

RADIOCARBON

*In Association with the American School of Prehistoric
Research, Peabody Museum, Harvard University
announces the publication of*

Late Quaternary Chronology and Paleoclimates of the Eastern Mediterranean

Edited by OFER BAR-YOSEF and RENEE S. KRA

This sourcebook results from a workshop convened by the editors at the 14th International Radiocarbon Conference, 24 May 1991, in Tucson, Arizona. *Late Quaternary Chronology and Paleoclimates of the Eastern Mediterranean* brings together the results of varied radiometric dating techniques into one convenient reference. The volume includes: 1) discussions of TL, ESR and U/Th dating relevant to the hotly debated issues of the origins of modern humans and the fate of the eastern Mediterranean Neanderthals; 2) comprehensive compilations of radiocarbon dates encompassing the past 40,000 years, with special reference to the shift from foraging to agriculture and animal domestication, as well as critical re-evaluations of the available dates; 3) summaries of the paleoclimates of the area during the last 20,000 years as viewed through marine, continental, palynological and paleohydrological sequences. This 377-page book contains 23 articles by international scholars well-known in their respective fields.

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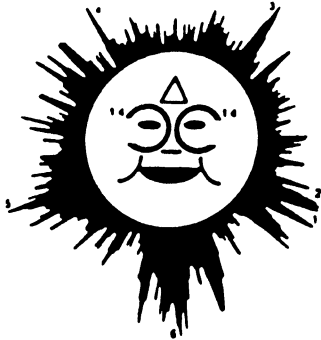
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An International Journal of Cosmogenic Isotope Research

has published

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A Special Hardcover Edition

Edited by Minze Stuiver, Austin Long and Renée S. Kra

CALIBRATION 1993 amends and extends the time series published in the 1986 Calibration Issue. This special hardcover edition contains tree-ring-derived calibration curves for the radiocarbon time scale, a marine calibration curve employing U/Th coral data, and discussions of atmospheric and marine reservoir influences on measured ^{14}C ages.

Calibration procedures are also reviewed.

A 5¼" diskette of the new IBM-PC based program, CALIB 3.0.3C (M. Stuiver and P. Reimer, University of Washington), is included. The program integrates the new atmospheric and marine data presented in this issue, and allows for calibrations from "conventional radiocarbon years" to calendar dates for the past 18,360 ^{14}C years.

CALIBRATION 1993 represents the state-of-the art calibration, and provides an essential tool for ^{14}C research and dating.

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LSC 94

International Conference

Advances in Liquid Scintillation Spectrometry

*Glasgow, Scotland
8-12 August 1994*

LSC 94 continues the series of conferences held in Gatlinburg, USA in 1989 and Vienna, Austria in 1992. The conference venue will be the Royal Scottish Academy of Music and Drama in Glasgow, Scotland, from 8-12 August 1994. This is the week before the 15th International Radiocarbon Conference, which will also be held at the same location.

The aims of the conference are to promote and encourage the free exchange of information on liquid scintillation spectrometry and related scintillation techniques.

The proposed scientific themes are:

- New Instrumentation
- Advances in Liquid and Solid Scintillators
- Bioscience Applications
- Environmental Applications
- Alpha Counting
- Cerenkov Counting
- Data Handling Algorithms/Computer Applications and Software
- Sample Handling and Disposal
- Other Scintillation Techniques

Contributed papers are welcomed within the themes outlined above. There will also be a major exhibition of the latest commercial instrumentation for liquid scintillation spectrometry and displays of ancillary equipment, supplies and books.

For further conference information please contact the Conference Secretariat
Gordon Cook, Scottish Universities Research & Reactor Centre, East Kilbride
Glasgow G75 0QU, Scotland
Telephone: (44)3552-23332 Fax: (44)3552-29898

15th International Radiocarbon Conference

Glasgow, Scotland
15–19 August 1994

The 15th International Radiocarbon Conference will be held in Glasgow, Scotland in the Royal Scottish Academy of Music and Drama (RSAMD) from 15–19 August 1994, the week immediately following the International Conference on Advances in Liquid Scintillation Spectrometry.

The broad themes of the conference are:

^{14}C in Archaeology
Advances in Beta Counting
Accelerator Techniques
Calibration of the ^{14}C Time Scale
 ^{14}C As a Tracer of the Dynamic Carbon Cycle in Current Environments
 ^{14}C In the Reconstruction of Past Environments

There will be both poster and oral sessions, with no parallel sessions. There will also be opportunities for exhibiting equipment, computer software and books. To complement the main conference program, a number of workshops will be held on the weekend of 13 and 14 August. Topics are ^{14}C in soils, the use of ^{14}C in dating human recolonization after glaciation, the ^{14}C intercomparison (TIRI), liquid scintillation counting techniques, tephra studies and ^{14}C dating, PAGE chronologies, carbon in the oceans and AMS sample preparation. Accommodation, all within walking distance of the RSAMD, ranges from University Halls of Residence to five star hotels. A full social program is also planned, with a welcome party, civic reception, outing, and conference dinner.

Submission of Papers

We welcome contributed papers within the broad themes outlined above. Within the time constraints posed by our aim of having no parallel sessions for all presentations, the committee will determine the appropriate session and manner of presentation for the accepted papers.

For more information please contact Marian Scott or the Conference Secretariat,
Mrs. M. Smith, Department of Statistics
University of Glasgow, Glasgow G12 8QW, Scotland
Telephone: (44)41 339 8855 Ext. 5024; Fax: (44)41 330 4814
E-mail: GATA24@VME.GLASGOW.AC.UK or
marian@stats.gla.ac.uk

Radiocarbon Dates

from samples funded by English Heritage and dated before 1981

D Jordan, D Haddon-Reece, and A Bayliss

This volume holds a datelist of radiocarbon determinations carried out between 1970 and 1982 on behalf of the Ancient Monuments laboratory, now part of English Heritage. It also contains supporting information about the samples and the sites producing them, a comprehensive bibliography and three indexes for reference and analysis.

The datelist has been collated to give access to a large body of information which, although mostly published elsewhere, has never before been accessible in a consistent form. When these dates were produced, high-precision calibration was not possible; now that this is available all dates have been converted, thus giving archaeologists and others using radiocarbon dates the opportunity to review their dating results in the light of this calibration, and with hindsight. The indexes order the complex information contained in the datelist by HAR numbers and by true calendar dates.

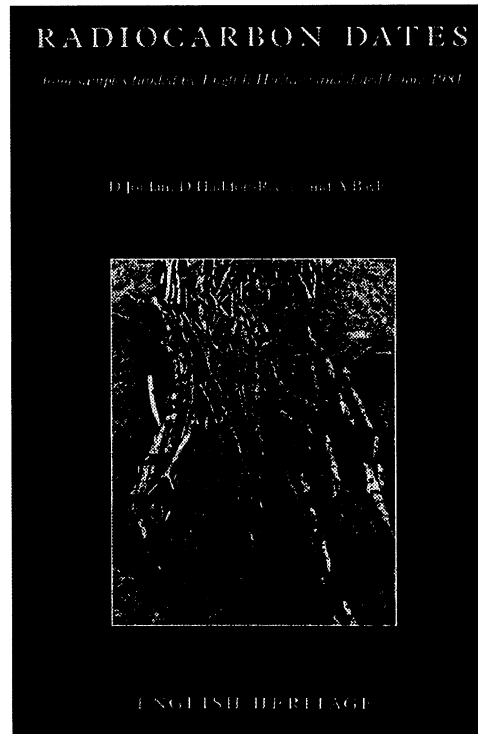
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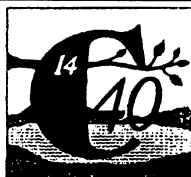
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From Springer-Verlag and Radiocarbon

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Edited by **R. E. Taylor**, *University of California, Riverside*,
A. Long and R. S. Kra, *both of The University of Arizona, Tucson*

Here, for the first time, are collected accounts of significant achievements and assessments of historical and scientific importance. **Radiocarbon After Four Decades: An Interdisciplinary Perspective** commemorates the 40th anniversary of radiocarbon dating and documents the major contributions of ^{14}C dating to archaeology, biomedical research, earth sciences, environmental studies, hydrology, studies of the natural carbon cycle, oceanography and palynology.

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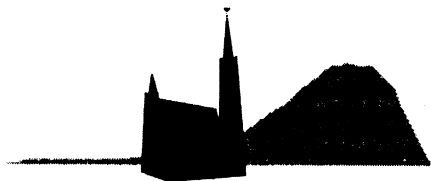
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LSC 92



Vienna, Austria
14-18 September 1992

From
RADIOCARBON
*An International Journal of Cosmogenic
Isotope Research*

LIQUID SCINTILLATION SPECTROMETRY 1992

*Edited by JOHN E. NOAKES, FRANZ
SCHÖNHOFER and HENRY A. POLACH*

Liquid Scintillation Spectrometry 1992 contains papers presented at an international conference, "Advances in Liquid Scintillation Spectrometry", held in Vienna, Austria, 14-18 September 1992. The volume reports state-of-the-art research and technology in the field of liquid scintillation counting.

The Methods section contains sample preparation and measurement techniques, scintillators and solvents, alpha measurements and standardization. The Bioscience Applications section is an overview of liquid scintillation spectrometry in molecular biology and implications of epidemiological studies. Environmental Applications include the use of tritium, radon, radium, uranium and other radionuclides in studies of radiation protection, tracer techniques and waste management.

The editors are leading scientists from the USA, Austria and Australia, and the authors are international academic scholars and industrial researchers. The 512-page hardcover volume contains extensive bibliographical references and a comprehensive index. It was published in October 1993 by *RADIOCARBON*. ISBN 0-9638314-0-2

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NOTICE TO READERS AND CONTRIBUTORS

The purpose of *RADIOCARBON* is to publish technical and interpretive articles on all aspects of ^{14}C and other cosmogenic isotopes. In addition, we present regional compilations of published and unpublished dates along with interpretive text. Besides the triennial Proceedings of Radiocarbon Conferences, we publish Proceedings of conferences in related fields. Organizers interested in such arrangements should contact the Managing Editor for information.

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 regarding the results of investigations that have appeared on our pages. These sections also include short technical notes to disseminate information concerning innovative sample preparation procedures. Laboratories may also seek assistance in technical aspects of radiocarbon dating. Book reviews are encouraged. We include a list of laboratories and a general index for each volume.

Manuscripts. When submitting a manuscript, include three printed copies, double-spaced, and a floppy diskette, single-spaced. We will accept, in order of preference, FrameMaker 4, WordPerfect 6.0 or 5.1, 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 mb) or 5¼" (360 k or 1.2 mb). We also accept E-mail transmissions of manuscripts. Papers should follow the recommendations in INSTRUCTIONS TO AUTHORS (1994, vol. 36, no. 1, this issue). Offprints of these guidelines are available upon request. Our deadlines for submitting manuscripts are:

<i>For</i>	<i>Date</i>
Vol. 36, No. 3, 1994	May 1, 1994
Vol. 37, No. 1, 1995	September 1, 1994
Vol. 37, No. 2, 1995	January 1, 1995

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, vol. 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 should be reported as "cal BP" or "cal AD/BC" according to the consensus of the Twelfth International Radiocarbon Conference, Trondheim, Norway, 1985.

Measuring $\delta^{14}\text{C}$. 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 of the 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. Thus, for the present, we continue the editorial policy of using Δ notations for samples not corrected for age.

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