

Furthermore, the journal is taking the bold step of supporting electronic submission and the review of manuscripts by electronic mail. E-mail is a concept whose time has come, promising to reduce the time and costs associated with the editorial process. There will be glitches of course, but ultimately we will all be grateful to those who force us to make use of this efficient new technology.

Despite my concern about the continuing proliferation of new journals, I am confident that *Redox Report* will succeed. I hope it retains its refreshing personality in the process. □

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## Science and art of biomolecules

Colin Blake

**Acta Crystallographica Section D: Biological Crystallography.** Editor-in-chief J. P. Glusker. *Munksgaard*. 6/yr. Dkr1,985 (institutional); Dkr550 (personal).

**Nature Structural Biology.** Editor Guy Rid-dihough. *Nature Publishing, New York*. 12/yr. \$495, £300 (institutional); \$195, £125 (personal).

**Chemistry and Biology.** Editors Stuart L. Schreiber and K. C. Nicolaou. *Current Biology*. 12/yr. \$480 (institutional); \$120 (personal); \$60 (student).

OF the twin poles of biomolecular science, what we now call molecular biology and structural biology, the latter is a particularly multidisciplinary field bedevilled by a widespread literature. These three journals represent a reasonably orthodox selection of the important part of this literature. Two are the offshoots of long-established journals that have expanded recently into specialized areas to cover the burgeoning field of structural biology, and one is entirely new, devoted to "crossing the boundaries" between medicinal chemistry and the biomolecular sciences.

*Acta Crystallographica* was established nearly 50 years ago to focus international discussion on the problems of crystallography. At the time, crystallography dealt almost entirely with 'small' molecules, but even the first volume had a short paper on myoglobin. So the appearance now of *Section D* of *Acta*, subtitled *Biological Crystallography*, seems rather late in the day. Virtually unchanged in format from that adopted by *Acta* since its inception, *Section D* has the austere look of the essentially technical journal that it is. Having decided to seek its readership through the quality of its contents rather

than glossy display, its one concession to modern times is a sprinkling of discreet colour plates. *Section D* deals mainly with full research papers and contains a few short communications and an occasional editorial article or review. The papers are mostly devoted to the technical development of biological crystallography as a branch of applied physics and to the results thereby obtained. The quality of this literature is high and the expectation is that any significant advance in X-ray techniques will appear first in *Section D*. To that extent, the journal accurately plots the technical advance of what is still the most powerful tool in structural biology. A particular highlight of *Section D* is the proceedings of key conferences, published as a complete series of full-sized refereed research papers. Those on direct methods and crystallization of biological macromolecules are essential reading for those in the field. In keeping with the image of *Acta*, *Section D* is expensive, and publication is slow (6 months on average), but it is a uniquely valuable publication.

Despite the merits of *Section D*, one has to turn elsewhere for the latest results and the biological context of structural analyses. This 'elsewhere' could be any of half-a-dozen journals, but one of the first places to look would be *Nature Structural Biology*. Splitting off two years ago from *Nature* to provide space for the increasing number of papers in structural biology, it has created a lively and handsome home for some of the most important recent papers in structural biology. It has a *Nature*-like format of 'Editorial', 'News and Views', 'Reviews' and 'Correspondence' sections, followed by 7-8 full original contributions. The lavish use of colour is a particular advantage in getting the structural information across. The journal is, however, in competition with other established periodicals, even possibly from within its own stable. Its News and Views articles on the striking horseshoe ribonuclease inhibitor and the DNA gripper transcription factor refer to their original publication in *Nature*: either *Nature* has greater drawing power for the very best papers or it exercises preferential rights over its junior. Nevertheless, with a time of 2-3 months from submission to acceptance, an offer of free colour illustrations, a modest cost and the *Nature* prestige, *Nature Structural Biology* attracts many good research papers, making it one of the few really essential journals in structural biology.

Finally *Chemistry and Biology*. First published a year ago, it has the stated aim of promoting a chemical approach to understanding the biomolecules revealed by structural and molecular biology. The approach is by way of medicinal chemistry, so toxicity, disease and structure-based drug design loom large among the topics covered. In design, the journal is close to its stable companion *Structure*, a competi-

tor of *Nature Structural Biology*. It begins with a review ('Crosstalk'), intended to provoke, and this is followed by reviews and mini-reviews and 4-6 full research papers. Colour is fairly widespread but appears mostly in cartoons and modelled structures: the thrust of the journal is on the use and understanding of biological structures rather than on their experimental determination. This emphasis can make the science seem a little soft at times, particularly in comparison with *Acta*, and sometimes the artwork seems to take over the science. On the other hand, the understanding and exploitation of biomolecules can be rightly claimed to constitute the most challenging area of biomolecular science, and *Chemistry and Biology* may provide an important focus for capitalizing on the enormous investment being made in structural and molecular biology. Offering almost instantaneous publication at a relatively low cost, *Chemistry and Biology* deserves to do well. □

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## Fusion science?

John Armstrong

**Molecular Membrane Biology.** Managing editor Jack A. Lucy. *Taylor and Francis*. 4/yr. £97, \$160 (institutional); £49, \$80 (personal).

THE operative question today for any new journal is not "Should your library take it?" but "Which journal should you drop in its favour?". In this respect *Molecular Membrane Biology* is off to a good start, because it is a reincarnation of *Membrane*

IMAGE  
UNAVAILABLE  
FOR COPYRIGHT  
REASONS

Membrane system: electron micrograph of rough endoplasmic reticulum.