

Earth science

Geology, Resources and Society: An Introduction to Earth Science. By H. W. Menard. Pp. xi+621. (A Series of Books in Geology.) (Freeman: San Francisco and Reading, May 1974.) £6.10.

FROM the days of Lyell to those of Arthur Holmes and Jim Gilluly students of geology have been fortunate in the number of outstanding geologists who have taken on the task of preparing textbooks on their subject. To a remarkable degree a few textbooks of the first rank have contributed to the way geology has evolved, setting a pattern of thought which was to persist for several decades.

Menard states in his preface that he is aiming this book at students who are not majoring in the earth sciences. In other words this is a professional's textbook aimed at a wider audience and one which, in my opinion, may well become a guideline for those who

are attempting to integrate various branches of the earth sciences using the term in its widest sense.

Menard's approach is to provide readable syntheses on four or five fundamental divisions of each science, giving himself enough elbow room to treat the essentials but not so much as to become involved in detail. In succession he takes up the subjects of the planet Earth, its deformation, the atmosphere and hydrosphere, and the manner in which these react with the solid rock, first to render it unstable and to weather it and then to produce the sediments. Along the way he includes a brief section on volcanism and concludes with some 80 pages on water, fuels and mineral resources. He follows Holmes rather than Lyell in treating the Earth as a machine and making this, not the stratigraphical record, the link-pin of his arguments. I think he is particularly successful in conveying a sense of proportion and of the relative importance of phenomena. When discussing the circulation

of water, for example, he points out what a minute fraction is to be found at any one time in rivers and in the atmosphere; only 0.001% of all the Earth's water is in the air. Menard describes the circulation of solid rock, of sediments, air and water as we understand these matters today. His text would provide an excellent basis for any course dealing with the physical environment.

The title indicates Menard's wider interests. These emerge repeatedly through the book, but apart from the chapter on resources amounting to less than 10% of the whole, and the section on engineering problems caused by unstable ground, no extended portion of the text is devoted to them, though Menard does his best to emphasise their importance in the approach he adopts throughout the volume. It is difficult to see how he could have done more. He has been remarkably successful in his syntheses which in my mind constitute the main virtue of this book.

J. SURTON

obituary

Alfred E. Mirsky

PROFESSOR ALFRED E. MIRSKY, who first isolated and characterised genetic material from mammalian cells, died on June 19, 1974. He was 73.

Born in New York, he gained his PhD from the University of Cambridge in 1926 and returned to the Rockefeller University in 1927. He became a professor there in 1954 and retired in 1971.

Sir Frederick Brundrett

SIR FREDERICK BRUNDRETT, KCB, KBE, former Scientific Adviser to the Minister of Defence, died on August 1, 1974. He was 79.

After attending the University of Cambridge, he joined the wireless

branch of the Royal Naval Volunteer Reserve in 1916. He became Chief of the Royal Naval Scientific Service in 1946, and was appointed Deputy Scientific Adviser to the Minister of Defence in 1950. In 1954 he became Scientific Adviser and Chairman of the Defence Research Policy Committee.

Gertrude E. Perlmann

PROFESSOR GERTRUDE E. PERLMANN, an authority on protein chemistry, died on September 9, 1974. She was 62.

After receiving her DSc, from the German University of Prague, she joined the Biological Institute of the Carlsberg Foundation. She undertook research at the Harvard Medical School from 1939 to 1946, becoming a full

professor in 1973. She was noted for her research on the structure of pepsin.

Sir Francis Knowles

PROFESSOR SIR FRANCIS KNOWLES, Bt, FRS, the neuroendocrinologist, died on July 13, 1974. He was 59.

Educated at the University of Oxford, he carried out pioneering work into the structure of neurosecretory systems. In 1958, he went to the Department of Anatomy of the University of Birmingham, becoming Reader in 1963 and Professor of Comparative Endocrinology in 1967. Later that year he was appointed Professor of Anatomy at the University of London and Head of Anatomy at King's College, London.

Announcements

Award

The A. T. Shousha Foundation Medal and Prize for 1974 has been awarded posthumously to Mohamed Taieb Hachicha.

Appointment

Piero Sensi has been elected president of the Societa Italiana Scienze Farmaceutiche.

Miscellaneous

The Harkness Fellowships for study and travel in the United States—1975. Candidacy is open to men and women (between 21 and 30 years of age on September 1, 1975) in any profession or field of study provided both their secondary and further education (or equivalent professional experience in lieu of further education) have been wholly or mainly in the United Kingdom. For application forms or further

information write to The Harkness Fellowships (UK), Harkness House, 38 Upper Brook Street, London W1Y 1PE.

Gottlieb-Duttweiler Prize for the promotion of nutritional sciences. Applications are invited from scientists with outstanding achievements in the field of nutrition research. Applications should be sent by December 31, 1974 to Green Meadow Foundation, c/o Institute for Nutrition Research, Seestrasse 72, CH-8803 Rueschlikon, Switzerland.