

LABORATORIES

* Inactive Laboratories

- ¹ The ³H-Laboratorium of this institute (directed by Klaus Fröhlich) should be addressed separately.
- ^{1a} Lists from this laboratory have not been submitted to RADIOCARBON. See Gdansk I, *Acta Physica Polonica*, vol 22, p 189, 1962 Gdansk II, *ibid*, vol 32, p 39, 1967.
- ² This designation Gif supersedes both Sa (Saclay) and Gsy (Gif-sur-Yvette). The only Gsy date list to be published is Gsy I (Coursaget and Le Run, RADIOCARBON, v 8).
- ³ From January 1, 1961 the Gro numbers have been replaced by GrN numbers. "New" dates are referred to the NBS oxalic-acid standard.
- ⁴ Early dates from this laboratory were given a code designation that represents the name of the sponsoring institution, e g, I (AGS) for American Geographical Society (Heusser, RADIOCARBON SUPPLEMENT, v 1).
- ⁵ Formerly Hazelton Nuclear: code designation HNS has been dropped.
- ⁶ Some dates from this laboratory were published with the code designations S (Pringle *et al*, 1957, *Science*, v 125, p 69-70).
- ⁷ See SM.
- ⁸ See Gif.
- ⁹ Some dates from this laboratory have been published with the code designation RC (Flint and Gale, 1958, *AM JOUR SCI*, v 256, p 698-714). The code designation MP published in volume 1 of the RADIOCARBON SUPPLEMENT (1959, p 216) has been changed to SM in conformity with the wishes of the laboratory, and is explained by the change of the company's name from Magnolia Petroleum Company to Socony Mobil Oil Company, Inc.
- ¹⁰ Formerly Texas-Bio-Nuclear, then Kaman Instruments. The laboratory is no longer operating.

A ARIZONA

Dr Austin Long
Laboratory of Isotope Geochemistry
Geosciences Department
University of Arizona
Tucson, Arizona 85721

ALG ALGIERS

O Rahmouni
Bd Frantz Fanon
BP 1147
Algiers, Algeria

ANL ARGONNE NATIONAL LABORATORY

Mr James Gray, Jr
Argonne National Laboratory
9700 South Cass Avenue
Argonne, Illinois 60439

ANU AUSTRALIAN NATIONAL UNIVERSITY

Mr H A Polach
ANU Radiocarbon Dating Laboratory
C-Department of Geophysics and Geochemistry
The Australian National University
Canberra ACT, Australia 2600

B BERN

Prof H Oeschger
Physikalisches Institut
Universität Bern
Sidlerstrasse 5
Bern, Switzerland

- Ba** **BRATISLAVA**
 Prof S Usacev and Dr P Povinec
 Department of Nuclear Physics
 Comenius University
 Bratislava, Smeralova 2a Str
 Czechoslovakia
- Birm** **BIRMINGHAM**
 Prof F W Shotton, FRS and R E G Williams
 Department of Geology, PO Box 363
 University of Birmingham
 Birmingham B15 2TT, England
- Bln** **BERLIN**
 Ing Günther Kohl
 Deutsche Akademie der Wissenschaften zu Berlin
 Institut für Ur-und Frühgeschichte
 1199 Berlin, Rudower Chaussee 6
 Germany
- BM** **BRITISH MUSEUM**
 Mr Harold Barker and Mr Richard Burleigh
 Research Laboratory
 The British Museum
 London WC1B 3DG, England
- BONN** **BONN**
 Dr H W Scharpenseel and F Pietig
 Institut für Bodenkunde
 Universität Bonn
 Bonn, Germany
- *C** **CHICAGO**
 Dr W F Libby
 Institute of Geophysics
 University of California
 Los Angeles, California 90024
- *CT** **CALTECH**
 Dr Don M Yost
 Gates and Crellin Laboratories of Chemistry
 California Institute of Technology
 Pasadena, California 91109
- *D** **DUBLIN**
 Dr William A Watts
 Department of Botany
 Trinity College
 Dublin, Ireland
- Dak** **DAKAR**
 Dr Cheikh Anta Diop
 Directeur du Laboratoire de
 Radiocarbone IFAN
 Université de Dakar
 République du Sénégal
- DE** **UNITED STATES GEOLOGICAL SURVEY**
 R K Blankennagel
 U S Geological Survey
 Denver Federal Center
 Lakewood, Colorado 80225
- F** **FLORENCE**
 Dr C M Azzi, L Bigliocca, and E Piovan
 Radiocarbon Dating Laboratory
 Istituto di Antropologia
 Università di Firenze
 Via del Proconsolo 12
 50122, Florence, Italy

- Fr¹** **FREIBERG**
Dr Klaus Fröhlich
Sektion Physik
Bergakademie Freiberg
DDR 92 Freiberg
- *FSU** **FLORIDA STATE**
James R Martin, H G Goodell, and D S Phelps
Radiocarbon Dating Laboratory
Department of Geology
Florida State University
Tallahassee, Florida 32306
- *G** **GÖTEBORG**
Dr E Ehn
Laboratory of Nuclear Chemistry
Chalmers Tekniska Högskola
Göteborg, Sweden
- GaK** **GAKUSHUIN UNIVERSITY**
Prof K Kigoshi
Gakushuin University
Mejiro, Toshima-ku
Tokyo, Japan
- Gd^{1a}** **GDANSK**
Prof W Mościcki, Gliwice
Politechnika Slaska
Katedra Fizyki
Zaklad Fizyki Technicznej
C-14 Laboratory
Poland
- Gif²** **GIF-SUR-YVETTE**
Dr J Labeyrie or Mme G Delibrias
Centre des Faibles Radioactivités
Centre National de la Recherche Scientifique
91-Gif-sur-Yvette, France
- *GL** **GEOCHRONOLOGICAL LABORATORY**
Institute of Archaeology
31-34 Gordon Square
London, WC1, England
- Gro³**
GrN **GRONINGEN**
Dr W G Mook
Natuurkundig Laboratorium der Rijks Universiteit
Westersingel 34
Groningen, Netherlands
- GSC** **OTTAWA**
Mr J A Lowdon
Radiocarbon Dating Laboratory
Geological Survey of Canada
601 Booth Street
Ottawa, Ontario, Canada
- *Gsy²** **GIF-SUR-YVETTE**
- GU** **GLASGOW UNIVERSITY**
Dr M S Baxter
Department of Chemistry
The University
Glasgow G12 8QQ, Scotland

- GX** **GEOCHRON LABORATORIES INC**
Richard R Pardi, Mgr
Geochron Laboratories Division
Krueger Enterprises, Inc
24 Blackstone Street
Cambridge, Mass 02139
- H** **HEIDELBERG**
Mr D Berdau and Dr K O Münnich
C-14 Laboratorium
II Physikalisches Institut der Universität
Heidelberg, Philosophenweg 12
West Germany
- HIG** **HAWAII INSTITUTE OF GEOPHYSICS**
Robert W Buddemeier
Hawaii Institute of Geophysics
University of Hawaii
2525 Correa Road
Honolulu, Hawaii 96822
- Hv** **HANNOVER**
Dr M A Geyh
Niedersächsisches Landesamt
für Bodenforschung
D-3000 Hannover-Buchholz, Post f. 230153
West Germany
- I⁴** **TELEDYNE ISOTOPES**
James Buckley
Teledyne Isotopes
50 Van Buren Avenue
Westwood, New Jersey 07675
- IGS** **INSTITUTE OF GEOLOGICAL SCIENCES**
E Welin
Radioactive Dating Laboratory
S-1045 Stockholm 50, Sweden
- IRPA** **INSTITUT ROYAL DU PATRIMOINE ARTISTIQUE**
M Dauchot-Dehon and J Heylen
Institut Royal du Patrimoine Artistique
1 Parc du Cinquanteaire
Brussels 4, Belgium
- ISGS** **ILLINOIS STATE GEOLOGICAL SURVEY**
Dennis D Coleman
Section of Analytical Chemistry
Illinois State Geological Survey
Natural Resources Building
Urbana, Illinois 61801
- *IVIC** **CARACAS**
Dr Carlos Schubert
Instituto Venezolano de Investigaciones Cientificas
Departamento de Ecología
Apartado 1827
Caracas 101, Venezuela
- K** **COPENHAGEN**
Dr Henrik Tauber
Department of Natural Sciences
National Museum
Copenhagen K, Denmark

- KAERI KOREA ATOMIC ENERGY RESEARCH INSTITUTE
Dr Kyung Rin Yang
Radioanalytical Division
Korea Atomic Energy Research Institute
PO Box 7, Cheong Ryang
Seoul, Korea
- KI KIEL
Dr H Willkomm and Dr H Erlenkeuser
Institut für Reine und Angewandte Kernphysik
Universität Kiel
23 Kiel,
Olshausenstrasse 40-60
Germany
- KN KÖLN
Dr J C Freundlich
Universität Köln, Institut für Ur-und Frühgeschichte
C¹⁴-Laboratorium
Köln-Lindenthal Weyertal 125, W Germany
- L LAMONT
Dr D L Thurber
Lamont-Doherty Geological Observatory
Columbia University
Palisades, New York 10964
- LAR LIEGE STATE UNIVERSITY
Prof Dr Jean Govaerts
Lab d'application des radioéléments
9 Place du XX Aout
Liège, Belgium
- LE LENINGRAD
Radiocarbon Laboratory
Institute of Archacology
Dvortsovaya Nab 18
Leningrad D 41, USSR
- LJ UNIVERSITY OF CALIFORNIA, SAN DIEGO
Dr H E Suess
Scripps Institution of Oceanography
University of California, San Diego
La Jolla, California 92037
- LP LA PLATA
Musco de La Plata
Pasco del Bosque
La Plata, Argentina
- Lu LUND
Prof Björn Berglund and Mr Sören Håkansson
Radiocarbon Dating Laboratory
University of Lund
Tunavägen 29
S-22363 Lund, Sweden
- Lv HÉVERLIÉ LOUVAIN
Prof P C Capron and Mr E Gilot
Centre de Physique Corpusculaire
Avenue Baudouin 1^{er}
1348 Louvain, La Neuve, Belgium
- Ly UNIVERSITY OF LYON
Mr J Evin
Laboratoire de Radiocarbone
Institut de Physique Nucléaire
43, Boulevard du 11 Novembre 1918
69, Villeurbanne-Lyon France

- *M MICHIGAN
Dr James B Griffin
University Museums Building
The University of Michigan
Ann Arbor, Michigan 48104
- *Ma^o MANITOBA
- MC MONACO
Dr J Thommeret or Dr J L Rapaire
Laboratoire de Radioactivité Appliquée
Centre Scientifique de Monaco
Avenue Saint Martin
Monaco
- ML MIAMI
Dr H G Östlund
Rosensteil School of Marine and Atmospheric Science
University of Miami
Miami, Florida 33149
- Mo VERNADSKI INSTITUTE OF GEOCHEMISTRY
Vernadski Institute of Geochemistry
Academy of Sciences of the USSR
Moscow, USSR
Address: Academician A P Vinogradov
Vorobeyskoye shosse,d47-A
Moscow, USSR
- MP⁷ MAGNOLIA PETROLEUM
- N RIKEN (TOKYO)
Dr F Yamasaki
The Institute of Physical and Chemical Research
Wako-shi, Saitama Pref
Japan
- NPL NATIONAL PHYSICAL LABORATORY
Mr W J Callow and Miss G I Hassall
Division of Radiation Science
National Physical Laboratory
Teddington, Middlesex, England
- NSW NEW SOUTH WALES
D J Carswell, Assoc Prof
Department of Nuclear and Radiation Chemistry
University of New South Wales
PO Box 1
Kensington, New South Wales, 2033, Australia
- NTU NATIONAL TAIWAN UNIVERSITY
Yuin-Chi Hsu
Department of Physics
National Taiwan University
Taipei, Taiwan, China
- Ny NANCY
Pr René Coppens et Dr Pierre Richard
Centre de Recherches Radiogéologiques
ENS de Géologie Appliquée et de Prospection Minière
Institute National Polytechnique de Nancy
BP 452
54001 Nancy Cedex, France
- NZ NEW ZEALAND
Dr T A Rafter
Institute of Nuclear Sciences
DSIR, Private Bag
Lower Hutt, New Zealand

- *O HUMBLE—ESSO PRODUCTION RESEARCH COMPANY
General Manager, Geologic Research
Esso Production Research Company
Affiliate of Humble Oil & Refining Co
PO Box 2189
Houston, Texas 77001
- *ORINS OAK RIDGE ASSOCIATED UNIVERSITIES
Dr John E Noakes, Director
Radiocarbon Dating Laboratory
Oak Ridge, Tennessee 37830
- *OWU OHIO WESLEYAN ASSOCIATED UNIVERSITIES
Dr J Gordon Ogden, III
Department of Botany and Bacteriology
Ohio Wesleyan University
Delaware, Ohio 43015
- *OX US DEPARTMENT OF AGRICULTURE
L L McDowell
Agricultural Research Service
Soil and Water Conservation Research Division
Sedimentation Laboratory
PO Box 30
Oxford, Mississippi 38655
- P PENNSYLVANIA
Miss Elizabeth K Ralph and Mrs Stuart Lawn
Department of Physics
University of Pennsylvania
Philadelphia, Pennsylvania 19174
- Pi PISA
Prof E Tongiorgi
Laboratorio di Geologia Nucleare dell'Università
Via S Maria, 22
Pisa, Italy
- *PIC PACKARD
Dr Ariel G Schrodt
Low Level Counting Laboratory
Packard Instrument Co, Inc
2200 Warrenville Road
Downers Grove, Illinois 60515
- Pr PRAGUE
Alois Dubansky
Laboratory for Isotopes
Geochemistry and Geochronology
Geological Institute
Czechoslovak Academy of Sciences
Prague-8
Na Hrazi 26
- Pta PRETORIA
Dr J C Vogel
Natural Isotopes Division
National Physical Research Laboratory
CSIR
PO Box 395
Pretoria, South Africa
- Q CAMBRIDGE
Dr R G West or Dr V R Switsur
University Sub-Department of Quaternary Research
Botany School
Downing Street
Cambridge, England

- QL QUATERNARY ISOTOPE LABORATORY
Minze Stuiver
Quaternary Isotope Laboratory
Quaternary Research Center/Geophysics Bldg
University of Washington Ak-60
Seattle, Washington 98195
- R ROME
Dr F Bella, Istituto di Fisica
and
Dr C Cortesi, Istituto di Geochimica
Radiocarbon Dating Laboratory
University of Rome
Citta Universitaria
00100-Rome, Italy
- RL RADIOCARBON, LTD
Charles S Tucek
Radiocarbon, Ltd
4 Tice Court
Spring Valley, NY 10977
- RT REHOVOT GEOISOTOPE LABORATORY
Dr A Kaufman and Mr I Carmi
Geoisotope Laboratory
Department of Isotope Research
Weizmann Institute of Science
Rehovot, Israel
- RU RICE UNIVERSITY
Barry F Beck
Department of Geology
Rice University
Houston, Texas 77001
- S SASKATCHEWAN
Mr A Rutherford
Saskatchewan Research Council
University of Saskatchewan
Saskatoon, Saskatchewan, Canada
- *Sa⁸ SACLAY
- SI SMITHSONIAN INSTITUTION
Dr W H Klein, Director
Radiation Biology Laboratory
Robert Stuckenrath
C¹⁴ Laboratory
12441 Parklawn Drive
Rockville, Maryland 20852
- *SL SHARP LABORATORIES
- SM⁹ MOBIL OIL CORPORATION
Dr H F Nelson
Mobil Oil Research and Development Corp
Field Research Laboratory
PO Box 900
Dallas, Texas 75221
- SR SALISBURY, RHODESIA
Dr E R Swart or Dr J G Sheppard
Gulbenkian Radiocarbon Dating Laboratory
Department of Chemistry
University of Rhodesia
PO Box MP 167
Salisbury, Rhodesia

- SRR** SCOTTISH UNIVERSITIES RESEARCH AND REACTOR CENTRE
Dr D D Harkness and Prof H W Wilson
Scottish Universities Research and Reactor Centre
East Kilbride
Glasgow G75 0QU, Scotland
- St** STOCKHOLM
Dr Eric Welin and Mr Lars Engstrand
Radioactive Dating Laboratory
104 05 Stockholm 50, Sweden
- Su** FINLAND
Aulis Heikkinen, Lic Phil
Geological Survey of Finland
SF-0215, Otanieni, Finland
- SUA** SYDNEY UNIVERSITY, AUSTRALIA
R B Temple or Mr R Gillespie
Dept of Physical Chemistry
The University of Sydney
Sydney NSW 2006, Australia
- T** TRONDHEIM
Dr Reidar Nydal, Mr Steinar Gulliksen, and Mr Knut Lövseth
Radiological Dating Laboratory
The Norwegian Institute of Technology
Trondheim, Norway
- TA** TARTU
A Liiva and E Ilves
Biochemistry Laboratory
Institute of Zoology and Botany Academy of Sciences of the Estonian SSR
Vanemuise St 21
Tartu, Estonia, USSR
- TAM** TEXAS A & M UNIVERSITY
Dr William M Sackett
Dept of Oceanography
Texas A & M University
College Station, Texas 77843
- TB** TBILISI
A A Burchuladze
Radiocarbon Laboratory
Tbilisi University
1 Chavchavadze Avenue
Tbilisi, USSR
- *TBNC¹⁰** KAMAN NUCLEAR
Kaman Nuclear
Garden of the Gods Road
Colorado Springs, Colorado
- *TF** TATA INSTITUTE OF FUNDAMENTAL RESEARCH
Prof D Lal
Tata Institute of Fundamental Research
Homi Bhabha Road
Bombay-5 BR, India
- TK** UNIVERSITY OF TOKYO
Dr Nobufusa Saito
Carbon Dating Laboratory
c/o Department of Anthropology
Faculty of Science
University of Tokyo
Hongo, Bunkyo-ku, Tokyo, Japan

- Tln TALLIN
J M Punning
Institute of Geology
Academy of Sciences
Tallin, Estonia puiestee 7 ESSR
- TUNC TEHRAN UNIVERSITY NUCLEAR CENTRE
Dr A Mahdavi
Tehran University Nuclear Centre
PO Box 2989
Tehran, Iran
- Tx TEXAS
Mr S Valastro, Jr or Dr E Mott Davis
Radiocarbon Laboratory
Balcones Research Center, Rt 4, Box 189
University of Texas at Austin
Austin, Texas 78757
- U UPPSALA
Dr Ingrid U Olsson
Institute of Physics
University of Uppsala
Box 530
S-751 21 Uppsala, Sweden
- UB BELFAST
Dr A G Smith or Mr G Pearson
Palaeoecology Laboratory
The Queen's University
Belfast, BT7 1NN
Northern Ireland
- UCLA UNIVERSITY OF CALIFORNIA, LOS ANGELES
Dr Rainer Berger and Dr W F Libby
Institute of Geophysics
University of California
Los Angeles, California
- UGa THE UNIVERSITY OF GEORGIA
John E Noakes, Betty Lee Brandau
The University of Georgia
4 GGS Bldg
Geochronology Laboratory
Athens, Georgia 30601
- UW UNIVERSITY OF WASHINGTON
Dr A W Fairhall
Department of Chemistry
University of Washington
Seattle, Washington 98195
- V VICTORIA
Anne Bermingham
Radiocarbon Dating Laboratory
Science Museum of Victoria
304-328 Swanston Street
Melbourne, Victoria
Australia 3000
- VRI VIENNA RADIUM INSTITUTE
Dr H Felber
Institut für Radiumforschung und Kernphysik
Boltzmannngasse 3
A-1090 Vienna, Austria

- W US GEOLOGICAL SURVEY
Dr Meyer Rubin
US Geological Survey
Washington, DC 20242
- WIS WISCONSIN
Dr Margaret Bender
Radiocarbon Laboratory of the Center for Climatic Research
Institute for Environmental Studies
University of Wisconsin
Madison, Wisconsin 53706
- WRD WATER RESOURCES DIVISION
Dr F J Pearson, Jr
US Geological Survey
Isotope Hydrology Laboratory
12th and Pennsylvania Ave, NW
Washington, DC 20242
- WSU WASHINGTON STATE UNIVERSITY
Dr John C Sheppard
Radioisotopes and Radiations Laboratory
College of Engineering Research Division
Pullman, Washington 99163
- X WHITWORTH COLLEGE
Dr Edwin A Olson
Department of Earth Science
Whitworth College
Spokane, Washington 99218
- *Y YALE
Dr Minze Stuiver
Radiocarbon Laboratory
Yale University
New Haven, Connecticut 06520
- Z ZAGREB
Dr Adela Sliepcevic and Dr Dušan Srdoc
Institute "Ruder Boškovic"
41001 Zagreb, POB 1016, Yugoslavia