Reading the Isotopic Clocks.

our research in age determination and stable isotopes requires reliable data and custom service. Teledyne Isotopes has the expertise and experience to meet these requirements.

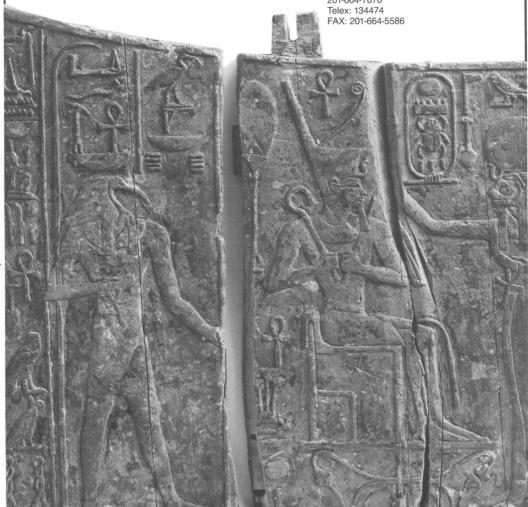
We have been pioneers in the industry since 1955 and are the only commercial laboratory that offers all major age determination techniques.

We can assure you of reliable data because of well-staffed and well-equipped labs, intercalibration with major universities and government facilities, and through use of N.B.S. and international standards.

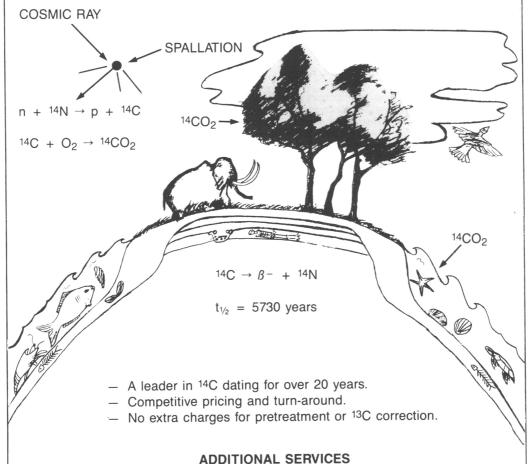
For the most reliable reading of the isotopic clocks, come to the experts.

TELEDYNE ISOTOPES

50 Van Buren Avenue Westwood, NJ 07675 201-664-7070 Telex: 134474



Radiocarbon Age Determinations



- Sr and stable isotopes in bones and dietary studies.
- Potassium-argon age determinations.
- Rubidium-Strontium age determinations.

US\$225.00 — Routine service — all sample types US\$400.00 — 7 day priority service



KRUEGER ENTERPRISES, INC. GEOCHRON LABORATORIES DIVISION

24 Blackstone Street Cambridge, MA 02139 (617) 876-3691

54th ANNUAL MEETING SOCIETY FOR AMERICAN ARCHAEOLOGY

Atlanta Hilton Hotel Atlanta, Georgia Wednesday, April 5-Sunday, April 9, 1989

Annual Meeting Chair: Kenneth L. Kvamme
Arizona State Museum
University of Arizona
Tucson, AZ 85721

GUIDELINES FOR CONTRIBUTIONS

The privilege of participating in the annual meeting as a presenter, organizer, chair or discussant is restricted to paid-up members. However, representatives of other disciplines or archaeologists who are not North American residents may request a waiver of this requirement.

Society policy states that a person may not deliver more than one paper although that person may, at the same meeting, chair a session or serve as junior author of a paper presented by someone else or serve as a discussant.

Complete symposia proposals (with abstracts of papers), abstracts of contributed papers, abstracts of research reports, and abstracts for poster sessions must reach the program chairperson no later than October 1, 1988. All proposals and abstracts must be submitted on appropriate SAA forms, which are mailed to all SAA members with the ballot.

In case of co-authorship of papers, only the senior author should submit a Participant Information Form containing the information on all of the associated authors. The Participant Information Form is in two parts: Page One (Submission Information) and Page Two (Short Abstract Information). Copies of the Participant Information Form must be submitted by all participants including symposia organizers, chairs and discussants as well as all senior authors of symposia papers, contributed papers, research reports and posters.

Because it is no longer possible to accommodate all individuals wishing to make presentations at the annual meeting, the Program Committee will evaluate each submission for professionalism and redundancy with other submissions. Symposia organizers and authors of contributed papers, research papers, and poster sessions will be notified of the Program Committee's decision to accept or decline the submission by January 15, 1989. Abstracts of all papers, research reports, and posters accepted for presentation will be published in the final program.

SYMPOSIA—A symposium consists of a group of papers on a common theme. The symposium topic and the individual papers within it will be reviewed. Changes, such as consolidation of two symposia or changes in the individual papers, may be recommended. Symposia organizers should contact the Program Chair no later than September 1, 1988 in order that the Guidelines for Symposium Organizers and a special symposium form can be sent to them. Complete symposia proposals must be submitted as a package by the symposium organizer(s) and must be received by October 1, 1988.

The package must include two (2) copies of the *Symposium Proposal Form* and two (2) copies of the *Participant Information Form* for each senior author, discussant, chair, and organizer (whether or not the organizer is chairing the symposium). The organizer(s) should assure that all participants submit the *Advance Registration Form* and meeting fee before *March 13, 1989*. Participants who do not prepay the *Advanced Registration Fee* will be dropped from the symposium.

CONTRIBUTED PAPERS (20 minutes)—Contributed papers are to be distinguished from Research Reports in that they generalize, synthesize, or compare and are addressed to problems of theory, method, culture history, or culture process. Contributed papers must follow the same format as the symposia papers, and each proposed presentation must include two (2) copies of the *Participant Information Form* (Page One—Submission Information Form and Page Two—Short Abstract Form).

RESEARCH REPORTS (10 minutes)—A research report is a presentation which describes the results of a recent field or laboratory research project. Each proposed presentation must include two (2) copies of the *Participant Information Form* (Page One—Submission Information Form and Page Two—Short Abstract Form).

POSTER SESSION—Like the research report, the poster session is a description of the results of a recent field or laboratory research project. The poster session is especially appropriate for research results that can be described graphically better than verbally. Each proposed presentation must include two (2) copies of the *Participant Information Form* (Page One—Submission Information Form and Page Two—Short Abstract Form).

REGISTRATION FEES:

All presenters, chairs, discussants, and poster contributors are required to pay the established registration fee for the annual meeting. The fee must accompany the *Advanced Registration Form* and must be received by the SAA Washington Office no later than March 13, 1989. Individuals who fail to meet this deadline will be dropped from the Final Program. The registration fee may be waived upon written request (see paragraph one).

CONTENTS

1988 Fryxell Award for Interdisciplinary Research		453
OBITUARY		
Volney Hurt Jones, 1903-1982	C. Wesley Cowan	455
ARTICLES The Structure of Archaeological Theory	Michael B. Schiffer	461
A Reconsideration of Animal Body-Part Utility Indices Plumbate Origins and Development The Behavioral and Material Correlates of Site Seasonality: Lessons from	Duncan Metcalfe and Kevin T. Jones Hector Neff and Ronald L. Bishop	486 505
Navajo Ethnoarchaeology Long-Term Anasazi Land Use and Forest Reduction: A Case Study from	Thomas R. Rocek	523
Neduction: A Case study from Southwest Colorado Ohio Hopewell Trophy-Skull Artifacts as Evidence for Competition in Middle Woodland Societies Circa	Timothy A. Kohler and Meredith H. Matthews	537
50 B.CA.D. 350	Mark F. Seeman	565
REPORTS		
A Mammoth Fraud in Science	James B. Griffin, David J. Meltzer, Bruce D. Smith, and William C. Sturtevant	578
Prehistoric Vegetation and Environment at Chaco Canyon Hunting Hoppers Myth and History Reconsidered: Archaeological Implications of Tzotzil-Maya Mythology	Stephen A. Hall David B. Madsen and James E. Kirkman J. M. Levi	582 593 605
COMMÉNT		
Hierarchical and Nonhierarchical Approaches to Ceramic Design Analysis: A Response to Jernigan	Amy A. Douglass and Owen Lindauer	620
CURRENT RESEARCH, edited by Thomas F. Ly	vneh	627
Plains, Great Lakes, Northeast, Southeast		627
REVIEWS, edited by Susan C. Vehik		652