Polymers, Pure and Applied

Paul Calvert

Polymer Bulletin. Editors H.-J. Cantow *et al.* 24/yr in 2 vols. (Springer-Verlag.) DM256. *Polymer Testing*. Editor R. Brown. 4/yr. (Applied Science, Barking, UK.) £43. *Polymer Degradation and Stability*. Editor N. Grassie. 6/yr. (Applied Science, Barking, UK.) £69.

POLYMER science has been well served for "archival" journals over the years. The *Journal of Polymer Science* (JPS) started in 1946 and has now expanded to five sections. In recent years its dominance has waned as *Polymer* and *Macromolecules* have appeared and thrived. Currently, the (synthetic) polymer science section of a library would need to take about five polymer journals to have a reasonable coverage of the field (counting JPS as one); another five or so could be regarded as useful but not vital.

Polymer Bulletin (PB) and *Makromolekulare Chemie — Rapid Communications* (not reviewed here) have both appeared during the past three years and are the first fast-publishing journals in the field. PB takes short papers of four to six single-spaced, camera-ready pages. At the moment publication is taking one or two months from receipt of the paper to cover date of the issue, compared with about six months in the venerable Letters Edition of JPS and one to two years in many of the "full" journals (much of this long hiatus seems to be in refereeing).

Polymer Bulletin

The reader does not have a great deal to gain from very rapid publication. Research results in polymers remain "new" for a year or two and journals containing large numbers of short papers make very boring reading. However, for authors, rapid publication has advantages. Replying to referees' comments is easier within the first couple of months after a paper is finished and it is much better if a paper is published while the author can still remember what it contains. In principle one can now quickly publish brief progress reports and put more effort into the occasional archival gem. Since many of us seem to spend more time as authors than as readers, both of these rapid-publication journals should be successful. However, they could probably be improved from the reader's viewpoint by dividing the contents into sections by subject.

As our "purer" colleagues in physics and chemistry often point out, polymer science is really an applied science and much work in the field is done in industrial research and development laboratories and

in a variety of research associations, standards laboratories and military laboratories. The scientific journals serve well the pure scientists, while the "trade press" serves the plastics engineer, but in the middle there is a gap filled only by one or two applied polymer science periodicals.

POLYMER TESTING

Polymer Testing (PT) falls into this middle region; most members of the editorial board are from company or government laboratories. Full length papers are published on methods of testing and standardizing polymers; initially paints and adhesives were excluded but are now allowed by popular request. This journal also differs from the others in having a distinct personality, with an editorial and occasional readers' letters.

Automation, Atoms and Analysis

T.S. West

The Journal of Automatic Chemistry. Editor P.B. Stockwell. 4/yr. (United Trade Press, London.) £30 UK, SwFr.161, \$80.50 elsewhere. *Progress in Analytical Atomic Spectroscopy*. 4/yr. Editor-in-chief C.L. Chakrabarti. (Pergamon.) \$85.

THE automation of laboratory techniques and the emergence of applied atomic spectroscopy are two of the most significant developments in analysis during recent years. Given the sharp eyes of publishers for fresh ventures, it is not surprising that two new review journals have appeared which deal with precisely these topics.

The international *Journal of Automatic Chemistry* (JAC) covers all aspects of automation and mechanization in analytical, clinical and industrial laboratories. These are areas in which automation has become absolutely essential because of the necessity to handle enormous numbers of samples and to cut down costs (the manual operator is perhaps the most expensive "instrument" in all laboratories). Each issue contains about eight or nine articles, many of them devoted to microprocessors and a smaller number to improvements to commercial automated systems or the construction of miscellaneous ancillary devices to improve their performance. In addition there are useful and informative articles on meetings, new products and literature, and

The readership for PT is secure because many laboratories are concerned with the testing and quality control of plastics. Authorship is likely to be more of a problem in that industrial scientists do not publish much — papers in the current issues still rely heavily on institutions represented on the editorial board and it may take some time for the journal to expand beyond this.

A "stablemate" of PT, *Polymer Degradation and Stability* (PDS) has an editorial board which is almost completely drawn from academic and government research centres. The journal publishes full papers with a publication lag of six months to one year, which is about as fast as one can expect for a quarterly journal. There are not many institutions which do basic research on polymer degradation, so PDS is really aimed at quite a small community. For those in the field the narrowness of the topic makes it an interesting (and easy) journal to browse through. If it can survive with such a small potential readership it will do a useful job. □

Paul Calvert is in the School of Molecular Sciences at the University of Sussex.

a running calendar of current and forthcoming events. There are also occasional book reviews.

The standard of the papers is usually good, even excellent, and the "virtual" A4 format allows good use to be made of illustrations. The generally high quality of the articles read in the sample issues suggests that this journal has so far done an excellent job and should be scanned on a regular basis by all who are concerned with automation. It is not possible, since the dates are not given, to establish publication time, but the journal gives the impression of being very much "on the ball".

The blunt intention of the editor of *Progress in Analytical Atomic Spectroscopy* (PAAS) is "to fill a serious gap in the literature of a rapidly expanding field". Each of the three other issues sampled since the first, which appeared virtually to be the complete publication of a PhD thesis (with no other papers), contains two to four review papers written by specialists in particular areas by invitation of the