



RADIOCARBON

Announces the Publication of the Following Special Issues:

Proceedings of the 13th International Radiocarbon Conference

Dubrovnik, Yugoslavia, 20–25 June 1988

Volume 31, No. 3, 1989 @ \$60.00

This special issue contains papers on recent developments in Sample Preparation and Measurement Techniques, Intercomparison Study, Carbon Cycle in the Environment, Global ^{14}C Variations, Applications and much more. 874 pages. The Proceedings issue is part of the 1989 subscription.

**Proceedings of the International Workshop
On Intercomparison of Radiocarbon Laboratories**

Glasgow, Scotland, 12–15 September 1989

Volume 32, No. 3, 1990 @ \$40.00

A workshop in Glasgow on the Intercomparison of Radiocarbon Laboratories was hosted by the University of Glasgow, Scottish Universities Research and Reactor Centre and the NERC ^{14}C laboratory at East Kilbride. The scientific program of the workshop covered previous and current intercomparison studies among radiocarbon laboratories, as well as plans for accuracy improvement in this field. This issue contains papers and discussions and is part of the 1990 subscription.

**Radiocarbon After Four Decades:
An Interdisciplinary Perspective**

Lake Arrowhead, California, 4–8 June 1990

Special Hardcover Edition Published by Radiocarbon and The University of Arizona Press

The conference commemorated the dawn of radiocarbon as a dating, biological and environmental tracer isotope. This conference volume will document the major contributions of ^{14}C dating to archaeology, biochemistry, environmental studies, geochemistry, geology, geophysics, hydrology and oceanography over the last 40 years. This monograph will be offered outside of our three regular issues, at a discount to subscribers.

For more information on ordering or subscriptions, please write to:

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Department of Geosciences
The University of Arizona
4717 East Ft Lowell Road
Tucson, AZ 85712 USA
Tel: 602-881-0857
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THIRD INTERNATIONAL RADIOCARBON INTERCOMPARISON 1992

It is proposed to hold a further intercomparison for radiocarbon laboratories in 1992. This new exercise is complementary to the laboratory use of the new IAEA reference materials and will make use of natural samples whose ages will be unknown to the participants. The intercomparison has been funded by the UK research councils (SERC and NERC), and samples will be made available to all laboratories who request them.

Any laboratory not already committed to the project, but that wishes to do so, should contact:

Dr E M Scott
Department of Statistics
University of Glasgow
Glasgow, G12 8QW Scotland

Fax: (41) 330 (5094)
E-mail: GATA24 @ UK.AC.GLASGOW.VME

EARTH OBSERVATIONS AND GLOBAL CHANGE DECISION MAKING: A NATIONAL PARTNERSHIP

NASA, NOAA, ERIM Third Annual Conference on Global Change

On 22–23 October, 1991, NASA, NOAA, and ERIM will again host a major environmental conference at the National Press Club in Washington, DC. The purpose of the conference is to evaluate the impact of satellite earth observations on the global change decision-making process, and to build a national partnership to address global change science and policy issues.

For information, contact:

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Tel: (313) 994-1200, ext 3234
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RADIOCARBON - PRICE LIST

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(00636)

Subscription Information

1991: Volume 10 (6 issues)

Annual subscription (1991) **DM 495.00**

Two-year rate (1991/92) **DM 940.50**

ISSN: 0277-3791



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P A PIRAZZOLI (France), **D R GRANT** (USA) & **P WOODWORTH** (UK), Trends of relative sea-level change: past, present and future.

Loess, Aeolian Deposits, and Related Palaeosols in the Mediterranean Region

M CREMASCHI (Italy), Stratigraphy and palaeoenvironmental significance of the loess deposits on Susak Island (Dalmation Archipelago).

H MUCHER, **J SEVINK**, **G BERGKAMP** & **J JONGEJANS** (The Netherlands), A pedological and micromorphological study on Mediterranean loessial deposits near Gerona, NE-Spain.

B VAN VLIET-LANOE (France), The genesis and age of the argillic horizon in Weichselian loess of North Western Europe.

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1991: Volumes 5-8

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Two-year rate (1991/92) **DM 570.00**

ISSN: 1040-6182



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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, RADIOCARBON UPDATES 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, include three hard copies, double-spaced. When the final copy is prepared after review, please provide a floppy diskette along with one hard copy. We will accept, in order of preference, WordPerfect 5.1 or 5.0, Microsoft Word, Wordstar or any IBM word-processing software program. ASCII files, MS DOS and CPM formatted diskettes are also acceptable. The diskettes should be either 3½" (720 K or 1.44 megabytes) or 5¼" (360K or 1.2 megabytes). Radiocarbon papers should follow the recommendations in INSTRUCTIONS TO AUTHORS (R, 1990, v 32, no. 1, p 115–118). Offprints are available upon request. Our deadline schedule for submitting manuscripts is:

<i>For</i>	<i>Date</i>
Vol 34, No. 1, 1992	Sept 1, 1991
Vol 34, No. 2, 1992	Jan 1, 1992

Half-life of ^{14}C . In accordance with the decision of the Fifth Radiocarbon Dating Conference, Cambridge, England, 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*, 1962, v 195, no. 4845, p 984), 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, California, 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.

Measuring 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, California, 1976, recommended that the reference standard, 0.95 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.