

Announcing. . .



An international meeting on research in Radiocarbon Dating, Accelerator Mass Spectrometry and Related Fields.

First circular will be sent September 1989.

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AMS GEOSCIENTIST

Purdue University is upgrading its Tandem Accelerator to establish a research center for Accelerator Mass Spectrometry (AMS). This instrument will mainly analyze ^{36}Cl , ^{129}I , ^{41}Ca , ^{10}Be , ^{26}Al , and ^{14}C to solve scientific problems in Solid Earth and Atmospheric Sciences. Professor David Elmore has joined the Physics Department to help establish this facility and substantial start-up funds have been provided.

Purdue's Department of Earth and Atmospheric Sciences seeks a well-established geoscientist whose research involves isotopes that can be analyzed by AMS. We especially seek applicants with AMS-related experience in hydrology, surficial processes, climatology, physical geography or biogeochemical cycles who have demonstrated an ability to obtain external funding.

The successful applicant will teach courses in his/her specialty, have essentially unlimited access to the facility, and assume a major role in directing overall research-and-development priorities. Rank and salary for this faculty position will depend on qualifications.

Send vita, statement of AMS-related research and experience, and names of three references to: Dr. Steven J. Fritz, Department of Earth and Atmospheric Sciences, Purdue University, West Lafayette, IN 47907. Screening will commence on May 1 and will continue until the position is filled. Purdue University is an affirmative action/equal opportunity employer.

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20–25 June 1988**

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INTERNATIONAL WORKSHOP ON INTERCOMPARISON OF RADIOCARBON LABORATORIES

GLASGOW, 12–15 SEPTEMBER 1989

A workshop was held in Glasgow in September, 1989 on the topic of the InterComparison of Radiocarbon Laboratories. The meeting was hosted by the University of Glasgow, Scottish Universities Research and Reactor Centre and the NERC ^{14}C laboratory at East Kilbride. The scientific programme of the workshop covered previous and current intercomparison studies of radiocarbon laboratories, as well as future developments in this field.

The Proceedings will be published by *RADIO-CARBON* as a Special Issue in Volume 32, No. 3, 1990. Participants should submit three double-spaced copies (with diskette, if available) of their manuscripts by November 15, 1989. Manuscripts received after this date will *not* be included in the Proceedings. Manuscripts should not exceed 10 printed pages.

Participants should submit manuscripts to:

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REVISED NOTICE TO READERS AND CONTRIBUTORS

Since its inception, the basic purpose of *RADIOCARBON* has been the publication of compilations of ^{14}C dates produced by various laboratories. These lists are extremely useful for the dissemination of basic ^{14}C information.

In recent years, *RADIOCARBON* has also been publishing technical and interpretative articles on all aspects of ^{14}C . We would like to encourage this type of publication on a regular basis. In addition, we will be publishing compilations of published and unpublished dates along with interpretative text for these dates on a regional basis. Authors who would like to compose such an article for his/her area of interest should contact the Managing Editor for information.

Other sections recently added to our regular issues include NOTES AND COMMENTS, LETTERS TO THE EDITOR and ANNOUNCEMENTS. Authors are invited to extend discussions or raise pertinent questions to the results of scientific investigations that have appeared on our pages. These sections include short, technical notes to relay information concerning innovative sample preparation procedures. Laboratories may also seek assistance in technical aspects of radiocarbon dating. Book reviews are also encouraged as are advertisements.

Manuscripts. Papers may now be submitted on both floppy diskettes and hard copy. When submitting a manuscript on a diskette, *always* include *two* hard copies, double-spaced, or wait until the final copy is prepared, after review, before sending the edited diskette. We will accept, in order of preference, WordPerfect, 5.0 or 4.2, Microsoft Word, WordStar or any major Macintosh or IBM word-processing software program. ASCII files, MS DOS and CPM formatted diskettes are also acceptable. The diskettes should be either $3\frac{1}{2}$ " (720K or 1.44 megabytes) or $5\frac{1}{4}$ " (360K or 1.2 megabytes). Radiocarbon papers should follow the recommendations in *RADIOCARBON* Style Guide (R, 1984, v 26, p 152–158). Our deadline schedule for submitting manuscripts is:

<i>For</i>	<i>Date</i>
Vol 32, No. 1, 1990	Sept 1, 1989
Vol 32, No. 2, 1990	Jan 1, 1990

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, 5568 yr, for the half-life. This decision was reaffirmed at the 11th International Radiocarbon Conference in Seattle, Washington, 1982. 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 ± 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 cal AD/BC, citing the specific calibration curve used to obtain the estimate. Calibrated dates will now be reported as "cal BP" or "cal AD/BC" according to the consensus of the Twelfth International Radiocarbon Conference, Trondheim, Norway, 1985.

Meaning of $\delta^{14}\text{C}$. In Volume 3, 1961, we endorsed the notation Δ (Lamont VIII, 1961) for geochemical measurements of ^{14}C activity, corrected for isotopic fractionation in samples and in the NBS oxalic-acid standard. The value of $\delta^{14}\text{C}$ that entered the calculation of Δ 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 $\delta^{14}\text{C}$ as the observed deviation from the standard. At the New Zealand Radiocarbon Dating Conference it was recommended to use $\delta^{14}\text{C}$ 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 $\delta^{13}\text{C} = -19\text{‰}$.

In several fields, however, age corrections are not possible. $\delta^{14}\text{C}$ and Δ , 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 Δ notations for samples not corrected for age.

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