call utilized a 4600-mile telephone network that joined Washington and Juneau and included Seattle, Ketchikan, Anchorage, and Fairbanks. At each location, government, military, and industrial officials participated in the inaugural ceremonies

■ The crater of the active volcano of Izalco, in western Salvador, has been observed and photographed at close range for what is probably the first time. On 23 Nov. six men, led by Haroum Tazieff, French volcanologist, climbed to the crater's edge, where they remained for 20 minutes. They gathered samples of volcanic rock to be sent to Paris for geological study, and they also made a film. The expedition was under the auspices of the United Nations Educational, Scientific, and Cultural Organization.

Scientists in the News

GEORGE R. HARRISON, dean of science at Massachusetts Institute of Technology, has been chosen to receive the first Pittsburgh spectroscopy award, which has been established by the Spectroscopy Society of Pittsburgh to honor those who have made distinguished contributions in this field of science. The presentation will be made on 6 Mar. 1957 at the dinner for the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy.

Among Harrison's outstanding achievements are his numerous studies of line spectra, the measurements and compilations for the M.I.T. Table of Wavelengths, important contributions to the ruling of gratings, authorship of several books, and 10 years' service as editor of the Journal of the Optical Society of America. He has been a leader in establishing the analytical use of emission spectroscopy, and he has been a teacher throughout most of his lifetime.

ROBINSON BROWN, senior mechanical engineer at Southwest Research Institute, has been appointed head of the newly created mechanical development section of the department of engineering mechanics. The new section, which will be under the general direction of EDWARD WENK, Jr., chairman of the department of engineering mechanics, will work on research and development problems related to oil field and heavy equipment for industrial research sponsors

RURIC C. ROARK, who for nearly 30 years was in charge of U.S. Department of Agriculture research on insecticides and other pesticidal chemicals, retired from Government service on 1 Dec. His successor as head of the pesticide chemicals research section in USDA's

Entomology Research Branch is Stanley A. Hall, formerly leader of the Branch's project on synthesis of organic insecticides, synergists, and insect repellents and attractants.

During almost 43 years of work for the department, Roark has won wide recognition for his important contributions to the development of insecticidal fumigants for agricultural products, the development and adoption of rotenonecontaining insecticides, and for his leadership of research on insecticide residues. His compilations of information and annotated bibliographies on insecticides have been of outstanding value to scientists throughout the world.

Roark attended Kentucky State University, Clark College at Worcester, Mass., and the University of Cincinnati, where he received his B.A. degree in 1907. He did graduate work in organic chemistry at the University of Illinois (M.A. 1908), the University of Wisconsin, and George Washington University, Washington, D.C. (Ph.D. 1917).

In 1948 the Department of Agriculture presented a Distinguished Service award to Roark's unit, and in June 1956 Roark was honored with USDA's Superior Service award for "inspirational leadership and meritorious service to agriculture in developing and improving the use of chemical control methods for insect pests."

In addition to his contributions to agriculture, Roark has been responsible for chemical research on insect-control materials important to national defense. In 1946 the Surgeon General of the Navy commended Roark and his staff for exceptionally meritorious service rendered to the naval forces during World War II.

WILLIAM C. MENZIES, Jr., of the Celanese Corporation of America's development engineering laboratories in Charlotte, N.C., has been appointed technical director of the Lowell Technological Institute Research Foundation, Lowell, Mass. He succeeds GEORGE O. LANGLAIS who has accepted a position in technical services with the Monsanto Chemical Company in Springfield, Mass.

JANE STAFFORD, who for many years has been associated with Science Service, where she has been in charge of writing about the medical sciences, has accepted a science writing position at the National Institutes of Health in Bethesda, Md. On 3 Dec. she became assistant for research reports in the Office of Research Information, which has responsibility for the collection, preparation, and dissemination of information related to the medical and biological sciences. Miss Stafford is a senior member of the writing and reporting staff at NIH.

DAEL L. WOLFLE, executive officer of the AAAS, received an honorary degree during the 65th Founder's Day convention at Drexel Institute of Technology. Other recipients of honorary doctor of science degrees were Catherine MacFarlane, research professor in gynecology at Woman's Medical College; John S. Burlew, executive vice president of the Franklin Institute; and Merriam H. Trytten, director, Office of Scientific Personnel, National Research Council.

ARTHUR E. RUARK, Temerson professor of physics at the University of Alabama, has been granted leave by the university in order to join the research division of the Atomic Energy Commission in Washington, D.C. In January he will become chief of the controlled thermonuclear branch.

C. P. OLIVER and W. S. STONE, department of zoology, University of Texas, Austin, will assume the managing editorship of *Genetics*, beginning with the volume for 1957.

BERNARD B. JATUL has been named director of the pharmaceutical chemistry research department of the Schering Corporation, Bloomfield, N.J. He succeeds RICHARD BARRY, who has been named vice president and scientific research director of the Union Pharmaceutical Company, an affiliate of Schering.

HEINZE FRANKEL-CONRAT of the Virus Laboratory of the University of California, will deliver the third annual Margaret Beattie lecture of the American Association of Bioanalysts (Western Region), which is scheduled for 3 Feb. at the St. Francis Hotel in San Francisco, Calif.

COMFORT A. ADAMS of Philadelphia, Pa., electrical engineer and Harvard University professor emeritus, has been awarded the 1956 Edison medal. It will be presented during the winter general meeting of the American Institute of Electrical Engineers at the Hotel Statler, New York, 21–25 Jan. Adams is being honored "for pioneering achievements in the development of alternating current electric machines and in electrical welding; for vision and initiative in the formation of an engineering standards organization and for eminence as an educator and consulting engineer."

C. LLOYD CLAFF has been appointed research associate in the department of biology, Boston University, College of Liberal Arts. He is president of the Single Cell Research Foundation, Inc., Randolph, Mass., and research associate in surgery in the Harvard University Medical School.

PAUL D. WHITE, emeritus professor of medicine at the Harvard Medical School, will deliver the 32nd Hermann M. Biggs memorial lecture, under the auspices of the Committee on Public Health of the New York Academy of Medicine, on the evening of 7 Feb. in the academy building. He will discuss "The relation of ways of life to heart disease."

WILLIAM CULSHAW, an English physicist who has successfully applied optical methods to study of millimeter radio waves, has joined the Boulder Laboratories of the National Bureau of Standards to continue this work, which he will carry out in the microwave physics section. Before joining the Bureau, Culshaw was with the millimeter wave division of the British Telecommunications Research Establishment, where he specialized in microwave optics and later in millimeter wave magnetron development.

Recent Deaths

KARL GEBHARD, Winter Park, Fla.; 64; former attending surgeon at Mount Vernon Hospital and former instructor in anatomy at Bellevue Hospital; 9 Dec.

FLORENCE HEDGES, San Francisco, Calif.; 78; retired plant pathologist who worked with the U.S. Department of Agriculture for more than 30 years; 11 Dec.

ROGER I. C. MANNING, Phoenix, Ariz.; 57; director of the Arizona Department of Mineral Resources since 1951; 8 Dec.

JEFFREY R. STEWART, Franconia, Va., and Fort Lauderdale, Fla.; 51; paint specialist, operator of his own research laboratory, editor and publisher of the *National Paint Bulletin*; 9 Dec.

CARL V. WELLER, Ann Arbor, Mich.; 69; editor of *The American Journal of Pathology* since 1941 and chairman of the University of Michigan department of pathology for 25 years; 10 Dec.

Education

■ The University of Wisconsin's board of regents has approved plans for a research observatory to be located 15 miles west of Madison. A new building, together with a 53-acre site and a new telescope, are being made available through a \$200,000 gift to the University from the Wisconsin Alumni Research Foundation.

The telescope, a 36-inch reflecting instrument, is under construction at Boller and Schwens, South Pasadena, Calif. The firm expects to make delivery sometime late in the summer of 1957. The

new telescope will provide 5 times the light-gathering power of the university's Washburn Observatory telescope, a 15-inch refracting instrument in use for almost a century.

- The second in a series of grants in support of computation centers and research in numerical analysis has been announced by the National Science Foundation. Grants totaling \$230,000 have been awarded as follows: Cornell University, \$50,000; University of California (Berkeley), \$50,000; University of Pennsylvania, \$70,000; Princeton University, \$40,000; and Stanford University, \$20,000.
- The Warren Building of the Massachusetts General Hospital, Boston, was dedicated on 3 Dec. "as a tribute to the members of the Warren family for their contributions to the medicine and surgery of the new world." Three floors of the \$4-million facility will house the pathology department, and four others will be devoted to clinical and research laboratories for neurology, neurosurgery, psychiatry, and dermatology. In addition, the new building eventually will provide patient areas. Originally designed as a five-story building in 1951, the plans were revised in 1955 for a 12-story structure.
- The department of microbiology at Saint Louis University School of Medicine has been reorganized under the direction of R. Walter Schlesinger, formerly at the Public Health Research Institute of the City of New York, Inc. The department has undergone complete physical reconstruction, especially of its research facilities.
- The Veterans Administration Hospital, Madison, Wis., has announced the establishment of a radioisotope laboratory for basic biochemical and clinical research, with emphasis on research on the biosynthesis and metabolism of lipids. Support for the work will be administered through the University of Wisconsin Medical School and the Veterans Administration. Laboratory research will be under the direction of John W. Porter, and clinical investigations will be supervised by Frank C. Larson. A limited number of pre- and postdoctoral appointments will be available through the University of Wisconsin for applicants interested in this work.

Grants, Fellowships, and Awards

■ The Daniel and Florence Guggenheim Foundation has announced that 18 to 20 fellowships for graduate study in the fields of jet propulsion and flight structures will be awarded in 1957 by the

Daniel and Florence Guggenheim jet propulsion centers at Princeton University and the California Institute of Technology and by the Institute of Flight Structures at Columbia University. The stipends range from \$1200 to \$2000 each, plus tuition.

Application forms are available from the presidents and deans of all engineering and technical colleges; presidents, plant managers, and personnel directors of all companies, laboratories, and engineering organizations known to be engaged in rocket, jet propulsion, or flight structures work; commanding officers of armed forces units and establishments engaged in rocket and jet propulsion development and testing; secretaries of the principal technical societies; and from the Daniel and Florence Guggenheim Foundation, 120 Broadway, New York, N.Y., as well as from Princeton, C.I.T., and Columbia.

■ Entries are now being accepted for the Oberly memorial award that is presented every 2 years by the American Library Association for the best bibliography in the field of agriculture or the related sciences. The current award, to be made at the ALA annual conference in Kansas City, 23–29 June, is for a bibliography issued in 1955 or 1956. Final entry date is 15 Mar. 1957.

Seven copies of the bibliography should be sent to Whiton Powell, Chairman, Albert R. Mann Library, Ithaca, N.Y. An accompanying letter should state that the work is being submitted for consideration for the Oberly award and that the authors are United States citizens. Copies will be returned after the competition if so requested at time of submission. Points to be considered in judging will be accuracy, scope, usefulness, format, and special features such as explanatory introductions, annotations, and indexes.

■ The Lalor Foundation has announced details of the 40 awards that it is offering to younger college and university staff and faculty members for research in the biological sciences for the summer of 1957. This is the third annual series of such summer research awards.

The awards are for advanced study and research employing chemistry or physics to attack problems in any field of biology. The studies may be carried on at any institution of the award holder's choice. The upper age limit for appointment is 40 years.

The awards will usually not exceed \$900 for a single man or woman, \$1100 for a married person working at his home institution, and \$1250 for a married person whose principal program is at another institution. Transportation and other expenses are for the account of the award holder.