

Focus on UK Serials Group Member

IOP Publishing

Development of a Learned Society Publisher

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When Gladstone opened the first meeting of the Physical Society of London in February 1874 he could not have envisaged that 115 years later its successor body would have a membership of more than 14000 professional physicists and own a major international physics publishing house. Indeed, for nearly 100 of those years publishing was a fairly modest endeavour and not until the mid-1960s were the foundations laid for today's publishing activity.

The Physical Society was formed as a learned society for physicists "specially devoted to the reading and discussion of papers connected with their science". Growing awareness that physicists also saw themselves as professional people brought into being a sister organisation, the Institute of Physics, in 1918 to "improve the professional status of physicists". The two bodies, together with their own publications, merged in 1960 and the joint body was granted a Royal Charter in 1970 with the objective of "promoting the advancement and dissemination of education in the science of physics, pure and applied". The rationale for, and mission of IOP Publishing (IOPP) derive directly from that objective and might be paraphrased as creating an income for physics through quality scientific information services.

IOPP's publishing history can be described in a few sentences. It commenced in 1874 with the *Proceedings of the Physical Society*. By 1967 these

had split into three and were then combined with the two journals of the (1918) Institute of Physics into the five-part *Journal of Physics*. Together with the established review journal *Reports on Progress in Physics*, the newly launched *Physics Education* and an occasional conference proceedings, these formed the whole of the publishing programme. By 1989, there were 22 journals publishing well over 40000 pages in nearly 300 issues. The Institute's *Conference Series* published its 100th volume of proceedings and the total annual output of new book titles under the Institute of Physics and Adam Hilger imprints was over 60. Along the way, the Institute had entered collaborative arrangements with four other societies and a commercial publisher, had purchased Adam Hilger Ltd from Rank Precision Industries in 1976 and had purchased and disposed of the Bristol-based John Wright group, including its medical publishing arm.

IOPP — Statistics

	Books	Journals
Sales	£0.85m	£5.6m
Titles	62	22
Pages	28K	41.5K

IOP Publishing Ltd as legal entity wholly owned by the Institute of Physics and controlling all the Institute's publishing was not incorporated until 1986, although the Publishing Division - which had opened an office in Bristol in 1971 and relocated there completely in 1975 - had been physically separate from other Institute activities for many years and had been largely self-contained. Control, through the Institute's Council and a hierarchy of committees had, in common with other societies, been as loose or as tight as the membership of these bodies from time to time saw fit. A sense of corporate identity was slow to develop but received

a boost with the formation of IOPP, controlled by its own Board of Directors, albeit with a minority of executive directors, reporting direct to the Council of the Institute.

It is Council which lays down the bottom-line requirement, to make a profit for the Institute - which of course has charitable status - to help fund those activities that do not generate net income. These are in part scientific but mainly educational. The Institute is involved in physics (or where appropriate, science) education at all levels with active programmes to attract young people into physics and keep them there. It is equally concerned with the social environment within which the next generation of physicists grows up and thus takes an active part in public policy debates on education, research funding, training for industry, status of physicists relative to other science and engineering professions, mobility of scientists and 1992, and so on. In these activities, IOPP's main function is to provide resources, but it also offers professional and promotional services and, through the magazine *Physics World*, independent editorial support. It is perhaps a measure of the status and confidence that IOPP enjoys within the Institute that the Editor of *Physics World*, a full-time staff member, enjoys complete editorial control of the publication.

To ensure profitability, IOPP must operate commercially. The emphasis here is less on maximising profit for the (sole) shareholder than on careful planning and financial control to ensure that the budgeted profit is actually delivered to the Institute so that it does not need to draw on reserves. However, profit must grow to meet not only increased costs but the increasing range of activities and services that members and the profession demand. Within a contracting market for publications this can be achieved in the long term only through expanding the range and size of publications on offer - in competition with commercial and other society publishers - and through enhancing or at least maintaining their quality so as to slow down, arrest and in some cases reverse the erosion of library sales. Using journal subscription prices alone to generate this profit is likely to be short-sighted in the current climate in the UK, North America and elsewhere. Indeed, for some years IOPP has used a consistent formula to review its journal subscription prices, of which the main components have been direct cost inflation and journal size/frequency. Where there have been significant departures from the formula they have tended to be for newer journals where performance

is sometimes difficult to forecast or where the pace of journal growth has outstripped price changes.

Being largely controlled and supported by physicists working in academia, IOPP is only too well familiar with the pressure on library resources and complaints about the proliferation of new journals. There will never be unanimity on this subject while scientists publish in increasing numbers and lend their support to new journals as authors and editors. IOPP takes the view that when, in the past, it has ignored these trends - often due to changes in the direction of research - this has done some damage to its "market share" of published output in the past and would do more in the future, if it continued to stay aloof. As a publisher owned by a learned/professional society it claims, not arrogantly but with some confidence, that what commercial publishers can do, IOPP can do better. It therefore has an active journal and book development and commissioning programme, funded out of its own resources. Collaboration with other societies in new journal launches is one of the strategies sometimes used to secure a broader base of support and commercial success, but the key element is always to ensure that there is a demonstrable need for a new journal on the part of the community.

A further key component in IOPP's strategy for the future is the control, maintenance and improvement of quality. No-one would claim that quality of presentation is the same as in the "good old days" of hot metal, though perhaps IOPP has held the line a little longer than some. Although it can and does produce beautiful books, economic and marketing pressures do not allow that too often. There is no compromise on scientific quality, however. Even conference proceedings go through a refereeing process and for some journals, papers that are correct but of "marginal interest" only are being declined. IOPP has traditionally employed full-time, scientifically trained staff to select referees and administer the approval process. It is an expensive way of doing things but it ensures that consistent standards are applied, that "cliquiness" in the control of journals is avoided by dispersing the refereeing load (also, Editorial Board members normally serve for a maximum of four years only), and that authors get a good standard of service. If citations are a measure of journal quality, then published results show IOPP's journals to rank well compared with its competitors.

To help keep expenses under control, IOPP now processes a substantial amount of material for its journals, and also books, on disk. This not only

makes a contribution to containing or reducing the direct costs of production, and thus taking pressure off prices and subscription rates. It also provides a service which appears to meet a demand from authors. Less easily quantified in terms of financial benefit, but certainly important for speed and efficiency of response, is the use of information technology for other purposes, such as editorial processing, subscription fulfilment and book order processing, electronic mail, fax and other aids to rapid communication.

If Gladstone would have been surprised at the size of IOPP's output, he might equally have marvelled at its international flavour. 55% of book and 88% of journal sales are outside the UK. Only 25% of journal authors are from the UK and the proportion continues to decline. Membership of Editorial Boards from outside the UK - mainly continental Europe but also farther afield - is beginning to approach 50%; and they do meet regularly, giving a unique opportunity for international market feedback.

IOPP — Main Markets

	Books	Journals
UK	44.5%	11.0%
Rest of W Europe	18.2%	22.5%
North America	15.9%	38.7%
Rest of World*	21.4%	26.9%

(*inc. - 11% Japan)

To operate in a diverse, international market requires effective marketing arrangements throughout the world, coordinated in IOPP by a combined journals and books marketing department. Two key nodes in the international network are exclusive agencies in the two largest single non-UK markets, North America and Japan, with the Institute's sister organisation, the American Institute of Physics, covering the former. These are supported by representation and agency arrangements elsewhere in the world. An important marketing aim is to ensure that these agencies represent IOPP books and journals effectively, with

agreed marketing plans and sales targets. In addition, IOPP itself ensures support through an extensive programme of some 200 conferences, exhibitions and fairs where IOPP products are displayed and where - cost permitting - IOPP itself is often represented by its own staff or, for example, by members of Editorial Boards.

In North America, the American Institute of Physics is responsible for marketing, fulfilment and physical distribution. For the rest of the World, IOPP has its own order processing and distribution department in Bristol, employing a local firm for warehousing and distribution. A somewhat checkered history of distribution arrangements has paved the way to the present organisation where IOPP has much more direct contact with its customers and is able to ensure a more effective and responsive service than before. That is not to say that the transition was easy, and much effort has been necessary to rebuild the confidence of customers and overcome the frustration of IOPP's own staff.

IOPP has one asset denied to non-society publishers in physics - a significant and growing membership of the Institute in the UK. Although internationalism has reduced the relative scale of the contribution to publishing made by these members - or indeed by the UK physics community as a whole - it remains substantial and IOPP sees it as an important responsibility, therefore, to provide effective services to this community. It does so through its publishing, of course, but also through direct, indirect and financial support for other Institute of Physics programmes designed to raise the profile of physics, ensure its support in academia, government and industry, and help build the next generation of physicists. Because of its semi-autonomous status within the Institute, and its pro-active and commercial approach, it can often do this to more immediate effect than can be achieved through the traditional and more deliberate learned society approach. As the Institute itself is becoming more competitive in the "market" for physicists, this partnership between parent and offspring organisations is beginning to show encouraging results. □