# Science in France

THE second issue of French Science News, published by the French Foreign Office and distributed by its Embassy in London, contains considerable information about major French scientific investigations and developments in science and technology. The main articles are concerned with developments in petrology and astronomy while, among pure research items, summaries of work are given on the fundamental theory of corpuscular systems and the concept of the centre of gravity; ultrasonic absorption and dispersion in polyatomic gases; paramagnetic ion relaxation; the production of tritium in thorium by protons of 135 MeV.; the spectra of conversion electrons and K and L Auger electrons resulting from the disintegration of thulium-170 to yttrium-170; the basic functions of definite symmetry for the wave-functions of a system of three identical particles; the absorption spectra of selenium and tellurium in ultra-violet light; the equilibrium diagrams of the zircon-oxygen systems of the rare earths; the reactions of the system calcium sulphide-vanadium pentoxide and the preparation and identification of sodium orthonitrates and orthonitrites. Accounts are also given of new developments in apparatus and equipment in various laboratories as well as in engineering. In medicine, details are given of the phosphodiuresis test provoked by parathormone, and the diagnosis of pseudo-hypoparathyroidism in the infant and the risk involved in radiological examinations. Other information includes particulars of new courses at higher education centres, recent books and awards to outstanding men of science. The journal would be considerably improved if the final editing were entrusted to a French-speaking English-born man of science. M. Jean Rostand might then have enjoyed even more his International Kalinga Prize "for scientific Vulgarization . . . for the entirety of his work".

### Introducing Pedology

MARIAN RAY, of 36 Villiers Avenue, Surbiton. Surrey, has provided an admirable series of filmstrips showing the origin, composition and use of soil. There are five strips in the series, each of which could form the basis of a lesson to scholars taking the Ordinary Level General Certificate of Education examination in biology, or agricultural students at farm institutes. The first, "Rocks and Erosion" describes the main types of rocks and the action of weathering ; the second, "Plants and Decay", is concerned with the elements of plant nutrition and their re-circulation. "Soil Profiles" shows how soil formation is influenced by climate, animals and "Soil Composition" describes the topography; physical and chemical bases of soil; while "Soil and Farming" includes such varied topics as soil erosion, pests and diseases, the effects of teaching crop rotation, the effects of fertilizers, farm machinery and different types of British farming. Each strip is in colour and supported by a booklet with concise text and a short bibliography.

### U.K. Population Statistics

THE Registrar General's Quarterly Return for the second quarter of 1960 was published in October. The usual periodical returns show a continuation of the relatively high birth-rate, and it is likely that births in 1960 will exceed the figure of 750,000 regis-

tered in 1959 and will be higher than in any year since 1948. Stillbirth and infant mortality-rates continue to decline, and are lower than in any previous corresponding quarter. It is noteworthy that the already low rates have been reduced by 25 per cent during the 1950's. The Return contains an abridged life table for 1957-59, showing an expectation of life at birth of 68.0 years for men and 73.7 for women. The high excess of deaths among males continues, and at ages 55-65 male death-rates were approximately double those of females of the same age. Another table shows the number of years of working life lost per 10,000 population. Among males, cancer, accidents and coronary disease accounted for 40 per cent of the loss; among females, the three most important causes were cancer, bronchitis, and important causes were cancer, pneumonia and other cardiac diseases (No. 446. Pp. 28. London: H.M. Stationery Office, 1960. 2s. net).

## Quarterly Journal of the Royal Astronomical Society

THE Monthly Notices of the Royal Astronomical Society has hitherto contained both original papers and material primarily concerned with the affairs of the Society. The increasingly specialized character and growing quantity of papers being published in the Monthly Notices has led to the appearance of the new Quarterly Journal (1, No. 1 (September 1960). Double issue. Pp. 128. 24s.; Annual subscription 40s.; 6 dollars. Single issues 12s.; 1.80 dollars. (London: Royal Astronomical Society.) It will contain all that was in Monthly 1960). Notices other than the original papers. Presidential addresses, George Darwin lectures, reports of observatories, and Council notes will be included, together with articles of the type previously appearing in Occasional Notes. The latter publication has been terminated. Monthly Notices will in future contain only original research papers. The new journal will appear in future in March, June, September and December each year; but, for technical reasons, two double issues are being published in 1960. It will be sent to all subscribers to Monthly Notices and to all Fellows of the Society, and will be on sale to others at £2 per annum. The contents of the first issue, dated September 1960, include an address by Prof. R. O. Redman on the work of the Cambridge Observatories, and articles by Prof. F. Hoyle on the origin of the solar nebula and by Dr. B. E. J. Pagel on the surfaces of stars.

#### The Transvaal Museum, Pretoria

THE report of the Trustees of the Transvaal Museum, Pretoria, for the year ended March 31, 1960, again refers to the shortage of work, storage and exhibition space which prevents the Museum from exercising its proper function to the community (Pp. 46. Pretoria: Transvaal Museum, 1960). The imposition of an entrance fee of 1s. led to a decrease of about one-third in the total attendance. On the other hand, it has eliminated the disinterested and undesirable visitor who formerly used the Museum as a rest-house and caused much trouble. Two major expeditions to the Gobabeb area of the Namib Desert and Somalia have been organized during the year. The former was made possible by a generous private donation and produced much material and information concerning life under extreme desert conditions.