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# Proceedings of the 10th International Radiocarbon Conference Bern/Heidelberg, 19-26 August 1979

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All correspondence and manuscripts should be addressed to the Managing Editor, RADIOCARBON, Kline Geology Laboratory, Yale University, 210 Whitney Ave, PO Box 6666, New Haven, Connecticut 06511.

#### INSTRUCTIONS TO CONTRIBUTORS

Manuscripts of radiocarbon papers should follow the recommendations in Suggestions to Authors, 5th ed.\* All copy (including the bibliography) must be typewritten in double space. Manuscripts for vol 23, no. 3 must be submitted in duplicate before May 1, 1981.

General or technical articles should follow the recommendations above and the editorial style of the *American Journal of Science* or the Proceedings of the Tenth International Radiocarbon Conference. Date lists should follow the format shown in the most recent issue of RADIOCARBON.

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\* Suggestions to authors of the reports of the United States Geological Survey, 5th ed, Washington, DC, 1958 (Government Printing Office, \$1.75).

#### NOTICE TO READERS

Half life of  $^{14}$ C. In accordance with the decision of the Fifth Radiocarbon Dating Conference, Cambridge, 1962, all dates published in this volume (as in previous volumes) are based on the Libby value,  $5570 \pm 30$  yr, for the half life. This decision was reaffirmed at the 9th International Conference on Radiocarbon Dating, Los Angeles/La Jolla, 1976. Because of various uncertainties, when  $^{14}$ C measurements are expressed as dates in years BP the accuracy of the dates is limited, and refinements that take some but not all uncertainties into account may be misleading. The mean of three recent determinations of the half life,  $5730 \pm 40$  yr, (Nature, v 195, no. 4845, p 984, 1962), is regarded as the best value presently available. Published dates in years BP, can be converted to this basis by multiplying them by 1.03.

**AD/BC** Dates. In accordance with the decision of the Ninth International Radiocarbon Conference, Los Angeles and San Diego, 1976, the designation of AD/BC, obtained by subtracting AD 1950 from conventional BP determinations is discontinued in Radiocarbon.

Authors or submitters may include calendar estimates as a comment, and report these estimates as AD/BC, citing the specific calibration curve used to obtain the estimate. Meaning of  $\delta^{\text{Id}}$ C. In Volume 3, 1961, we endorsed the notation  $\Delta$  (Lamont VIII, 1961) for geochemical measurements of <sup>14</sup>C activity, corrected for isotopic fractionation in samples and in the NBS oxalic-acid standard. The value of  $\delta^{\text{Id}}$ C that entered the calculation of  $\Delta$  was defined by reference to Lamont VI, 1959, and was corrected for age. This fact has been lost sight of, by editors as well as by authors, and recent papers have used  $\delta^{\text{Id}}$ C as the observed deviation from the standard. At the New Zealand Radiocarbon Dating Conference it was recommended to use  $\delta^{\text{Id}}$ C only for age-corrected samples. Without an age correction, the value should then be reported as percent of modern relative to 0.95 NBS oxalic acid. (Proceedings 8th Conference on Radiocarbon Dating, Wellington, New Zealand, 1972). The Ninth International Radiocarbon Conference, Los Angeles and San Diego, 1976, recommended that the reference standard, 0.95 times NBS oxalic acid activity, be normalized to  $\delta^{\text{Id}}$ C = -19%e.

In several fields, however, age corrections are not possible.  $\delta^{14}C$  and  $\Delta$ , uncorrected for age, have been used extensively in oceanography, and are an integral part of models and theories. For the present, therefore, we continue the editorial policy of using  $\Delta$  notations for samples not corrected for age.

Citations. A number of radiocarbon dates appear in publications without laboratory citation or reference to published date lists. We ask that laboratories remind submitters and users of radiocarbon dates to include proper citation (laboratory number and date-list citation) in all publications in which radiocarbon dates appear.

Radiocarbon Measurements: Comprehensive Index, 1950-1965. This index covers all published <sup>11</sup>C measurements through Volume 7 of RADIOCARBON and incorporates revisions made by all laboratories. It is available to all subscribers to RADIOCARBON at \$20.00 US per copy.

Publication schedule. Beginning with Volume 15, RADIOCARBON has been published in three issues: Winter, Spring, and Summer. Contributors who meet our deadlines will be given priority but publication is not guaranteed in the following issue.

List of laboratories. The comprehensive list of laboratories at the end of each volume now appears in the third number of each volume.

Index. All dates appear in index form at the end of the third number of each volume. Starting with Volume 22, RADIOCARBON is publishing a new type of index, which is organized in chronologic order, according to sample type and by geographic distribution. The editors of RADIOCARBON believe that this practice will serve a more useful function. Our readers are encouraged to make further suggestions.

# ELEVENTH INTERNATIONAL RADIOCARBON CONFERENCE

June 20-26, 1982

### Seattle, Washington, USA

The Eleventh International Radiocarbon Conference will be held from June 20 to 26, 1982 on the campus of the University of Washington in Seattle.

#### **PROGRAM**

The scientific program includes the following topics:

<sup>14</sup>C and archaeology

Mass spectrometric dating with accelerators and enrichment of <sup>14</sup>C samples. We invite also the discussion of other radioisotopes

Natural <sup>14</sup>C variations, with special consideration of the influence of climate change on past atmospheric <sup>14</sup>C and CO<sub>2</sub> levels

General technique

The influence of man on 14C levels in our environment

<sup>14</sup>C and overlapping dating methods

Special topics: to be announced

### **PAPERS**

Acceptance of papers will be decided on the basis of extended summaries (about 2 pages). Depending on the number of papers accepted, parallel sessions and/or poster sessions may be scheduled. Apart from the paper presentations one or more working sessions may be planned during the conference. The conference proceedings will be published in RADIOCARBON.

#### **AMQUA**

A meeting of AMQUA, the American Quaternary Association, has been scheduled in Seattle following the Radiocarbon Conference (June 28-30). It may be possible to take part in the AMQUA preconference field trips on June 26 and 27.

Write for more information to:

Quaternary Isotope Laboratory, AK-60 University of Washington Seattle, Washington 98195

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