

plane of the ecliptic—about 6° . On October 31 it made its closest approach to the earth, passing within 400,000 miles—the nearest approach of any minor planet. It reached perihelion about the middle of December, its distance from the sun being then 0.6 unit, that is, 56,000,000 miles. At present it is nearly 1 unit from the sun and about 1.5 units from the earth.

It is certain that no accurate determination of the time of revolution around the sun is possible from observations over four days, and it is very improbable that it will be seen at the next return, unless by a most fortunate coincidence. Dr. M. Davidson described his computation of the orbit of 1932 HA at the Royal Astronomical Society in May 1932, and predicted that other planets of a similar character, making close approaches to the earth, would be discovered. Since May 15, 1932, when this planet approached the earth within 7 million miles, Adonis came within $1\frac{1}{2}$ million miles in 1936, and now 1937 UB has made a closer approach than either. It is fairly safe to infer that there is a family of these small bodies, their diameter not exceeding 1–2 miles, the orbits of which lie well within the orbit of the earth, and that more of them will be discovered. Probably in the past the earth encountered many of them, but the craters formed, assuming that some of them struck the ground, not the ocean, have been obliterated in the vicissitudes of geological ages. It may be conjectured that our planet has swept up all that could possibly encounter it, for which reason a collision with one of these small bodies is an extremely remote possibility. It is hoped that some light will be thrown on problems of cosmogony through the study of these small planets.

The Night Sky in January

THE planets visible in the south-west sky in the evening are Mars and Saturn, and the approach of the former towards the latter will be noted, until, by February 2, Mars will have passed eastwards of Saturn. On January 20, Mercury is at greatest elongation (24° west) and may possibly be seen about 5° above the south-east horizon on that date at 7^h. In the middle of the month, Sirius souths at 23^h and is one of a conspicuous array of first magnitude stars to be seen southwards near the meridian. In order of apparent magnitude these stars are Sirius (-1.6^m), Capella (0.2^m), Rigel (0.3^m), Procyon (0.5^m), Betelgeuse (0.9^m , variable), Aldebaran (1.1^m) and Pollux (1.2^m). Two of these stars offer extreme examples of stellar densities. There is Betelgeuse, a super-giant star with a diameter of about 250 million miles, the average density of which is one-millionth that of water. In contrast, the companion of Procyon, an extremely dense white-dwarf star of planetary dimensions, has a mean density more than a million times that of water.

Announcements

PROF. NIELS BOHR, professor of physics in the University of Copenhagen, and Prof. Georges Denigès, formerly professor of biological chemistry in the

University of Bordeaux, have been elected *Correspondants* of the Sections of General Physics and Chemistry, respectively, of the Paris Academy of Sciences.

THE honorary membership of the Royal Asiatic Society has been conferred upon Prof. René Dussaud, Secrétaire perpétuel de l'Académie des Inscriptions et Belles Lettres et Conservateur honoraire des Musées Nationaux, Paris, in recognition of his eminent services to Semitic archaeology, history and epigraphy.

COLONEL W. B. PURDON, professor of hygiene at the Royal Army Medical College, is to be promoted Major-General and will take over the office of commandant and director of studies at the College in March. He will succeed Major-General W. P. MacArthur, who will assume the appointment of director-general of the Army Medical Service on that date. The new professor of hygiene will be Lieut.-Colonel D. I. Richardson, at present assistant director of hygiene, the War Office.

THE University of Basle has conferred honorary doctorates on Profs. Paul Karrer and Leopold Ruzicka, who hold the chairs of chemistry at the University and Polyclinic at Zurich respectively. The former has investigated the structure of vitamins A and B, and the latter the structure of the sterols including vitamin D and the sex hormones.

THE following appointments and promotions in the Colonial Service have recently been made: Colonial Forest Service: A. R. Barrie (Malaya), J. S. P. Beard (Trinidad), H. A. Douglas (Gold Coast), D. C. Duff (Gold Coast), E. S. Erskine (Malaya), D. B. Fanshawe (British Guiana), F. P. Graves (Malaya), J. H. Nelson Smith (British Guiana); E. Davies, inspector of produce, Nigeria; R. F. Innes, assistant agricultural chemist, Jamaica; B. C. King, chemist and petrologist, Uganda; D. Sturdy (agricultural officer), senior agricultural officer, Tanganyika; Capt. W. S. Aitken, senior veterinary officer, Uganda; Dr. J. Carmichael, senior veterinary research officer, Uganda; R. J. Simmons, senior veterinary officer, Uganda; J. R. V. Smyth, senior agricultural superintendent, Agricultural Chemists' Branch, Jamaica.

A LIST of whole-time awards for scientific research, other than professorships, offered by public and private bodies in Great Britain and Northern Ireland has recently been issued by the Royal Commission for the Exhibition of 1851 (1 Lowther Gardens, Exhibition Road, London, S.W.7. Price 1s.). The list comprises fellowships, studentships, scholarships, etc., classified into: (A) open awards offered by private and public bodies other than universities or colleges; (B) open awards offered by universities or colleges; (C) awards restricted to candidates from particular localities or institutions. Particulars concerning each award are given. The list contains much valuable information, and should be kept at hand by heads of research departments and institutions.