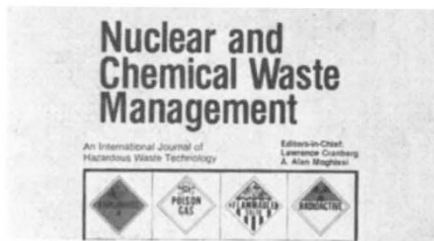


and radioactive effluents can be safely managed with existing technologies or a straightforward extension thereof" and that "the waste disposal issue is an important part of the effort [to assist the expansion of nuclear power] and one that does not require extraordinary measures".

Part of the reason why these truths have not been more widely appreciated is perhaps the United States government's indecisiveness in setting rational limits and criteria for the disposal of radioactive waste. (There is no shortage of designs.) The result has been a proliferation of research and development projects, usually leading to the recommendation that even more research and development is needed. Quixotically, people have set out not merely to find the "best" method or materials, but to pile several "bests" upon each other.

Unfortunately, many of the papers in these three journals are in that unrealistic tradition. My estimate is that only some 15 out of the 40 papers support the adequacy of current technology. Half a dozen of these papers, however, are outstanding — they deal with matters such as the adequacy of glass for nuclear waste disposal and the economics of waste disposal as part of the entire fuel cycle.

Although each of these journals deals with the problems of the disposal of radioactive waste, their emphasis varies. Thus, while RWM is devoted entirely to such questions (with concentration on



waste from the production of nuclear energy), NCWM also covers the disposal of hazardous chemicals. The brief of *European Applied Research Reports* (EARR) is broader still: it publishes "reports on all aspects of nuclear science and technology", a significant proportion of which deal with technical approaches to nuclear waste management. Conversely, EARR accepts contributions from a geographically more limited area than either of the other two journals, since it only accepts papers which have been sponsored by, or published in collaboration with, the Commission of European Communities.

Within their self-restricted subject areas, NCWM and RWM carry a variety of material. They deal with economics, safety and public policy as well as with technical matters. Both publications include editorials and letters to the editor, of a uniformly high quality in the first few issues. EARR is evidently not intended as a "talking shop" since it carries only technical reports, although symposium

proceedings are apparently published from time to time.

All three journals deserve a place in libraries concerned with the topic of waste management even though, as always, it will be necessary for readers to sift for themselves the wheat from the chaff. □

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Rapid Damage

C.A. English

Radiation Effects Letters. Editor-in-chief L.T. Chadderton. 54/yr in 9 vols. (Gordon & Breach.) 1981: \$157.

Radiation Effects Letters (REL) was launched with the aim of facilitating the rapid publication of short contributions on the effects generated by the interaction of radiation with matter. It invites both experimental and theoretical contributions over the same wide subject range as its well-established companion journal, *Radiation Effects*. The latter remains the vehicle for full-length papers, correspondence and book reviews.

Topics covered in both journals range from the interaction of radiation with crystalline materials to radiation effects in biology and biochemistry. To aid quick publication, REL requires that letters of up to six pages are submitted in camera-ready form suitable for direct reproduction; although the quality of production is good, all letters appear to be published without revision and as a consequence some lack clarity. The standard of contents is variable, and it is difficult to be convinced that all letters represent truly significant contributions requiring rapid publication. The majority, however, provide information on topics of current interest, and thus are of relevance to workers in this area.

Typically, an issue contains articles received over a six to eight week period. Thus time to publication is faster than that previously achieved by short communications in its parent journal, and compares well with other journals offering rapid publication of letters. However, about a third of the issues of REL have taken six to nine months to reach Harwell. It is to be hoped that this problem is not widespread as it negates the main purpose of the journal.

The appearance of REL must be welcomed. The journal fills a potentially valuable role in allowing the speedy dissemination of information on topics of current interest in its chosen area. □

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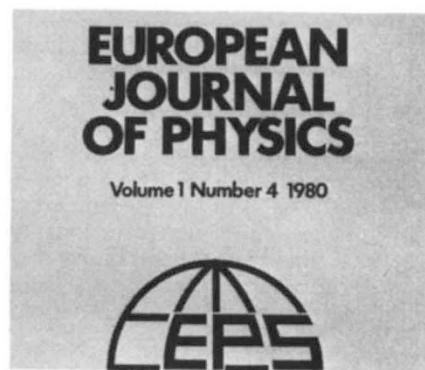
Teaching Physics

Daphne F. Jackson

European Journal of Physics. Editor G.W. Series. 4/yr. (Institute of Physics, Bristol, UK.) \$80 US, £35 elsewhere.

THIS journal aims to provide a European equivalent of the *American Journal of Physics*, which plays an important part in the literature of physics education, chiefly as a vehicle for novel insights into points of physics which are often prompted by the experience of physics teachers at all levels.

The *European Journal of Physics* (EJP) is solely concerned with explicitly educational questions. The editor identifies four broad areas for contributors, and the journal publishes articles



(mostly in English) on particular topics in physics or teaching methods at university level; on the fundamentals of physics or new insights into known areas of physics; on topics which cross the boundaries between physics and other disciplines; and on the cultural implications of physics.

Each issue contains 60–70 pages of papers (not normally longer than 5,000 words), book reviews and reports on conferences and other events; letters and comments, including comments on previously published papers, are also accepted but are subject to the usual refereeing procedure. Publication appears to be rapid.

Much thought and effort has evidently been put into the launching of the journal, and the standard of production is generally good; the text and mathematical content have a clean, simple appearance, and the illustrations are well reproduced.

Almost all the contributions in the four issues of the inaugural volume fall into the first two categories mentioned above. But whereas the articles on teaching methods are not very exciting and could have appeared elsewhere, those on fundamental topics or controversies in physics are of greater depth. As a forum for papers of this kind, together with developing sections on cross-disciplinary and cultural topics, the EJP could prove timely and valuable. □

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