

Australian government reports⁴⁻⁶ give extensive data to the contrary and R. S. Cambrey (personal communication), senior author of the British report, points out that about 75 per cent of the long-lived activity in the southern hemisphere in 1969 was due to the 1968 nuclear tests. This percentage is presently rising as the 1970 series nears completion.

Can the scientific community remain complacent in the knowledge that the French government intends to continue testing in the South Pacific next year, and under conditions of reduced safety? M Debré has underlined his government's lack of respect for the people of the area by recently announcing a reduction of what he terms "the surfeit of useless precautions".

I call on responsible scientists to use their influence, through the various scientific organizations, to enlighten their governments on the radiation hazards to which South Pacific communities are exposed and to impress on these governments the need to pressure France, as a humanitarian gesture, to cease nuclear testing in the South Pacific.

Yours faithfully,

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¹ Sternglass, E. J., *New Scientist* (July 24, 1969).

² Gofinan, J. W., and Tamplin, A. R., *Environment*, **12**, (3), 12 (1970).

³ Odum, H. T., and Odum, E. P., *Ecol. Monogr.*, **25** (3), 291 (1955).

⁴ Cambrey, R. S., *et al.*, Report, *AERE R6212* (HMSO, 1969).

⁵ National Radiation Laboratory, *NZ Dept. of Health Report No. NRL-F33*, (1969).

⁶ Gibbs, W. J., *et al.*, *Austral. J. Sci.*, **32**, 238 (1969).

Journal Dissemination

SIR,—One major impediment to the further development of science and advanced technology in developing and underdeveloped nations is that scientific journals reach us much more slowly than they reach laboratories in the developed nations. There are two reasons for this: our library budgets are small, so that to maintain a maximum coverage we are limited to seairmail subscriptions. Second, in many cases the postal services are so bad that even after the journals reach the country they may be delayed several months before reaching the laboratory.

It has been suggested that the IATA might accept the shipment of scientific journals at reduced rates, but this piece of special pleading would, we suppose, be resisted since many other people may also feel that they merit special consideration.

We make the following proposal: that every scientific journal should be published in two forms simultaneously, in the present form and in microfiche (or microfilm). Any subscription to the journal would automatically consist in a subscription to one copy in each form. The microfiches could easily be sent by airmail letter post (this would be much faster even than present airmail subscriptions because letters receive very much higher

priority than parcels or printed matter even when the latter are sent airmail) at a very low cost and if the conventionally bound journal took several months to arrive by sea it would not matter so much. The additional cost of making the microfiches centrally and in such numbers would be very small and the problem of copyright would not be more acute than at present since the microfiches would be sent only to people who receive the journal by subscription in the normal way.

We are aware that certain journals are already offered in both forms but with the subscriber having to make the choice between them. We believe that our proposal is superior and that the additional cost would be sufficiently small that the price of subscriptions need not be raised significantly.

Finally, we feel that the proposal would also benefit science libraries with more favourable postal services since they would need to keep the bound journals only for a year or two while keeping a complete record of the literature on microfiche.

Yours faithfully,

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Citation Indexing for Studying Science

SIR,—E. Garfield's list (*Nature*, **227**, 669; 1970) of authors most cited in 1967 features a selection of authors of techniques for cytology, which prompts comment on the objectivity he claims for citation indexing, in the light of current writing and editing practice in this field leading to arbitrary omissions.

A citation index will, for example, disregard the large number of times the term Feulgen is used, without bibliography and yet with precise meaning. Lead citrate staining is mostly mentioned with a citation; uranyl acetate, used for the same purpose and perhaps reported in the same sentence, without one. Citation practice for embedding media is varied and not always apt. Fixation with glutaraldehyde ranked frequent citation for a time; that with osmium tetroxide rarely does unless particular buffers are added. Because these techniques rarely form "key words", there is no automatic check on this selectivity.

This does not deny that the authors frequently cited are important and welcome influences in several fields. An appreciation of the state of their fields, however, and of their influence on them, will escape index researchers content with the objectivity gained by not reading the literature.

Yours faithfully,

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Announcements

University News

Professor Jack Diamond, Beyer professor of mechanical engineering, will succeed **Professor S. G. F. Brandon** as a pro-vice-chancellor of the **University of Manchester** in October. **Professor R. A. C. Oliver** is retiring from the Sarah Fielden chair of education and will be succeeded by **Professor Frank Musgrove**, University of Bradford.

Mr John B. Wilkinson, head of the Unilever Research Laboratory, Isleworth, has been appointed visiting professor in the Department of Chemistry, **University of Surrey**.

Professor Peter V. Hobbs has been appointed professor of atmospheric sciences in the **University of Washington**, Seattle.