

out an interesting subfield for development, and the first issues contain some interesting papers. The journal's success will depend critically on the response of the materials science community.

Tribology Letters is an imaginative and timely development. The important field of tribology — covering friction, lubrication and wear — is roughly at the stage of development that studies of the solid-gas interface had reached in 1964. The emphasis so far has been on the engineering aspects of these problems, based on measurements of macroscopic properties. But experimentalists and theoreticians are now beginning to make headway into the field at an atomic level. This journal specifically aims to bridge the gap between these two communities, and between them the editors (straddling the Atlantic, a smart move by the publisher) and their editorial board do span the two communities. This welcome, well-produced journal may well play a key role in bringing those working on new highly refined techniques at the atomic scale into contact with the tribological engineers, to the benefit of both. I hope so. □

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Material matters

Neil Alford

Advanced Performance Materials. Editor-in-chief F. H. Froes. *Kluwer*. 4/yr. Dfl358, \$205.50 (institutional); Dfl110, \$110 (personal).

Euromaterials. Managing editor Peter Gregory. *VCH*. 4/yr. DM150 (institutional); DM58 (personal).

It is always interesting to see how editors justify the introduction of a new journal. The intended niche for *Advanced Performance Materials* is the "transitioning [*sic*] of good science to real world applications". This is laudable, for making this transition is one of the most frustrating and difficult tasks in science and technology. The journal is aimed at both researchers and funding managers. According to the opening editorial, it "will not contain fundamental science papers, no matter how good" — which seems entirely at odds with one of the journal's stated aims of attracting original research papers. The big question, then, is what will the journal contain?

The answer is a broad spectrum of articles across a wide range of materials (metals, ceramics, polymers, composites, electronic materials) — but all oriented towards applications. There are broad

overviews of areas of science and technology (an article on structural ceramics, for example, contains no new or deep science but provides a good technological and economic appraisal); assessments of the materials research agenda in various countries; summaries of research at institutions such as the School of Mines in Madrid and La Sapienza in Rome; reports on specific materials such as interfacial reactions in Al/SiC composites; and whole issues devoted to accounts of work at organizations such as the All Russian Institute for Light Alloys (an issue is also planned for the Beijing Institute for Aeronautical Materials).

There is a stated emphasis on affordability of materials, particularly now that less and less research is geared towards the military. So-called 'dual use' technology can be used by the military as well as in the civilian arena. A good example is the infrared sensor. The military paid through the nose for this missile technology but it is now also used at very low cost in automatic doors and intruder alarms.

In an article on advanced-performance structural ceramics and ceramic composites, the most important reason for studying materials science is alluded to: the discovery of materials whose properties allow applications that would otherwise be impossible. If *Advanced Performance Materials* can help in the crucial problem of technology transfer, then it will succeed.

Already helping the development of materials science is *Euromaterials*, supplied free to individuals affiliated to the Federation of European Materials Societies (FEMS). A slender newsletter, it packs a lot in, from details about forthcoming conferences to reviews of recent books. But its main value is for the information it gives on funding opportunities, especially now that the European Union Framework programme is in full swing. With ECU1.6 billion (about £1.3 billion) on offer from Brite-Euram III over the next three years, it would seem a good idea to find out as much as possible about the programmes in Europe.

Each issue contains an 'Essay' of a couple of pages written by a leading materials scientist or by a 'Euro-official' responsible for coordinating funding in his or her country. Researchers can thus see where and how funds are likely to be allocated and how to gain access to them. A news section highlights the activities of FEMS in member countries, a useful source for those searching for European partners in cooperative research programmes. There are also sections on European news (essential reading for keeping abreast of, say, the Brite-Euram and NATO programmes) and on science and technology (equipment and materials). To round this all off, there are excellent and authoritative book reviews and an events calendar.

The European materials science com-

munity needs a newsletter of this sort and this is a good one. The importance of the discipline is reflected in the sizeable funds now devoted to materials science throughout Europe. *Euromaterials* will be of great help to those who want a slice of the cake. □

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Picking the combination

Kevin Kendall

Applied Composite Materials: An International Journal for the Science and Application of Composite Materials. Editor-in-chief Peter W. R. Beaumont. *Kluwer*. 6/yr. Dfl406, \$232.

COMBINE the word 'composite' with 'material', 'polymer', 'advanced' and 'technology' and you end up with around 16 possible journal titles, roughly the number today serving the multitude of material scientists, scientists and engineers working in this esoteric branch of technology.

Until now the study of composites has been as simple as the invention of journal titles. Take at least two materials, mix them together and eureka, you have a new composite material. For example, combinations of glass and polymer, carbon and resin, steel and cement, and ceramic and metal can all give beneficial properties. As scientists, we have even found the useless combinations worthy of interest in academic journals, especially when they are described as 'model systems'.

The introduction of the word 'applied' into a journal title changes all this. The message now is that the science has been over-fished. The combinations of materials requiring exploration have been over-exploited, and the myriads of micro-mechanisms have multiplied to the extent that historic fundamental theories seem to have been forgotten. It seems that engineers will replace scientists. Products will supersede prototypes.

In this respect, *Applied Composite Materials* does not quite live up to expectations. Writing papers containing applications as well as science is demanding. Only one paper out of 26 in the first four issues comes close to satisfying the criterion of describing application, measurement and theory. Its title is "Composite monocoque frame for a mountain bicycle: testing and calculation". The other papers are often interesting, typically 10–20 pages long, with a mix of microstructural, processing, testing and failure observations. But they could equally have appeared in