

News and views

A Letter to the Editor

Referenced Authors Lists

The writers of scientific textbooks or treatises have long had the practice of providing a list of other authors referenced within the text or in footnotes. This list, which may form an integral part of the index, or be a separate list, consists usually of the bare names, followed by the page numbers where the reference is made, some of the numbers being sometimes underlined to connote some aspect of the reference made.

The usefulness of this referenced authors' list is so unquestionably established that there is more than a suggestion that at least as great a usefulness, and probably a much greater one, is offered by similar lists in periodic publications. It is therefore the purpose of this letter to propose consideration of the inclusion, next to the regular annual or semi-annual authors' list, of a list of all authors referenced by the various writers in a given volume of the Institute of Physics publications.

There is no need to dwell here on the already established usefulness of referenced authors' lists, but two instances of the potential added usefulness of such lists in periodical publications deserve mention.

One instance concerns the bibliographical value of a means to start almost anywhere in the scientific literature, and to proceed methodically and easily forward in time in following the impact of certain generic thoughts on the development of a chapter of science, to the point where the bibliographer, who could be a student about to tackle a research problem, or an author about to launch a publication, is within one year of being up-to-date.

The other instance concerns one of the knottiest tasks faced by scientific management, namely the problem of evaluating published research results.

In a world of increasingly pyramided organizational structure, the administrator of a large unit is often obliged to gauge the scientific output of an individual or of a group of researchers. When the research activities under scrutiny are of the long-range type, as indeed is the case for most basic research and for much applied research, superficiality can be forced easily on the judgment of the administrator, who may base his evaluation on such crude data as amount of published material. As this letter is addressed more especially to the editors of the many periodicals within the Institute of Physics family, the writer trusts they will agree with him that too large a responsibility would be lodged with them and their assisting editorial readers, if mere

acceptance of a manuscript were to be interpreted as more than an indication of possible value of the material presented.

A more precise, and yet impartial, evaluation would be possible, were the administrator able to gauge the impact made on scientific thought by his own research staff, or by new members under consideration. In theory, he could do this objectively by noting the references made in the scientific literature to the efforts and results of his own researchers, thus letting them, in effect, be judged by their peers. At the present time, however, a great deal of page-thumbing would be required to do this, whereas the referenced authors lists proposed here would permit one to make a fair determination in a matter of minutes.

A cursory survey has indicated that, from the publishing standpoint, the extent of these lists would not be prohibitive. The number of names they contain would be a very few times the number of names of authors of articles and letters to the editor, but with a few page numbers substituted for the titles, their bulk would be comparable to the regular authors' list. Even so, their very bulk could be a measure of the need for a pertinent cross reference in the bibliography of exponentially increasing activities.

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Eniwetok Tests

Contribute to Thermonuclear Research

"Joint Task Force 132, operating for the Department of Defense and the United States Atomic Energy Commission," the AEC announced on November 16th, "has concluded the third series of weapons development tests at Eniwetok Atoll in the Marshall Islands. Like the GREENHOUSE series 1951, it was designed to further the development of various types of weapons. In furtherance of the President's announcement of January 31, 1950, the test program included experiments contributing to thermonuclear weapons research.

"Scientific executives for the tests have expressed satisfaction with the results. The leaders and members of the military and civilian components of the Task Force have accomplished a remarkable feat of precision in planning and operations and have the commendation of the Department of Defense and the Atomic Energy Commission.

"In the presence of threats to the peace of the world and in the absence of effective and enforceable arrangements for the control of armaments, the United States Government must continue its studies looking toward the development of these vast energies for the defense of the free world. At the same time, this Government is pushing with wide and growing success its studies directed toward utilizing these energies for the productive purposes of mankind."

That AEC statement was eagerly pounced upon by the press and the public. It sounded, said the cautious, like officialese for a successful hydrogen bomb. News-