

The Nature of Materials Science Publishing

By Peter Gregory*

The materials scientist, whether he thinks of himself as such, or whether he regards himself more as a metallurgist, chemist, physicist, ceramist or engineer must publish the results of his labors to complete the scientific process and to ensure career advancement or continued financial support. This is no different to scientists working in more clearly defined areas but a difference does arise when he considers to which journal he should submit his manuscript.

As with other scientists, the worker in materials science would obviously wish that his "hot new results" are communicated to as large an audience of interested colleagues as possible. In the more classically defined areas of chemistry, biology, physics etc. there are a number of well established, high quality publications which cater for a specialist audience, as well as one or two highly popular journals which mix quality reports of new research results with articles of a more general nature. These more general articles are intended to bring new developments to the attention of the non-specialist but otherwise scientifically educated reader. These journals are namely *Nature* and *Science*.

This approach produces an excellent forum for the exchange of ideas and opinion across a wide range of disciplines. However, these highly respected journals, while catering well for the molecular biologists, earth scientists and astro- and particle physicists for example, cannot possibly blanket every area of science to an equal degree and therefore have weaknesses in their coverage of certain areas.

The nature of today's materials science is such that the interaction of experts from different fields is not only important but quite often essential and it is therefore unfortunate that those areas which are covered to a lesser extent by the leading journals of general science are just those with the greatest relevance to materials.

In the materials sector there are a large number of specialist journals serving restricted areas of the whole, and a few which purport, through their names, to be of a more general nature, but on closer inspection are found to lack true interdisciplinarity and to publish to a large extent only full papers.

Materials science, with its many facets and contributing technologies is ideally suited to the general forum approach to publishing where research results are combined with opin-

ion, comment and information. The complexity of materials science, and the accompanying plethora of journals each dealing with their own specialist areas have made it increasingly difficult, alone on time grounds, to keep up with the literature in one field while maintaining an all important



overview of other areas. To provide that opportunity is exactly the intended function of *Advanced Materials*, the advent of which has been warmly welcomed, one reviewer^[1] being moved to say:

"It is the (materials) journal one would most like to have delivered to a busy desk"

This is an opinion we are sure will be shared by an increasing number of ceramists, chemists, physicists, metallurgists and engineers as we move into what will undoubtedly be a fascinating and exciting future for materials science.

For our part, at *Advanced Materials*, we would like to thank both the readers and editorial team of *Angewandte Chemie* for their interest and support over the last eighteen months during which time the two journals were also published in a joint form. The complete separation of the two journals, which occurs in January, will give us the space and freedom to expand our coverage of all aspects of high-tech materials science while not giving *Angewandte Chemie* too strong a materials bias. We believe that we can provide the materials scientist with a readable, general forum for results and opinion which will help integrate all of our efforts and change the nature of materials science publishing.

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[1] A. Windle, *Nature* 341 (1989) 369.