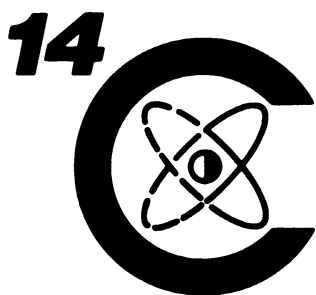


Radiocarbon

An International Journal of Cosmogenic Isotope Research

VOLUME 45 / NUMBER 3 / 2003



IN THIS ISSUE:



Bomb radiocarbon in tree rings from northern New South Wales, Australia, Q Hua et al., p 431–447

Editor

A J T JULL

Associate Editors

J WARREN BECK
GEORGE S BURR

Managing Editor

MARK E McCLURE

Assistant Editor

ROY A RAMOS

Business Manager

AGNIESZKA P BAIER

Department of Geosciences
The University of Arizona
4717 East Fort Lowell Road
Tucson, Arizona 85712-1201 USA

ISSN: 0033-8222

RADIOCARBON

An International Journal of Cosmogenic Isotope Research

Editor: A J T JULL

Associate Editors: J WARREN BECK and GEORGE S BURR

Managing Editor: MARK E MCCLURE

Assistant Editor: ROY A RAMOS

Business Manager: AGNIESZKA P BAIER

Subscriptions and Sales Manager: KRISTA LINDSAY

Published by

Department of Geosciences

The University of Arizona

Published three times a year at The University of Arizona, Tucson, AZ 85712-1201 USA.

© 2003 by the Arizona Board of Regents on behalf of the University of Arizona. All rights reserved.

Subscription rate (2003): \$190.00 (institutions), \$90.00 (individuals). Foreign postage is extra. A complete price list, including proceedings of international conferences, special publications and back issues, appears on the back pages of this issue. *Advertising rates* available upon request, or see www.radiocarbon.org/adrates.html.

Missing issues will be replaced without charge only if claim is made within three months (six months for India, New Zealand, and Australia) after the publication date. Claims for missing issues will not be honored if non-delivery results from failure by the subscriber to notify the Journal of an address change.

Authors: See our "Information for Authors" document at www.radiocarbon.org/Authors/ for guidelines on manuscript submission and format. All correspondence and manuscripts should be addressed to the Managing Editor, *RADIOCARBON*, Department of Geosciences, The University of Arizona, 4717 East Fort Lowell Road, Tucson, AZ 85712-1201 USA. Tel.: +1 520 881-0857; Fax: +1 520 881-0554; Email: editor@radiocarbon.org.

List of laboratories. Our comprehensive list of laboratories is published annually, and is also available at www.radiocarbon.org/Info/lablist.html. We ask all laboratory directors to provide their laboratory code designation, as well as current telephone and fax numbers, and email addresses. Changes in names or addresses, additions or deletions should be reported to the managing editor. Conventional and AMS laboratories are arranged in alphabetical order by country, and we include laboratories listed by code designation.

RADIOCARBON on the World Wide Web: <http://www.radiocarbon.org/>

RADIOCARBON is indexed and/or abstracted by the following sources: *Anthropological Index; Anthropological Literature; Art and Archaeology Technical Abstracts; Bibliography and Index of Geology (GeoRef); British Archaeological Bibliography; Chemical Abstracts; Chemistry Citation Index; Current Advances in Ecological and Environmental Sciences; Current Contents (ISI); FRANCIS (Institut de l'Information Scientifique et Technique – CNRS); Geographical Abstracts; Geological Abstracts; Oceanographic Literature Review; Science Citation Index; Social Sciences Citation Index.*

CONTENTS

EDITORIAL BOARD	iii
FROM THE EDITOR	v
ARTICLES	
AMS Radiocarbon Dating of Bones at LSCE <i>N Tisnérat-Laborde, H Valladas, E Kaltnecker, M Arnold</i>	409
Development of an Automated System for Preparation of Organic Samples <i>Christine Hatté, Jean-Jacques Poupeau, Jean-François Tannau, Martine Paterne</i>	421
Environmental Studies	
Bomb Radiocarbon in Tree Rings from Northern New South Wales, Australia: Implications for Dendochronology, Atmospheric Transport, and Air-Sea Exchange of CO ₂ <i>Quan Hua, Mike Barbetti, Ugo Zoppi, David M Chapman, Bruce Thomson</i>	431
Freshwater Reservoir Effect in ¹⁴ C Dates of Food Residue on Pottery <i>Anders Fischer, Jan Heinemeier</i>	449
Soils and Sediments	
¹⁴ C Ages of a Varved Last Glacial Maximum Section Off Pakistan <i>Ulrich von Rad, Michael Sarnthein, Pieter M Grootes, Heidi Doose-Rolinski, Jochen Erbacher</i>	467
AMS Dating of Pollen Concentrates—A Methodological Study of Late Quaternary Sediments from South Westland, New Zealand <i>Marcus J Vandergoes, Christine A Prior</i>	479
NOTES & COMMENTS	
Is there a Fifth International Radiocarbon Intercomparison (VIRI)? <i>E M Scott, C Bryant, G T Cook, P Naysmith</i>	493
Reply to Israel Carmi: “Are the ¹⁴ C Dates of the Dead Sea Scrolls Affected by Castor Oil Contamination?” <i>Kaare L Rasmussen, Johannes van der Plicht, Gregory Doudna, Frank M Cross, John Strugnell</i>	497
Characterizing the Error in the Estimated Age-Depth Relationship <i>Andrew R Solow</i>	501
RADIOCARBON UPDATES	507
LIST OF LABORATORIES	509
AUTHOR INDEX	537
SUBJECT INDEX	539