

variability are covered in some detail, as are facies relations. The lithology of every unit is discussed in some detail. Complete references are provided for each stratigraphic unit. The fossils known from each unit are listed and critically evaluated for their age significance. The English is very readable. The alphabetical list of references is the most complete available for Vietnam, including both Vietnamese and foreign publications. An index of the stratigraphic units is provided. An index of geographic and geologist's names is also provided, as well as a detailed table of contents.

Both Editors are experienced, senior geologist-biostratigraphers, with wide experience in both field and laboratory dealing with the stratigraphic geology of Vietnam. The book covers the varied structural relations of the stratigraphic units, as well as their relations to overlying and underlying units. The material is organized into seven chapters: Sedimentary Basins of Viet Nam; Precambrian; Lower Paleozoic (Cambrian through Silurian); Middle Paleozoic (Devonian); Upper Paleozoic (Carboniferous and Permian); Mesozoic; and Cenozoic; within each of these chapters the material is arranged stratigraphically for each region into which the nation is divided. Useful, coloured index maps covering the Precambrian through Tertiary, eight in number, are provided. For anyone unfamiliar with the geology of Vietnam these various aids provide easy entry to the stratigraphic geology of the country. The printing is clear and well organized.

Arthur J. Boucot

BOWDEN, A. J., BUREK, C. V. & WILDING, R. 2005. *History of Palaeobotany. Selected Essays*. Geological Society Special Publication no. 241. v + 304 pp. London, Bath: Geological Society of London. Price £80.00, US \$144.00; GSL members' price £40.00, US \$72.00; AAPG/SEPM/GSA/RAS/EFG/PESGB members' price £48.00, US \$87.00 (hard covers). ISBN 1 86239 174 2. doi:10.1017/S0016756807003214

There are few volumes on the history of palaeobotany. The most important in recent years was Henry Andrews' *The Fossil Hunters*. This was far from a complete history and is in need of revision. There is still considerable interest in the topic as can be evidenced by this Geological Society Special Publication. The mix of papers within this volume reflects the diversity of authors and the quality varies; some of the papers are scholarly analyses whilst others consist mainly of historical documents.

There are 18 papers in this volume which includes an interesting paper by Torrens, himself not a palaeobotanist, on Henry Steinhauer, showing that he was a much neglected figure and that he was the first to use Linnean nomenclature for fossil plants. Torrens has done a great service in highlighting Steinhauer's work. Cleal and others take a different approach from normal considering the illustrations and illustrators of fossil plants. This is a useful addition to the literature.

Other papers consider individuals from Hugh Miller to Marie Stopes and others, or 'schools' such as at Glasgow, Manchester and Sheffield. Many others might have been included but this needs people and time to write the articles and in the days of the RAE this is not always possible. Whilst most of the articles concern European palaeobotanists there are two articles on the history of palaeobotany in Argentina and China.

This is an unusual book, being selected essays, and I am not sure many individuals will buy it but I hope it is taken by

libraries to be a future valuable resource for those interested in the history of science.

Andrew C. Scott

Reference

ANDREWS, H. N. 1980. *The Fossil Hunters*. Ithaca: Cornell University Press.

SELINUS, O., ALLOWAY, B., CENTENO, J. A., FINKELMAN, R. B., FUGE, R., LINDH, U. & SMEDLEY, P. (eds) 2005. *Essentials of Medical Geology. Impacts of the Natural Environment on Public Health*. xiv + 812 pp. Amsterdam: Elsevier. Price £59.99 (hard covers). ISBN 0 12 636341 2. doi:10.1017/S0016756806002305

With fears of pandemic diseases at a time when general public health is at an all-time high in the developed world, it is easy to overlook the influence of the surrounding, inorganic environment on peoples' health. Were you to live on the lower floodplains of the Ganges or Brahmaputra rivers, in West Bengal or Bangladesh, that influence would be all too apparent. In the interest of reducing endemic poor health resulting from waterborne pathogens, there has been a huge programme of well-sinking to tap abundant, biologically clean groundwater since the 1970s. By the mid-1980s it had become clear that a completely unexpected case of 'out of the frying pan into the fire' had emerged. Villagers began to present the classic symptoms of chronic arsenic poisoning: horny lesions on hands and feet (keratoses) and dark spots on the rest of the body (now termed 'the Devil's rain' by many Bangladeshis). A combination of the geological evolution of the river sediments and simple geochemical reactions had led to what the World Health Organization claimed to be the greatest case of mass poisoning in human history.

The arsenic tragedy in the northeast of Peninsular India re-emphasized that where we live bears on our health. Arsenic poisoning has been a risk in areas of metal mining, particularly for sulphide ores and gold, known for centuries. Equally, deficiencies in essential trace elements were long recognized as causes of several physical ailments, such as goitre from too little iodine in the diet, generally in areas distant from the sea that do not receive wind-blown sea salt dissolved in rainwater. In fact there is a host of geochemically induced ailments, and others that stem from the mineralogy of local rocks, such as cancers associated with inhalation of asbestiform minerals. Although clinicians have been increasingly concerned with environmental health threats, only recently have their ranks been joined by geoscientists, in an internationally organized way. In 2000 UNESCO set up IGCP 454 Medical Geology, to be followed by the International Medical Geology Association, one of the driving forces for these initiatives being Olle Selinus of the Swedish Geological Survey, Editor-in-Chief of *Medical Geology*.

At £60 in hardback, the book runs to more than 800 pages, printed in full colour and is good value on that score. It opens with a full treatment of the biological role of the elements – chemical aspects of uptake and response – and their natural and anthropogenic sources in eight chapters. That is essential reading for environmental geochemists, to supplement empirical relationships between exposure and symptoms gathered from field studies.

Section II examines the various pathways through geological and geochemical systems, *en route* to ingestion