much excellent research is being done in this area, and reflects that of the society's meetings and also the choice of editor-in-chief (C.B. Duke of Xerox for the first year, and now W.L. Brown of Bell Laboratories).

The study of microstructure is of particular importance in materials science, and the reproduction of micrographs (optical and electron) in the journal is of high quality. The printing and layout are clear, and the paper good. The listing of contents by topic and the materials index are worthwhile features. Refereeing takes an average of three months for full articles and two months for rapid communications, and appearance in print is only one or two months later. Potential contributors may also be attracted by the wide circulation to all members of the Materials Research Society, and to potentially greater numbers because the journal is quite affordable for members of affiliated societies.

About 80 per cent of the articles come from the United States, and regrettably this proportion seems to be increasing. Authors from elsewhere may be deterred by the page charges ($70 per page). It is hard to believe that these charges can make much of a contribution to costs; perhaps they are merely a device for limiting the length of papers, but that could surely be done more effectively and fairly by firm refereeing and editing.

That criticism apart, it is clear that *Journal of Materials Research* has already established itself as an important archival journal. It seems assured of a healthy future. □

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Considering clusters

Brian J. Howard

Zeitschrift für Physik D: Atoms, Molecules and Clusters. Managing editor I.V. Hertel. *Springer-Verlag. 12/yr. DM 1592 plus carriage charge.*

THE emergence of a new journal in atomic and molecular physics is usually difficult to justify. It is, however, debatable, whether or not this is a new journal because it arises from the division of the well-established and well-respected *Zeitschrift für Physik A: Atoms and Nuclei*. Atomic and nuclear physics make strange bedfellows and it has become customary in the physics literature, at least in the main general journals, to separate such diverse subjects (witness *Physical Review, Journal of Physics, Il Nuovo Cimento, Physica* and others).

A welcome aspect of the new journal is implied in its sub-title — *Atoms, Molecules and Clusters*. There are many journals devoted to atomic and molecular physics, but only a few editors appear to have fully appreciated the great growth of interest in clusters. This is a subject in which a wide range of questions, both physical and chemical, need to be addressed. Clusters are also of fundamental importance for the deeper understanding of the transition from isolated atoms and molecules, via large aggregates, to the properties of the condensed phases.

In his introduction, the editor of *Zeitschrift für Physik D* expresses the hope that "cluster scientists, in particular, will appreciate an obvious 'home' for this rapidly expanding field". Although I welcome these sentiments, they are certain to prove too optimistic. Other journals such as the *Journal of Chemical Physics* already cater for the subject, and are where most major advances are still likely to be published.

The specified aim of the newcomer is to cover all aspects of atoms, molecules and clusters, including their production, spectroscopy, interactions and dynamics. However the early issues show a significant bias towards atomic physics, no doubt reflecting the journal's origins. There are, however, a few high-quality papers on molecules and clusters. There have also been special issues devoted to synchrotron radiation, metal clusters and multiphoton process, all of which have

helped to redress the balance. The editorial board has been carefully chosen to reflect all aspects of the proposed subject area; its members are distinguished scientists from a variety of fields and should attract a wider range of papers once the journal is more generally known.

The quality of production of the papers is high. There is a stated aim of reasonably rapid publication (three months) but the average appears to be closer to five months. There is also the opportunity to publish short notes produced from camera-ready typescript, which are guaranteed to appear in print within six weeks of receipt of the final manuscript.

There can be little doubt that this will become an established and presumably respected journal. It is perhaps not the journal one is most likely to browse through, but it will become a valuable source of information on the physics of atoms and molecules, and clusters. □

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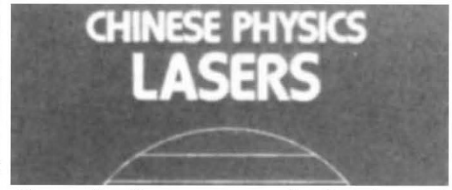
In short, the news from China

I.N. Ross

Chinese Physics — Lasers. Editor Chinlon Lin. *American Institute of Physics. 12/yr. US $400, elsewhere $410.*

THIS journal is a translation of the *Chinese Journal of Lasers*. Each issue contains 10 to 15 main contributions, together with a number of shorter items called "Science Notes" and a number of "Letters".



Generally, the papers are short and report the results of novel experimental work in topical areas.

There are usually several (around four to five) papers with theoretical sections backed up with experimental verification, and one or two longer articles of an analytical and more substantial nature. The subject matter is strongly directed towards new developments in lasers and techniques used in lasers (56 per cent), but there are also contributions on nonlinear optics (14 per cent), optics and holography (20 per cent) and some reports on the (largely medical) applications of lasers.

The journal combines a strong experimental bias with a predominance of short articles, a lack of highly critical reviewing and an evident preference for papers which report initial and often useful results of new ideas. Few papers of this sort are likely to make important contributions to the subject, but a large number of readers, particularly those involved in all aspects of laser development and nonlinear optics, will find subject matter of considerable relevance to them. There are also sufficient contributions in optics and holography to form a worthwhile section of the journal. Applications could well have been better left out, perhaps to enable more rapid publication of the mainstream papers; it is a little surprising, given the brevity of most of the contributions, that the publication time — typically a year — is so long.

This journal can be recommended as containing good material from a country now making notable contributions to laser physics. It collects together new ideas in its fields and presents a practical assessment of them, and as such does fill a gap not satisfied by other publications. □

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