

packstone and this fact is confirmed by the accompanying text. Thankfully I found the text elsewhere to be clearly written and accurate.

The final part of a reviewer's job is to assess how this new text compares with previously published atlases on carbonate petrography. The classic text in this field is the American Association of Petroleum Geologists' Memoir 27: 'Colour illustrated guide to carbonate rock constituents, textures, cements and porosities' edited by P. Scholle. This was published over 20 years ago, but is still in print and is amazingly good value at £17, with a hard cover. The main differences between the two books are the high quality of the images in Adams and MacKenzie and the greater range of non-skeletal grain types illustrated. However, Scholle's Memoir 27 has the useful addition of a greater range of bioclasts, the illustration of ancient and modern examples and the use of SEM micrographs which are not used in Adams and MacKenzie.

Dolomites, dedolomites and evaporite replacements get more or less the same treatment in both texts but Adams and MacKenzie have a more comprehensive treatment of other diagenetic textures and have the benefit of cathodoluminescence micrographs. In summary the cost and breadth of treatment in Memoir 27 still make it a good buy, but the quality of illustration and the accompanying text in Adams and MacKenzie perhaps make it worth paying the extra £7. For those who already have Scholle's memoir on the shelf, it is well worth hanging on to. For those requiring more detail on different fossil groups, then Horowitz and Potter ('Petrography of Fossils') is still the best atlas with good quality black and white photomicrographs but this is no longer listed by Springer Verlag.

Finally this seems a good subject for a well indexed CD-ROM and I look forward to a digital version for student use in the future.

D. BOSENCE

The Photo Atlas of Minerals. (on CD-ROM) Los Angeles County Museum of Natural History Foundation. Price US \$49.95 + \$9.95 for latest upgrade (+ \$7.50 shipping)

Many geologists are first attracted to the subject by the sight of stunning mineral specimens in books and museums. The 'photogenic' aspect of amateur geology is an important influence on all

earth scientists at some point in their formative years. The Photo-Atlas of Minerals is a CD-ROM format pictorial reference of minerals, which centres on a database of 800 images of mineral samples. There are data entries for some 3600 other minerals for which there are no photographs. The CD is PC-based, compatible with Windows 3.1 or higher, and easy to use. The CD-ROM contains the database, a glossary of mineralogical terms (relevant to hand specimens), an identification game and a slide show. Hypertext linking allows unfamiliar terms to be explained effortlessly.

The images chosen are all impressive and pleasing but (unfortunate to my professional eye) lack scale. A large variety of minerals is included. Some mineral groups are explained (such as feldspar) and this is helpful. The feldspar page gives the main end-members which can then be hypertext linked. However, others are puzzlingly absent – I could not find entries for pyroxene, amphibole or garnet, for which only the names for end-members are present. Variety names are also absent; e.g. the image shown for 'microcline' is described as amazonite, but amazonite itself is not an entry in the database. Each mineral usually has a selection of images, allowing a fuller appreciation of the variability in natural samples.

The database can be searched against several specific criteria, such as hardness, density etc., and cross referencing of these searches can be used for basic mineral identification. However I would not recommend it as an identification tool since the criteria are quite prescriptive and inflexible. An identification game, common to many CD-ROM packages, is included, but is of limited use. The images rarely truly represent mineral lustres and so the ID game becomes largely guesswork. I have to admit that in four attempts I did not get a single mineral correct!

As a teaching tool, this CD-ROM would have limited use. The glossary is helpful and the photogenic nature of the images is a key attraction in a subject that can appear staid and dry. However, the absence of key terms such as pyroxene and amphibole makes it of little use and the ID game would serve only to demoralise less confident students.

The Photo-Atlas is aimed at the amateur market and fills an important niche – its contribution lies in fostering the subject among the general public and inspiring the earth scientists of future years.

A.A. FINCH