advertisements — its contents are strictly down to earth. As well as research articles, it features good, short reviews, technical notes, and reviews of books, meetings and workshops. The format and layout are good. The illustrations are clear and all the print can be read without using a magnifying glass. No issues I've seen contain coloured photographs — perhaps for economy — but surprisingly this does not appear to be an obvious defect.

As might be expected of such a new, international journal, the papers published to date have been of variable quality. Most are of interest, nonetheless, and the short reviews are useful reference works. The speed of publication of papers after receipt averages about five months, which is fairly typical for many journals of this type. There are no sections for correspondence or editorials: because the field is advancing fast, both may become desirable.

This is a practical and valuable publication for those working with animal cells in many areas. As cells are used increasingly to search for and produce useful biologically active molecules, more people will be reading *Cytotechnology*. □

W.R. Arathoon is in the Department of Cell Culture Research and Development, Genentech, Inc., 460 Point San Bruno Boulevard, South San Francisco, California 94080, USA.

Light thickens

Bob Ford

Journal of Photochemistry and Photobiology B: Biology. Editor-in-chief G. Jori. *Elsevier Sequoia. 12/yr. SwFr. 900.*

THIS new journal has been created through the efforts of the European Society of Photobiology after unfruitful negotiations to share the established journal of the American Society for Photobiology (*Photochemistry and Photobiology*). The undaunted Europeans decided to join up with the old *Journal of Photochemistry*, which was renamed (apparently by committee) and split into two sections, *Chemistry (A)* and *Biology (B)*.

The scope extends to any biological phenomenon involving light. Thus in the first few issues one can find several excellent articles which illustrate the journal's wide potential. These include assessment of the use of light to treat neonatal jaundice; new data on the ultra-fast kinetics of photosynthetic energy conversion; studies on the adaptation of microorganisms to changing light regimes; predictions of the effect of the ozone hole on skin cancer; and a delightful description of the restoration of art works in the Brancacci Chapel in Florence using reflectance spectroscopy as a guide. Here is a healthy mix of articles, mostly of a high standard of presentation and of fairly wide importance.

There are, however, troubles ahead if the average handling time of papers is not reduced. Currently the delay seems to be approaching eleven to twelve months from the submission of the article to its publication. Naturally, authors who think their data is of burning importance will be tempted to go elsewhere. The problem is that the journal has been a victim of its own success — the editors have been flooded with manuscripts, leading to a long queue of accepted papers waiting for a space. The editorial board are attempting to improve matters by expanding the current volume and have negotiated a doubling of the number of issues per year to twelve.

Why should there be such a demand for an outlet in this area? One reason is that photobiology has been relatively poorly served by journals, with *Photochemistry and Photobiology* traditionally dominating the field. Also, the expanding interface between photochemistry and medicine has not, as yet, been fully explored by publishers. For instance, the development of phototherapy for the treatment of certain cancers is perhaps the most rapidly growing area of photobiology at the moment.

The new journal does cater for the more rapid dissemination of information in a News and Views section where current results can be discussed informally. This section is novel and interesting, giving the journal a refreshingly open feel in allowing the public exchange of views between contributors. In addition there are the longer invited review articles, the fully refereed research papers, an occasional book review and space for the newsletter of the society.

In general the reproduction quality is good, but the uninteresting cover design, small size and overlong name of the journal may put off the browsing reader. A further drawback is that librarians may be undecided as to its correct location. Should it go next to its sister publication in the chemistry library, or with biology and medicine? I would strongly recommend the latter — in my experience, biologists and medics rarely stray into chemistry libraries.

The journal is certainly not cheap, but with the recent agreement by the publishers to double the number of issues per year, it seems to be in good shape and looks likely to prosper. □

Bob Ford is in the Department of Biophysical Chemistry, Biozentrum, University of Basel, Klingelbergstrasse 70, CH-4056 Basel, Switzerland.

Bottom lines

Peter D. Moore

Journal of Paleolimnology. Editor John P. Smol. *Kluwer. 6/yr. Dfl.476, United States $223 (institutional); Dfl.230, US $108 (individual).*

How can one define palaeolimnology (or paleolimnology if you come from the other side of the pond)? The subject is the study of ancient lake sediments, but there are researchers who analyse such sediments without strictly deserving the title palaeolimnologists. There are palynologists, for example, who extract fossil pollen grains preserved in the sediments in order to reconstruct vegetation history within the lake catchment and beyond. They use the fact that sediments are chronologically stratified to provide a time sequence for their work, but they are not usually specifically concerned with the history and development of the lake. The palaeolimnologist is more interested in autochthonous rather than allochthonous fossils, in the story of the lake rather than its catchment.

This new journal therefore does not deal with general environmental history. Rather it contains papers on lake levels, diatoms, chrysophytes, crustacea, caddis flies and chydorids, all of which provide information on the history of a particular lake. Some articles cover research techniques that have implications for catchment history. The inwash of clastics and

journal of paleolimnology

the accumulation of heavy metals, for example, provide a link between aquatic and terrestrial palaeoecology. Biogeographers may also need to turn to palaeolimnology to solve some of their problems, such as questions of endemicity in fish (gobies from Japanese lakes find their way into the journal). Papers on techniques for the recovery of sediment cores from lakes and for the preparation of fossils from the sediments are also evidently acceptable.

Paleolimnology thus has a specialist niche to itself and has avoided an excessive intake of palaeoenvironmental papers for which there are many alternative publication media. Such specialization has advantages in terms of reduced competition from other journals, but it also has the disadvantage of a restricted market. One can only guess about the long-term success of this strategy, but I feel that the distinctive flavour of *Paleolimnology* should appeal to enough researchers to ensure its continued viability. □

Peter D. Moore is in the Division of Biosphere Sciences, King's College London, Campden Hill Road, London W8 7AH, UK.