



## 7th International Conference on Accelerator Mass Spectrometry

Tucson, Arizona  
May 20-24, 1996

The 7th International Conference on Accelerator Mass Spectrometry, co-sponsored by The University of Arizona and the Lawrence Livermore National Laboratory, will be held in Tucson on 20–24 May 1996. The University of Arizona is a center for AMS, radiocarbon dating, global change and tree-ring research. We believe this combination is unique, and will give a more interdisciplinary atmosphere to AMS-7. We plan to highlight global change research, new AMS applications and new techniques. The scientific program of the meeting will be finalized on 19 February 1996. We expect to mail the final circular and preliminary program to registered participants in April 1996. Abstracts of the meeting and workshops will be published by *RADIOCARBON*.

**Associated Workshops:** There will be three pre-conference and one post-conference workshop. The first workshop will concentrate on  $^{129}\text{I}$  AMS studies and will be held in Livermore, California on Thursday, 16 May 1996. The second workshop will also be held in Livermore and will emphasize biomedical applications of AMS. This meeting will be held Thursday and Friday morning, 16–17 May. The third pre-conference workshop will be the largest and is entitled Applications of AMS to Global Climate Change. This workshop will be held at Scripps Institution of Oceanography in La Jolla, California on Saturday, 18 May 1996.

A post-conference workshop will be held in Tucson on Saturday, 25 May 1996. This workshop, entitled Geological Applications of AMS, will concentrate on two important topics: the use of AMS for paleoseismicity studies and the use of AMS measurements of in-situ-produced isotopes for geological applications.

For information on the Livermore workshops, please contact John Vogel (e-mail: [vogel2@llnl.gov](mailto:vogel2@llnl.gov)) or Mark Roberts ([roberts5@llnl.gov](mailto:roberts5@llnl.gov)). For questions concerning the other workshops or the main conference, please contact Tim Jull or Warren Beck at the address below.

**Field Trip:** A post-conference field trip highlighting archaeological sites in northern Arizona and the Grand Canyon and Flagstaff areas will be arranged if numbers warrant.

**Fees:** The registration fees will be \$325 after 1 February 1996, with a small charge for associated workshops.

**Local Organizing Committee:**

Timothy Jull, Chair  
George Burr  
Warren Beck  
Doug Donahue  
Steven Leavitt, Tree Ring Lab  
Marc Caffee, LLNL

**For Conference information contact:**

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**14**  **RADIOCARBON**  
**1996 PRICE LIST**

<b>Proceedings of the 15th International Radiocarbon Conference</b> (Vol. 37, No. 2, 1995)	\$75.00*
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<b>Proceedings of the International Tree-Ring Conference</b> (TREE RINGS, ENVIRONMENT AND HUMANITY) (Payable to <i>ICTREH/Tree-Ring Society</i> ; 1996)	65.00

**SUBSCRIPTION RATES VOLUME 38, Nos. 1–3, 1996**

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Postage & handling USA	35.00
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\*Surface postage and handling charges will be added to book orders and back issues. For airmail delivery, please contact *RADIOCARBON* for rates. Payment accepted in U.S.\$ only.

†**Subscription postage:** add \$10.00 for foreign.  
‡**Student rates:** ½ the individual rate for subscriptions and book orders. Please provide copy of student ID.

# Sixth Australasian Archaeometry Conference

## *Australasian Archaeometry: Retrospectives for the New Millennium*

Australian Museum, Sydney  
10–13 February 1997

Sponsored by

Australian Institute of Nuclear Science & Engineering  
Australian Nuclear Science & Technology Organisation  
Australian Museum

### *Co-Chairmen*

Claudio Tuniz, ANSTO  
and Richard Fullagar,  
Australian Museum

### *Conference Manager*

Margaret Lanigan, AINSE

### *Committee*

Colin Murray-Wallace, University of Wollongong; Robin Torrence, Australian Museum; Mike Barbetti, University of Sydney; Ewan Lawson, ANSTO; Daniel Potts, University of Sydney; Roger Gammon, AINSE; Jim Specht, Australian Museum

Preliminary notice is given that the Sixth Australasian Archaeometry Conference will be held at the Australian Museum in Sydney 10–13 February 1997. As this will be the last official meeting on Australasian archaeometry this millennium, the Conference will present an overview of the current status of archaeometry, major achievements, recent advances and applications. For the purposes of this Conference archaeometry is defined in the broadest context, and accordingly, contributions are invited from as wide a field as possible. Student contributions are also encouraged. In addition, the Conference Organizing Committee actively encourages suggestions for additional paper and poster sessions on significant thematic issues. Emphasis will be on the importance of interdisciplinary studies.

The Organizing Committee invites contributions in the form of major reviews of dating methods and other archaeometric techniques, papers summarizing recent advances in the development and application of archaeometric techniques and analysis, and papers addressing specific case studies and themes in which archaeometry has played a vital role, such as:

- Human colonization of Australasia and Oceania
- Extinction in Australasia and Oceania—causes and timing
- Natural resources, production, trade and exchange in a worldwide perspective.

## Subject Areas

**Chronology.** Radiocarbon (classical and Accelerator Mass Spectrometry), Thermoluminescence, Optically Stimulated Luminescence, Electron Spin Resonance, Amino Acid Racemization, Uranium-series, and other dating methods.

**Technology.** Metallurgy, stone tools, wood, ceramics, functional analysis including residues and use-wear.

**Characterization.** Chemical, mineralogical, ion beam analysis, mass spectrometry, neutron activation.

**Environment.** Vegetation, soil, food, animals, geomorphology, coastal change.

**Biomedicine.** Paleopathology, DNA studies.

**Climate change.** Dendrochronology and dendroclimatology compared with other techniques.

**Archaeometric analysis in light of technological change.** Has the quality of research questions kept pace with technological advances?

**Forgeries.** Archaeometry to the rescue

**Rock art studies.**

## Events

There will be an inspection of facilities at ANSTO on Tuesday 11 February followed by a barbecue luncheon. After lunch there will be a business meeting to consider the organization of the archaeometry community in Australia, national facilities for archaeometry, *etc.* As at previous Australasian Archaeometry Conferences, distinguished overseas visitors will be invited to present public lectures.

**Archaeometric studies of museum objects.** Sessions will be held on Monday 10 February 1997 and Wednesday and Thursday, 12–13 February 1997 at the Australian Museum in Sydney.

## Accommodations and Travel

Travel and accommodation subsidies may be available to presenters from AINSE member universities. The official airline for the conference is Ansett Australia. For further information please contact Ansett Australia, telephone 131413, quoting Masterfile Number MC01699.

## Abstracts

The second announcement, in early 1996, will feature a call for abstracts.

**Enquiries may be directed to:**

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Ms. Margaret Lanigan  
Tel. (02) 439 8220  
Fax (02) 439 6561

Copy and cut along line



**Request for Information**

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Institution: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

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For a copy of the detailed Second Announcement and Call for Abstracts, please complete this form and return it to:

Secretariat  
Sixth Australasian Archaeometry Conference  
AINSE  
PMB 1  
Menai, NSW 2234, Australia

## NOTICE TO READERS AND CONTRIBUTORS

The purpose of *RADIOCARBON* is to publish technical and interpretive articles on all aspects of  $^{14}\text{C}$  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 and Special Issues that focus on particular themes. 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 BOOK-REVIEWS. 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. 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, WordPerfect 6.0 or 5.1, Microsoft Word, Wordstar or any standard IBM word-processing software program on 3½" or 5¼" IBM disks, or high-density Macintosh diskettes. ASCII files are also acceptable. We also accept E-mail and ftp transmissions of manuscripts. Papers should follow the recommendations in INSTRUCTIONS TO AUTHORS (1994, vol. 36, no. 1). Offprints of these guidelines are available upon request. Our deadlines for submitting manuscripts are:

<i>For</i>	<i>Date</i>
Vol. 38, No. 2, 1996	January 1, 1996
Vol. 38, No. 3, 1996	May 1, 1996
Vol. 39, No. 1, 1997	September 1, 1996

*Half-life of  $^{14}\text{C}$ .* 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  $^{14}\text{C}$  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*, 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  $^{14}\text{C}$ .* In Volume 3, 1961, we endorsed the notation  $\Delta$ , (Lamont VIII, 1961), for geochemical measurements of  $^{14}\text{C}$  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  $\Delta$  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  $\delta^{14}\text{C}$  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  $\Delta$ , 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  $\Delta$  notations for samples not-corrected for age.

*NIST Standard Nomenclature.* Authors referring to NIST Oxalic Standard Reference Materials should use the new nomenclature: HOxI for SRM 4990 B (previously, Oxalic Acid I); HOxII for SRM 4990 C (previously, Oxalic Acid II).

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