Articles on Radiocarbon Dating

Since 1947 Science has played a large part in the publication of articles on the radiocarbon method of dating organic remains. However, the recent marked increase in the number of laboratories at work in this field and the corresponding increase in the number of radiocarbon lists has made it necessary for the Editorial Board to reconsider its publication policy.

During the years immediately after 1947 the radiocarbon dating laboratory at the University of Chicago, under the direction of Willard F. Libby, occupied the field alone. The Chicago group published several papers in Science on cosmic radiation and radiocarbon, on radioactivity of living matter, and on the radiocarbon method of estimating age, and, in 1951, the first extensive list of radiocarbon dates. In the same year the first similar paper from the newly established laboratory at Columbia University was published in Science.

Subsequently, several additional laboratories for radiocarbon dating were established in this country and in Europe. Inasmuch as Science had come to be regarded as the archival journal in this field, it was the journal of choice for publication of almost all of the results from the various laboratories. From 1951 through 1956, 18 articles on radiocarbon dating appeared in Science: from the Chicago group, 5 articles; Columbia, 3; Yale, 2; Copenhagen, 2; U.S. Geological Survey, 2; Pennsylvania, 2; and Michigan, 1. So far in 1957 two articles from the Humble Oil Company Laboratories have been published, and the first article from the Heidelberg laboratory appears in this issue. Articles from Columbia, Groningen, Stockholm, Yale, and Arizona await publication. The U.S. Geological Survey will soon submit its fourth list.

It is clear to the board that the increase in the number of papers in this field makes it impossible for Science to continue to publish radiocarbon articles in full. Perhaps the best solution—and indeed the usual solution in comparable specialized fields in the past—would be for those interested to establish their own journal. Nevertheless, in view of our close association with radiocarbon dating, the board sought some way to make it possible for us to continue to serve as a medium for the publication of radiocarbon papers, if those concerned wished to take advantage of it. The existence of the Auxiliary Publications Project of the American Documentation Institute permits an alternate solution.

Radiocarbon lists received on or after 1 October 1957 will no longer be published in full as lead articles, but will, if acceptable, be published as reports without dating lists. These reports will serve to describe the scope of the dating done and will provide a citation to the dating lists, which will be permanently stored in the American Documentation Institute, Auxiliary Publications Program, the Library of Congress. Each report will carry a notice that will give details about how photocopies of the lists may be obtained. This form of publication will make the radiocarbon dates permanently available to all who are interested and will make it possible for Science to continue to play an important part in making known the results of radiocarbon dating—results that are of interest to scientists in fields as diverse as archeology, geology, and prehistory.—G. DeS.