full moon does not occur this month. The following conjunctions with the Moon take place: Feb. 2d. 07h., Regulus  $1^{\circ}$  N.; Feb. 13d. 06h., Jupiter  $4^{\circ}$  S.; Feb. 13d. 07h., Saturn  $3^{\circ}$  S.; Feb. 18d. 11h., Venus  $7^{\circ}$  N.; Feb. 22d. 20h., Aldebaran  $0.2^{\circ}$  S.; Feb. 24d. 17h., Mars  $8^{\circ}$  N. Jupiter is in conjunction with Saturn on Feb. 18d. 15h., Jupiter  $0.2^{\circ}$  S.; this phenomenon occurs once every twenty years, and on this occasion the approach is unusually close, but conditions for observation are unfortunately not favourable. There is a total eclipse of the Sun on February 15, visible as a partial eclipse at Greenwich. The eclipse will be total along a track passing through southern France, northern Italy, the Balkans and parts of the U.S.S.R., where there will be a maximum duration of 2m. 45s. Seen from Greenwich, the partial eclipse begins before sunrise, attains its maximum phase of  $0.93$  at 7h. 42m., and ends at 8h. 47m. This is the largest eclipse to be seen from Greenwich since 1927 and until 1999. Mercury will be visible as an evening star during the first half of the month. Venus is an evening star, favourably placed for observation. Venus sets at 21h. 20m., 21h. 45m. and 21h. 50m. on February 1, 15 and 28, respectively, more than 4 hr. after the Sun. During the month its distance from the Earth decreases from 63 to 44 million miles, the visible portion of the apparent disk from  $0.499$  to  $0.315$ , and its stellar magnitude from  $-4.1$  to  $-4.3$ . Mars sets at 6h. 00m., 5h. 10m. and 4h. 25m. at the beginning, middle and end of the month, respectively. Mars is very conveniently situated for observation. It is at a distance of 80 million miles from the Earth on February 15, and its stellar magnitude is  $-0.1$ . Jupiter and Saturn are too close to the Sun for easy observation; they are only observable in the twilight before sunrise. Occultations of stars brighter than magnitude 6 are as follows, observations being made at Greenwich: Feb. 10d. 5h. 19.7m., 24 Sco. (*R*); Feb. 22d. 21h. 18.8m., 89 Tau. (*D*); Feb. 23d. 18h. 01.6m., 111 Tau. (*D*); Feb. 26d. 22h. 19.1m., 5 Cnc. (*D*). *D* and *R* refer to disappearance and reappearance, respectively.

### Announcements

DR. RUDOLF L. MÖSSBAUER has been awarded the 1960 Research Corporation Award by the California Institute of Technology and Research Corporation for his work on the production and detection of gamma rays. Dr. Mössbauer is at present on leave of absence at the California Institute of Technology from the Institute of Technical Physics, Munich.

AMONG the recent changes in administration and organization of the Akers Research Laboratory, Imperial Chemical Industries, the following appointments are announced: Dr. P. W. Brian, to become associate research manager of the Pharmaceutical Division and to be in general charge of the Laboratory; Dr. J. Chatt, to become group manager of the Heavy Organic Chemicals Division. Dr. Chatt will continue in charge of the Organic Chemistry Department.

THE Automatic Programming Information Centre, Brighton Technical College, is organizing a course in Algol 60 during April 5-6. Further information can be obtained from Richard Goodman, Automatic Programming Information Centre, Brighton Technical College.

THE annual general meeting of the Scottish Branch of Aslib is to be held at the National Engineering Laboratory, East Kilbride, on February 3. Further information can be obtained from the honorary treasurer, J. R. K. Pirie, M.E.R.L. (Aslib), East Kilbride, Glasgow.

THE Institute of Physics and the Physical Society is organizing a conference on "The Crystal Structures of Organic Compounds" in the Chemistry Department of the University of Glasgow during April 6-7. Further information can be obtained from the Secretary of the Institute of Physics and the Physical Society, 47 Belgrave Square, London, S.W.1.

THE Faraday Society is organizing an informal discussion on "Mechanisms of the Gas-Phase Reactions of the Halogens and their Compounds" at the Chemistry Department, University College, Cardiff, on March 28. The programme will be divided into two sections: (a) Oxidation processes; (b) reactions of elementary halogens. Further information can be obtained from Dr. J. H. Thomas, Chemistry Department, University College, Cathays Park, Cardiff.

A CONFERENCE is being organized by Research and Control Instruments, Ltd., on "X-ray Analytical Methods" at the Department of Geology, University of Manchester, during March 20-24. Further information can be obtained from the Conference Secretary, Research and Control Instruments, Ltd., Instrument House, 207 King's Cross Road, London, W.C.1.

THE Institution of Mechanical Engineers is organizing a symposium on "User Experience of Large-Scale Industrial Vacuum Plant" at the Institution during March 1-2. The symposium is being sponsored by the Joint British Committee for Vacuum Science and Technology. Further information can be obtained from the Secretary of the Institution of Mechanical Engineers, 1 Birdcage Walk, Westminster, London, S.W.1.

THE Department of Scientific and Industrial Research is organizing a two-day national conference on "Science and Industry—the Problem of Communication", which is to be held at the Brangwyn Hall, Swansea, during April 18-19. Further information can be obtained from the Press Officer, Central Office of Information, Park Place, Cardiff, or the Department of Scientific and Industrial Research Press Office, 5-11 Regent Street, London, S.W.1.

AN all-day meeting of the Welsh Soils Discussion Group will be held in the Department of Agricultural Chemistry, University College of North Wales, Deiniol Road, Bangor, on February 8, to consider "Glaciation in Wales as related to Soil Profile Development". Further information can be obtained from D. F. Ball, The Nature Conservancy, Penrhos Road, Bangor, Caernarvonshire, or James A. Taylor, Department of Geography, University College of Wales, Alexandra Road, Aberystwyth.

ERRATUM. We regret that the title of the communication by J. S. Machin and D. L. Deadmore in *Nature* of January 21, p. 223, is incorrect; it should read, "Thermal Stability of  $\text{TiOF}_2$ ". Throughout the text the formula ' $\text{TiOF}_2$ ' should be substituted for 'titanium dioxide', except where the latter is defined as anatase and in the third paragraph from the end.