Our No.	Sample	Age (years)
	changed this apparent temperature by changing the oxygen 18 content. Dr. Urey therefore concludes that the oxygen had not been replaced in the shell. Consequently, we believe that the carbon has not been replaced, since each carbon atom is surrounded by oxygens in the carbonate ions. Submitted by Alexander Spoehr, Chicago Natural History Museum.	
C-721	*Blue Site, Tinian Island (Tinian Blue Site)*: Shell (*Tridacna*) from the Blue Site on Tinian in the Marianas Islands, from Test A at a depth of 1.9′. At this site a skeleton was found that exhibited yaws, according to T. Dale Stewart, of the U. S. National Museum. Yaws and syphilis probably are manifestations of related forms of spirochete. The Marianas skeleton, as bearing on the existence of yaws in the Pacific prior to the historic period, is thus relevant to the larger problem of the development and spread of both yaws and syphilis. In addition, the Blue Site is representative of the major prehistoric cultural manifestation, the *latte culture*, which persisted up to the sixteenth and seventeenth centuries. How far back it goes is not known. Dating the Blue Site should furnish evidence. The excavation was conducted under the direction of Alexander Spoehr as part of the Chicago Natural History Museum Expedition in 1949–50. Submitted by him for dating.	1098 ± 145

RADIOCARBON DATES—(*Continued*)

References

1. Arnold, J. R., and Libby, W. F. *Science*, **113**, 111 (1951).
2. Libby, W. F. *Ibid.*, **114**, 291.
3. ———. *Radiocarbon Dating*. Chicago, Ill.: Univ. Chicago Press (1952).

News and Notes

American Congress on Surveying and Mapping

Official functioning of the Education Division for the first time since its creation last year featured the 12th annual meeting of the American Congress on Surveying and Mapping in Washington, D. C., June 11–13. The new division was formed in an effort to improve curricula in colleges and universities, which now offer few courses that are at all useful in training students to enter the increasingly specialized fields of surveying and mapping, where the study of such subjects as cartography, geography, geodesy, interpretation of aerial photographs, and other particularized subjects not found in civil engineering courses are required.

Education Division papers were read on such topics as the application of graphic arts to field and office surveying, U. S. Engineers' training of surveyors and mappers, surveying techniques, and a discussion of the three years of training required by the Virginia Department of Highways before it allows its new employes to supervise road projects.

The congress this year sponsored the most extensive exhibit of surveying and mapping equipment and reproduction devices ever held. Exhibitors were present not only from the United States, but also from Canada and several European countries.

A panel discussion on "Map Appreciation and Use" was highlighted in a paper read by Phil M. Miles, Kentucky State Agricultural and Industrial Development Board, who described his state's extensive cooperative mapping project with the aid of the U. S. Geological Survey. He added a note of humor by characterizing Kentucky as the only state that gives maps to visitors "so they can find their way to the Kentucky Derby between drinks."

Other speakers were Fowler W. Barker, of the Association of Professional Photogrammetrists; John W. Cain, of the U. S. Naval Photo Interpretation Center; Floyd Brinkley, of the U. S. Renegotiation Board; George C. Northrop, of the Joint Chiefs of Staff, Department of Defense; and Robert H. Lyddan, of the U. S. Geological Survey.

Maps containing false topographic information have been issued by some nations in the past, according to Col. Northrop, who added that the U. S. has found by experience that the economic advantages of giving correct data outweigh the military disadvantages. He cited several instances during World War II in which false maps very nearly resulted in tragedy for Allied troops that were trying to help the friendly nations that had provided the maps.

The great advantages and serious problems encountered in graduating the precise circle for use in

surveying and mapping were discussed by several speakers. Success in accomplishing this was described and illustrated by Benjamin L. Page, of the U. S. Bureau of Standards.

How local control aids the property surveyor was discussed by H. J. McFarlan, of the University of Michigan, and "Some Difficult Land Surveying Problems in the Florida Keys" was the interesting topic of a paper read by John P. Goggin, land surveyor of that state. The Canadian aspect was described by D. I. O'Gallagher, who told of the "Quebec *Procès-Verbal* of Boundary." The obvious advantages of local professional surveyors' organizations was the subject of a panel discussion.

"Charting Our Seas," by Robert W. Knox, U. S. Coast and Geodetic Survey, proved a feature topic of the Cartography Division. Hydrographic surveys are made primarily for issuing nautical charts, although they also serve as original public documents, and photographic copies often are furnished to other government agencies, private industry, and the general public, Admiral Knox explained, and he added that they are used for compiling bathymetric maps and for oceanographic and sedimentation studies. Industry uses them to study natural resources—particularly oil —and copies are employed in legal proceedings.

"Around the World in Eighty Days" was the subject of Newman Bumstead, National Geographic Society cartographer, who, unlike the hero of the Jules Verne story, spent most of his time sightseeing, because he flew around the world. Mr. Bumstead made the trip in the interest of the society's Map of the World. Humorous incidents marked his trip. He recalled the time in Egypt when he rode a camel named "Canada Dry," whose driver urged the animal on by cries of "Heigh-ho Silver"—the only English words he knew.

"Relief Mapping and the Bench Camera" were discussed by E. B. McCarthy, U. S. Coast and Geodetic Survey; and graduate training in cartography by J. Allen Hynek, assistant dean of Ohio State University's Graduate School.

A color-sound movie on *The Inter-American Highway through Central America and Panama* was shown through the courtesy of the U. S. Bureau of Public Roads.

The "Ninety Million Map" created by a relatively new agency, the U. S. Army Map Service, was the topic of a paper read by John G. Ladd, who traced the rapid but effective growth and the efficiency of his agency, established to meet the needs of World War II.

The new series of reconnaissance maps of Alaska, including a shaded-relief edition of most of the 153 quadrangles, was discussed by Gerald FitzGerald, U. S. Geological Survey, who related some of the fascinating history of this mapping project. He recalled the fact that only a few years ago this huge area was being mapped by surveyors using dogsleds, whereas almost all this work is now accomplished through aerial photography, and field men are transported by helicopter from one station to another, with great savings of time, money, and numbers of surveyors required.

"Maps of Nova Scotia" and the peculiar problems they presented were discussed by J. P. Messervey, deputy mines minister of that Canadian province. The importance of properly selecting contour intervals for topographic maps was described in detail by a panel that represented U. S. government leaders and mapping experts in private enterprises.

Control surveys as they relate to the ACSM Education and Property Surveys Divisions were discussed by Milton O. Schmidt, of the University of Illinois, and Sol. A. Bauer, a registered surveyor from Ohio. At the state level control surveys are extremely important, said C. A. Whitten, of the U. S. Coast and Geodetic Survey. "Shoran Operations in Canada" was the topic of a paper read by J. E. R. Ross, Dominion geodesist and International Boundary commissioner.

Some interesting aspects of geodetic observations in Mexico were related by Manuel Medina, director of the Mexican Office of Geodesy and Meteorology, who told of his encounters with Mexican rebels during a number of his field trips.

Delegates from many Latin-American countries and American members of the Congress on Surveying and Mapping were shown a color-sound motion picture, *Highways in the Sky,* describing the work of the U. S. Aeronautical Chart and Information Center, as well as a movie made by the Navy Hydrographic Office, and a training film of the U. S. Geological Survey. Delegates also inspected exhibits at a number of federal agencies that are actively engaged in surveying and mapping.

It is becoming increasingly difficult to obtain minerals from abroad, and the U. S. is not producing enough either for defense needs or for the expanding requirements of our peacetime economy, said Robert R. Rose, Jr., assistant secretary in the U. S. Department of the Interior. With living standards constantly rising and with increasing population, the problem is acute. Noting that requirements of metals for civilian and defense use are mushrooming at an alarming rate, Mr. Rose suggested that a possible answer may be found only if experts will quickly compile accurate information regarding the natural resources of the earth. Speaking on "Mineral Resources for Defense," Mr. Rose emphasized the need for more and more metals by pointing out that military aircraft alone during the recent world conflict required twice as much metal as did those of World War I. The increasing number of household appliances is an additional drain on metals resources, he declared.

J. VANCE DOBBIN

Topographic Division
U. S. Geological Survey

Scientists in the News

Homer L. Brinkly has been appointed to the Agricultural Research Policy Committee to replace **John H. Davis,** now general manager of the National Wool Marketing Corporation. Mr. Brinkly is executive vice president of the National Council of Farmer Cooperatives.

Harley E. Cluxton, Jr., of Lake Bluff, Ill., has been appointed director of the clinics at Northwestern University Medical School. Until last year he was director of medical research for the Armour Laboratories, Chicago, and served on the staff of the Mayo Clinic.

University of Wisconsin regents have accepted the resignation of **W. Windsor Cravens,** who has been associated with the Poultry Husbandry Department since 1937, first as an assistant and since 1941 as a faculty member. He has accepted a position in industry.

George Bernard Griffenhagen, of Los Angeles, has been appointed associate curator of the Division of Medicine and Public Health of the U. S. National Museum, Smithsonian Institution. He has been serving as assistant general manager and director of pharmaceutical research for the National Institute of Nutrition in Los Angeles, and as lecturer in pharmacy at the University of Southern California.

Henry W. Hemple, chief of the Division of Geodesy, U. S. Coast and Geodetic Survey, has retired from active duty after more than 35 years of service. For a major contribution to science, including the organization and development of steel-tower triangulation practice and leadership in the field of geodetic engineering in the U. S., Captain Hemple was awarded the 1952 Department of Commerce gold medal by the Secretary of Commerce.

At the Cleveland Health Museum's 12th anniversary civic luncheon at the Hotel Carter, **W. W. Peter** received the Elisabeth S. Prentiss National Award in Health Education. Dr. Peter is professional training branch chief in the Division of Health, Welfare and Housing, Institute of Inter-American Affairs, Washington, D. C. As director of the Council on Health Education, Dr. Peter helped the Chinese conquer the Foochow cholera epidemic in 1919. During 1934–42 he was director of the U. S. Navajo Service, organizing the Navajos in their fight against tuberculosis. He was associate professor of public health in the School of Medicine, Yale University, for three years before joining the Institute of Inter-American Affairs in 1945.

Lorne D. Proctor has been appointed physician-in-charge of the Division of Neurology and Psychiatry at the Henry Ford Hospital, succeeding **Thomas J. Heldt,** who retired July 1. Dr. Proctor was for many years associated with the University of Toronto both in the Department of Psychiatry and in the Department of Medical Research. He had also organized and directed a very active service in neurology and psychiatry as attending staff physician at the Toronto Western Hospital.

Myron J. Rockmore has been appointed to serve on the staff conducting a study of the release of mental patients for the New York State Mental Hygiene Council. The study was undertaken recently at the request of Governor Thomas E. Dewey. Mr. Rockmore will assist **Daniel Blain,** medical director of the American Psychiatric Association, who is serving as psychiatrist-in-charge, in making an analysis of administrative practices and procedures relating to the release of mental patients.

Education

An Industrial Engineering Institute will be held on the **University of California's** Berkeley campus Jan. 30–31 and on the Los Angeles campus Feb. 2–3. The institute, sponsored by the American Institute of Industrial Engineers, the American Society of Mechanical Engineers, the Society for Advancement of Management, the Society of Applied Industrial Engineers, and the American Society for Quality Control, has met annually for the past five years to discuss fundamentals and current practical applications in the field of industrial engineering and management. Speakers will include L. D. Miles, M. R. Lohman, George H. Gustat, Lillian M. Gilbreth, Ellis A. Johnson, and Dwayne Orton.

The **University of Chicago** has appointed S. Chandrasekhar the Morton D. Hull distinguished service professor of theoretical astrophysics; Richard P. McKeon the Charles F. Grey distinguished service professor of philosophy; and Harold C. Urey the Martin A. Ryerson distinguished service professor of chemistry.

Harvard University has appointed John H. Curtiss, of the Institute of Numerical Analysis of the National Bureau of Standards, visiting lecturer in the Division of Applied Science for the spring term. Andre Guinier, of the Sorbonne, internationally known for his work in x-ray and metallurgy, has also been named visiting professor in the division.

Indiana University Medical School, Department of Physiology, will hold its fifth course of George Cyril Graves lectures Jan. 13–15. Eugene M. Landis, George Higginson professor of physiology, Harvard Medical School, will be the speaker.

Mount Holyoke College has established Industrial Associates for Women in Science, the membership of which will include industrialists, scientists, and representatives of the college. The associates will seek to develop projects in education, teaching, and research to which industry may contribute both as a public service and in its own interest, and which will advance the educational aims of Mount Holyoke.

In the Laboratories

Beckman Instruments, Inc., has appointed Taylor Fletcher manager of its Special Products Division, succeeding John F. Bishop, who has been made assistant general manager, Instruments Division. Mr. Fletcher was formerly with General Electric and Jet Propulsion Labs; Mr. Bishop, prior to joining Beckman, was with the Bureau of Ships and Owens-Corning Fiberglas Corporation.

The following scientists have been added to the **Los Alamos Scientific Laboratory** staff: C. G. Chezem, R. L. Cubitt, P. J. Leurgans, L. R. Stein, and E. A. Voorhees, Jr. (physics); Helen L. Smith (chemistry); J. E. Hockett and E. G. Zukas (metallurgy); and R. M. Kloepper (electrical engineering). W. A. Biggers, physicist, has rejoined the staff.

The **National Bureau of Standards** has begun the construction of a $4,500,000 building to house its Central Radio Propagation Laboratory. Located near the campus of the University of Colorado, the building is expected to be completed early in 1954. The laboratory is engaged in ionospheric and systems research and work on measurement standards and provides advice on radio subjects for other agencies of the government.

Meetings and Elections

The **American Association of Physics Teachers** will hold its annual meeting at Harvard University, jointly with the American Physical Society, Jan. 22–24. Paul E. Klopsteg, of the National Science Foundation, and AAAS Executive Committee member, is president-elect of the association.

The **American Chemical Society** has chosen Harry L. Fisher, special assistant to the director of the Office of Synthetic Rubber, RFC, president-elect. Farrington Daniels, head of the Department of Chemistry, University of Wisconsin, will take office as president on Jan. 1, succeeding Edgar C. Britton, of Dow Chemical Company. Raymond E. Kirk and Ernest H. Volwiler were named to the society's Board of Directors for three-year terms.

The **Arctic Institute of North America** has elected Edward H. Smith (USCG, ret.) chairman of the Board of Governors for 1953. For the past three years, Admiral Smith has served as governor and vice-chairman of the institute, the only organization in North America devoted exclusively to scientific research in the Arctic. Three new members were elected to the Board of Governors: Richard F. Flint, Robert F. Leggett, and Hugh M. Raup.

The second **International Congress on Rheology** will be held July 26–31 in Oxford, England. Geoffrey Taylor is president of the congress, and G. W. Scott Blair, The University, Reading, England, is organizing secretary.

Miscellaneous

The following engineering educators have joined **Du Pont's** Year-In-Industry program, now beginning its second year: T. Stephen Crawford, of the University of Rhode Island; Jesse W. Mason, of Georgia Institute of Technology; and James H. Potter, of the University of Illinois. On leave of absence from their respective college posts, the educators will spend 12 months going through the company's entire engineering organization, with their regular salaries and normal expenses borne by Du Pont.

Participants in the **Mount Desert Island Biological Laboratory** Tissue Culture program included Betty Danes, Margaret H. D. Smith, John Torrey, and Frederick Wolfgram, with Barbara Holmes as assistant to Dr. Smith. The laboratory work was supplemented by group conferences and a series of six lectures by Philip R. White. The program will be continued next year. Applications should be sent to Dr. White, Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me., before *Mar. 15.*

The **National Science Foundation** has appointed the following advisory panel to study problems in minerals research connected with the recommendations of the President's Materials Policy Commission: John G. Bartram, Alan Bateman, James Boyd, Arthur H. Bunker, Paul D. Foote, L. C. Graton, John Gustafson, Thomas Nolan, Louis Slichter, John Vanderwilt, Clyde E. Williams, Donald H. McLaughlin, Andrey A. Potter, Earl P. Stevenson, and Paul E. Klopsteg. Also attending the first meeting, held Nov. 29, were Allen V. Astin, Paul Zinner, and E. D. Gardner.

Chemicals wanted by the **Registry of Rare Chemicals,** 35 W. 33rd St., Chicago 16, Ill., include: niobium pentafluoride; gallium trichloride; silicon sulfide; molybdenum oxydichloride; silicon tetrabromide; 3-aminothianaphthene; 1,1,1-trifluoro-2-methylpropanol-2; benzofuran; benzoyl disulfide; pyrimidine; α,α-diphenyl-β-methyl fulgide; divinyl ether; 7-hydroxy-2-naphthoic acid; N-methyl pyrrolidone; xanthotoxin; benzoyl-L-(+)-alanine; D-thyroxin; benzoyl-L-argininamide; norepinephrine; and amoidin.

National Institutes of Health point out that it is **Roger W. Sperry,** and not Robert W. (SCIENCE, **116,** 627 [1952]), who is the new chief of the section on Developmental Neurology in the Laboratory of Anatomical Sciences.

It is with deep regret that the officers and staff of the Association have learned of the death of F. R. Moulton, administrative secretary of the AAAS from 1937 to 1949. Since his retirement from office in January 1949, he has lived quietly in Evanston, and he died Dec. 7 in Wilmette, Ill., at the age of 80. A memorial service is planned, but the time and place have not yet been announced.
