

Europe's Physics Journals Under Review

A meeting of the editors of Europhysics Journals and observers was held under the joint auspices of EPS and UNESCO on January 25 and 26 in Paris, under the chairmanship of W. Martienssen, vice-president of EPS and J. Depireux, chairman of the EPS Publications Committee. In welcoming the participants, S. Passman on behalf of UNESCO spoke of the promotion of scientific advance as a means of achieving international collaboration but stressed the need to encourage its application in order to meet general world needs. It was part of UNESCO's policy to work not only through governmental but also non-governmental organizations which could, in some instances, be helped by subventions for specific projects. Close contact is maintained with the International Council of Scientific Unions and joint action was taken to rationalize the input-output matching of communications.

UNESCO was particularly anxious to provide opportunities for the training of scientists from the third world and was greatly concerned by the problem of information publishing and dissemination in these areas. EPS was asked to give some consideration to the difficulties encountered by scientists outside the privileged European continent.

Publicity

Although there was no doubt that Europe was already blessed with an extensive scientific communication network, the meeting was concerned that there was still a tendency for European physicists to publish in the USA in spite of the fact that the quality and quantity of research on the two sides of the Atlantic was comparable. Publishing was better organized in the USA and proper attention was paid to this aspect of scientific work. In Europe the presentation of the results of work accomplished was an aspect of research that often seemed to get neglected.

The Europhysics Journals were now making an important impact but there were still practical measures that would add to the value of the collection. For example, copies were often bound without the Europhysics emblem appearing on the cover. A more consistent publicity would benefit everyone, and it was important to think

of such details as including the words Europhysics Journal in the catchline of articles so that it appeared on photocopies. Publishers were invited to publish the full list of Europhysics Journals in their particular publication at least once every year as the publishing annually of the list in *Europhysics News* was not enough.

Referees

The Publications Committee was continuously active not only as a watchdog on the publishers by, for example, keeping an eye on lists of editorial boards but in standardizing styles and procedures. It will see if it can devise a standard terminology to help distinguish between general advisers on policy and those continuously active in the editorial work of a journal. The EPS divisions could help in advising journals on the names of new or additional referees in particular fields, which could encourage a younger participation. The journals were reluctant to circulate lists of active referees as these in general consisted of people already somewhat overloaded with work. What could be done though was exchange copies of the forms used by publishers to help referees systematize their comments on articles. It was recommended also that EPS reprints its style manual, making a clearer distinction between instructions to authors and those to editors.

Copyright

Copyright is a subject that touches publishers and authors alike. In the short term, the author is only interested in his paper being read by as wide a readership as possible. It matters little to him whether his work is diffused through formal journal pages or through photocopies provided by a library, provided he receives the recognition he desires. However, in the longer term, the ability to publish at all depends on the existence of healthy profitable journals which are being bought in adequate numbers. In consequence, overall, the publishers' and authors' interests converge.

Over recent years the growth of central library facilities with rapid photocopying machines has seriously eroded the publishers' market and it

is necessary to strike a new balance. A new law in the USA prescribes that unlimited photocopying in an institution is permissible for internal consumption but for outside distribution, only six copies of a given journal in a year may be made. The problem has already given rise to court cases in France and the Netherlands whilst in the UK the position is currently under examination. There the presence of the National Lending Library, created to provide a national copying service, highlights the difficulty, but it was thought that in the end, the UK rules would follow the American. This was evidently an area where the EPS could play a role in harmonizing policy. It was particularly regretted that in spite of acceptances from delegates from several countries (for whom travel had been arranged) there was no one at the meeting from Eastern Europe and so no opportunity for an immediate exchange of views. EPS has urged to use its good offices to establish a dialogue, obtain clarification of what was present practice and seek ways of protecting publishing rights.

Long-term Goal

In addition to the exchange of views on current problems, longer term possibilities were not forgotten. Eight years ago when EPS was founded, the establishment of an integrated policy of publishing in Europe was much to the fore. However, Europe was not then ready to consider seriously any fundamental moves. Times have now changed. Markets are more restricted, library budgets no longer rapidly expanding and EPS has shown itself through the Europhysics Journals and its other activities to be a real cohesive force. The long term goal of a Europhysics Press in which the scientific control is exercised through EPS seems now to be much more than an idle dream. Physicists and publishers alike recognize that if physics publishing in Europe is to achieve a status of complementarity with that of the USA, it must be less fragmented, while still retaining a dynamic flexibility.

It will take a long time to achieve, but now was the time to start considering the structure that could be evolved which took into account the investments and the skills available in the publishing houses whilst benefiting from the centralized consultation and policy making which EPS could organize. One could imagine a commercial society being created whose stock was owned by members of EPS but in which EPS maintained a controlling share. This company would

then make long term agreements with the publishers who would agree to their journals being merged into what might be called *Europhysics Review*. Flexibility could be preserved by establishing main categories expected to have an indefinite life, within which were less permanent sections regarded as current specialisations.

Publishing was though a commercial affair and a great deal of study will be necessary to see how best such an integration could take place. There were also problems of principle such as the vexed question of page charges which were a main source of income in the USA. (Presently no page charges are made in *Europhysics Journals* with just one exception.) Much has to be done before the idea can be realized, but it was generally agreed that while discussions went on, a first step should be for the Publications Committee, now that it has put order into much of what exists, to move into a new active phase where it could exercise influence ahead of the event rather than as in the past, act as a form of jury, only considering a new publication after it had appeared and the publisher had made his investment.

Third World

The adjurations of UNESCO did not go unheeded, as attention turned to the particular problems of the distant physicist with limited resources trying to get his work published. It was in noone's interest that double standards should be adopted but it was common experience that papers submitted often did not come up to European norms. It was not just a question of the language being more "broken" than usual so much as an inadequacy in the presentation of the work. Publishers expect to put in more editorial effort on papers coming from the third world but what was often needed was a re-writing or co-authoring effort. This all has to be paid for. Another problem was page charges when these were applied, although a number of journals were prepared to waive them in special circumstances. The supply of additional reprints to the author would help him in dissemination but again the money had to be found from somewhere.

A possible source is UNESCO itself but it is clear that a serious approach to this or any other organization on such a matter could only be made on a concerted basis.

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An International Classification in Physics

J. Depireux

There is no need to convince a scientist in general, and a physicist in particular, of the usefulness of a widely accepted classification for subject matters in his field. Be it for a personal bibliographic search or for automated information retrieval, for exchange of information or when switching from secondary abstracting journals to primary ones, or even when arranging a sequence of papers or just for shelving books in the library, it is clear that an internationally accepted classification would save both effort and time and so money.

Action was taken after it had been resolved at a Board meeting of the ICSU-AB held in Goslar (FRG) in July 1968 that :

"the classification, cross-referencing and indexing practices of the Member Services should be studied in a comparative way by fields".

In order to implement this resolution four major abstracting services : American Institute of Physics, Bulletin Signalétique, Physics Abstracts and Physikalische Berichte united their efforts. Additional help was provided by the Institute of Physics, INSPEC, the IUPAP, etc. The European Physical

Society through its specialized seminars and its Publications Committee has actively contributed to establishing the final version of this classification.

The final version is the result of many years of comparisons, consultations and compromises. It is believed by its many authors to be highly operational and will probably need no major revisions in the near future ; a provisional version (1975) has already been put to work, and the final version will be published for ICSU-AB by INSPEC in April of this year. After that minor changes will still be accepted

but, in order to avoid undue perturbations, they will be implemented on a three-year basis only.

Such a tool is only useful if it is widely known and used. It is to be hoped that some practical arrangement will be found to circulate a "scaled-down" version of it in one of the future issues of *Europhysics News*.

The whole of Physics is divided into ten chapters with the headings shown in the accompanying table. Chapters 0 to 7 cover the core of Physics proper whilst 8 and 9 deal with interdisciplinary fields.

- 0 *General (Education, History, Mathematical methods, Classical and Quantitative physics, Statistical physics, Measurement science*
- 1 *Elementary Particles and Fields*
- 2 *Nuclear Physics*
- 3 *Atomic and Molecular Physics*
- 4 *Classical Areas of Phenomenology (Electricity and magnetism ; Optics ; Acoustics ; Heat flow, Mechanics, Fluid dynamics)*
- 5 *Fluids, Plasmas and Electric Discharges*
- 6 *Condensed Matter : Structure, Mechanical and Thermal Properties*
- 7 *Condensed Matter : Electronic Structure, Electrical, Magnetic and Optical Properties*
- 8 *Cross-disciplinary Physics (Materials science, Physical chemistry, Biophysics)*
- 9 *Geophysics, Astronomy and Astrophysics*