

articles in English, French or German (*Journal of Nuclear Science and Technology*, Vol. 1, No. 1; April 1964. Pp. 1-36. Annual subscriptions (for non-members, postage covered): Vol. 1, Nos. 1-9 (1964), 8 U.S. dollars. Vol. 2, Nos. 1-12 (1965), 10 U.S. dollars. Single numbers 1 U.S. dollar each. Tokyo: Atomic Energy Society of Japan, 1964). The first issue, entirely in English, contains five original contributions and one short note, together with synopses of reports published in the Japanese journal (Vol. 6, Nos. 1-3; January-March, 1964). Contributions are invited from authors in countries other than Japan, particularly from scientists in Asia and Africa, but it is expressly requested that contributors should avoid duplication by not submitting material which is available elsewhere.

### Canadian Journal of Earth Sciences

THE National Research Council of Canada has announced the establishment of a new journal, the *Canadian Journal of Earth Sciences*, which is to be devoted to the publication of research in geology, geochemistry, geophysics, pedology, soil mechanics, glaciology and other branches of earth science. Articles may be written in English or French. Both papers and notes will be acceptable and equal consideration will be given to all manuscripts, regardless of the author's country of origin. The journal will be issued bi-monthly commencing in August, 1964. Volume 1 (three dollars) will cover August-December 1964, and Volume 2 (six dollars) the calendar year 1965.

### The Geological Basis of Canadian Landforms

FROM the flood of topographic maps issued in recent years by the Department of Mines and Technical Services in Ottawa, a selection of 42 sheets has been published by the Geological Survey of Canada to assist universities and schools in demonstrating the relationship of landforms to geology. The maps are on various scales from 1 : 25,000 to 1 : 1,000,000, and they illustrate the several methods at present used to depict relief. An explanatory handbook has been prepared (Canada: Department of Mines and Technical Surveys. Geological Survey of Canada. Paper 64-21: *Geology and Landforms as Illustrated by Selected Canadian Topographic Maps*. By David M. Baird. Pp. vi + 59. Ottawa: Queen's Printer, 1964. 35 cents), in which each sheet is briefly described and the noteworthy landforms listed; and the bound folio of maps, price 11.50 dollars, can be obtained from the Map Distribution Office, Surveys and Mapping Branch, Department of Mines and Technical Services, Ottawa. This useful collection of topographic maps produced for teachers and students of physiography could with advantage to their geological colleagues be followed by a comparable folio of geological sheets selected to provide typical representation of sub-surface structures.

### Palaeontology in the U.S.S.R.

IMPORTANT additions have recently been made to the well-documented and well-presented publications of the Palaeontological Institute of the Academy of Sciences, U.S.S.R. (*Nature*, 197, 854; 199, 1139; 1963). Recent volumes of the *Transactions of the Palaeontological Institute* are: 92, "Productids of the Kazanian Stage of the Russian Platform and Conditions during their Existence", by A. D. Grigorjeva (1962); 93, "Archaeocyathids and Algae of Cambrian Age in the Baikal Highlands", by A. G. Vologdin (1962); 94, "Rhiscodont Crossopterygian Fishes of the Devonian Period of the U.S.S.R.", by E. I. Vorobieva (1962); 95, "Brachiopods and the Palaeogeography of the Carboniferous in the Kuznetzk Basin", by T. G. Syracheva, A. N. Sokolskaya, G. A. Besnosova and S. V. Maksimova (1963); 96, "Bivalve Molluscs of the Quaternary Marine Deposits of the Black Sea Basin", by L. A. Nevesskaya (1963). The latest volumes of the *Principles of Palaeontology (Osnovy Paleontologii)*, prepared

under the general editorship of Y. A. Orlov, include *Algae, Fungi, Bryophyta and Pteridophyta*, which is edited by V. A. Vakhrameev, G. P. Radchenko and A. L. Takhtadzhan, and written by a number of authors (Pp. 616 + 34 plates, 198 text-figs. 1963. Price 5 r.), and *Gymnospermae, Angiospermae*, which is also edited by A. L. Takhtadzhan, V. A. Vakhrameev and G. P. Radchenko, and written by a number of authors (Pp. 647 + 68 plates, 627 text-figs. 1963. Price 4r. 17k.).

### The Microscope in Living Biology

VOLUME 83, Parts 1 and 2, 1964, of the *Journal of the Royal Microscopical Society* celebrates the "Tercentenary of the Microscope in Living Biology" and also the first meeting of the Society ever held outside Great Britain, the president being Dr. V. E. Coslett. Prefaced by messages from the Society's Patron, Her Majesty the Queen, and from the late President of the United States, John Kennedy, this issue of the *Journal* contains 32 articles on various aspects of microscopical techniques that are nowadays used in biological investigations, among which are articles on spot television microscopy, fluorescence, phase-contrast, electron and ultra-violet microscopy, together with five articles on the use of the microscope for the study of the living circulation. There are also articles on the history of microscopy and on radiographic techniques and methods for the negative-staining of viruses and biological structures.

### The Rubber Research Institute of Malaya

THE economic competition between natural rubber and synthetic rubbers is now traditional, but the advent of the new 'stereo-rubbers' has sharply demonstrated that natural rubber must be produced at an increasingly competitive price if it is to withstand this latest challenge. Present signs are that the natural rubber producers are well aware of this challenge and are taking steps to meet it. The publication of the latest investigations of the Rubber Research Institute of Malaya, Kuala Lumpur (*Journal*, 18, Parts 2 and 3; 1964), shows how 'plantation technology' is being developed at the Institute's Experimental Station. The effects of inorganic fertilizers on the growth of rubber seedlings, the effects of leguminous creepers as cover plants between rows of rubber trees and the necessity for improving plantation productivity if viability is to be maintained during periods of low rubber prices, are all reported in these issues of the *Journal*. Clearly, synthetic rubber manufacturers can no longer claim any sort of monopoly in scientific or technological research and this can only result in an exciting future for both processors and consumers of elastomers.

### Student Failure Rates

A BIBLIOGRAPHICAL review, entitled "Student Failure in Australian Universities", is contributed to *Vestes* for March (8, No. 1; 1964) by Naomi Caiden. Almost 170 references are collected from published sources and the material is briefly discussed in sections dealing, successively, with the pass rate; studies in selection (including matriculation, intelligence tests, objective scholastic performance tests, accrediting, and personality tests); studies of social factors, such as educational background, social and economic background, case studies and counselling; and studies of improvements within the university. The same issue of *Vestes* includes a note on failure rates and quotas by J. J. Broe.

### University News :

#### Birmingham

THE title of professor of experimental neuropharmacology has been conferred on Dr. P. B. Bradley, at present reader in neuropharmacology and head of the Department of Experimental Neuropharmacology. Dr. Bradley has specialized in the use of microelectrodes to detect electrical discharges from single nerve cells in the brain, especially