

Koerber's body was probably a cumulative exposure instead of a single one. Koerber's remains have been sent to Argonne National Laboratory for further examination.

Survey of Atomic Scientists

A survey of scientific and engineering manpower needs in private atomic energy industries will be conducted by the Atomic Industrial Forum, Inc., of New York under a contract with the U.S. Atomic Energy Commission. Scheduled to begin immediately, the survey will cover current manpower supply and prospective needs in relation to the industry's privately supported atomic energy activities, as distinguished from work done under contract to the Government. Information will be sought from all firms known to be engaged in or planning atomic energy work. The survey's purpose is to develop direct, reliable information for the use of industry, colleges and universities, and the Government in planning action to relieve the shortage of atomic scientists and engineers.

The forum survey will be the first step in a four-part manpower study based on the principle that the rate of advancement of nuclear science and engineering in the United States depends on the availability, now and in coming years, of an adequate number of persons trained in engineering and in the physical, mathematical, and natural sciences. Other surveys will cover the manpower needs of industry; universities, colleges, and nonprofit research institutions; and the Government. The survey being carried out by the forum will require about 5 months for completion. Arrangements for conducting other surveys will be announced as they are made.

Solar Water Heat

The Soviet radio has reported that the Government of Soviet Azerbaijan has ordered the construction of 200 solar water-heating plants this year and 500 next year to heat water for baths and showers in medical institutions and government agricultural stations. This follows the success of two solar plants built near Baku last year. The plants were able to heat water to between 48° and 56°C during the summer and to 43°C in the winter.

Building Radioactive since 1951

A building in Cincinnati, Ohio, that was last occupied by Keleket, Inc., makers of x-ray equipment, has stood empty since 1951 because it was contaminated

by the explosion of a capsule of radium. The premises were immediately washed down and contaminated machinery was crated in lead and shipped to Oak Ridge, Tenn., for burial. Nevertheless, later workmen were able to detect radium dust in every corner. Last September when an application for permission to use the building as a rest home was received by the board of health, tests showed that the building was still dangerously radioactive.

Kettering Laboratories, which has examined the structure, has reported that eventually repeated scrubbing and time might render it safe for occupancy if some areas were buried in concrete and if a constant check for radioactivity were maintained. Keleket went to court soon after the accident and asked \$200,000 from its insurance company. A ruling is still pending.

Rare Infant Disease Identified

An unusual kind of pneumonia, hitherto not known to exist in the United States, has recently been identified in a 21-month old infant born and reared in Connecticut. The disease was reported by Georges Dautier, Thayer Willis, and Roy N. Barnett in a recent issue of the *American Journal of Clinical Pathology*. The authors are all members of the staff of the Norwalk Hospital, Norwalk, Conn.

The dangerous organisms, *pneumocystis carinii*, appear in the lungs under microscopic examination, but they have not been cultured or transmitted to animals. The disease caused by these tiny organisms, however, has been of considerable concern in Central Europe, where it is a leading cause of death among small babies. Discovery of its presence in the United States at this time may indicate a possible health hazard.

The symptoms are those of a severe pneumonia, but the disease resists all of the drugs ordinarily used in the treatment of pneumonia. Since publication of the study, cases have been identified in Chicago and Oklahoma. How infants become infected with this little-known organism is unknown.

Isotope Separation

Photochemical separation of mercury-198 from other mercury isotopes has been achieved through the use of a monoisotopic resonance lamp. Mercury and water vapor are passed in a stream of nitrogen over a lamp that utilizes only mercury-198 as a radiation source. As a result, mercury-198 atoms are selectively excited, and, when some of the material reacts in the presence of a hot wire precipitator, the yield of mercuric oxide is

enriched by a factor of 1.5 with respect to the desired isotope.

According to Bruce Billings of Baird Associates—Atomic Instrument Company, to whom a patent on this process has been granted, similar techniques may be feasible for the separation of other isotope mixtures. He also stated that such methods may be applicable to the study of sensitized atoms in reaction.

Hamsters and the Common Cold

For what appears to be the first time, a hamster has been infected with a common cold. This makes the hamster the only animal other than the chimpanzee to be susceptible to the common cold, according to Reginald L. Reagan, Eddy Palmer, Frances S. Yancey, Sing Chen Chang, and A. L. Brueckner in an article in the September *Archives of Pathology*, published by the American Medical Association.

Four strains of cold virus (MR, C, RLR, and D) were taken from human beings. The viruses were given to suckling hamsters by nose. After from 3 to 7 days, several sucklings in each group given the viruses exhibited the typical symptoms of a cold. Other hamsters were exposed to the nose and throat washings from a person who had not had a cold in the past year. None of these animals caught colds. However, when they later received virus material from the hamsters with colds, they developed the typical signs. The hamsters that originally had colds did not develop them when given virus material a second time.

Dentistry in Western U.S.

The demand for dental care in the western states is expected to increase more rapidly than the number of practicing dentists and dental hygienists, according to a survey of 11 states by the U.S. Public Health Service, Department of Health, Education and Welfare. This report, the first of a series to be made throughout the nation, states that of the 95,000 dentists who are expected to be practicing in the United States by 1975, about 16,000 will be located in the western states. This would be an increase of 4000 over the number of dentists practicing in the West during 1955, but it still would not be a large enough number to meet the needs of the region's expected population growth. Although the proportion of dentists to population is still higher in the West than in the nation as a whole, it is now declining at a faster rate.

The survey was conducted by the USPHS Division of Dental Resources in cooperation with the Council on Dental

Education of the American Dental Association and the W. K. Kellogg Foundation. It was undertaken at the request of the Western Interstate Commission for Higher Education and published by the commission under the title "*Dental Manpower Requirements in the West*." The survey covers Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming, and also includes sections of the territories of Alaska and Hawaii.

New Electron Tube

A retarding-field oscillator, a new electron tube designed to operate at extremely high frequencies with large power outputs, has been developed by Ohio State University under a contract with the Wright Air Development Center of the Air Research and Development Command. The new tube operates at a frequency of 70,000 megacycles per second, and it has operated, with reduced power output, at 100,000 megacycles per second.

The tube is tunable, and it operates at lower voltage and with higher power output than tubes now on the market. Several rare metals are utilized in making the tubes. Gold is used as a solder; silver finds various uses because it has a low electric resistance; additional metals used include tungsten and tantalum, both of which have very high melting points. Sapphires are used for bearings.

News Briefs

■ The Audubon Society of Canada has come out strongly against current proposals to trap whooping cranes in the hope of breeding them in captivity. The society's executive director, John A. Livingston, said such a move would endanger the very existence of the cranes and that to remove any birds from the wild flock of 27 might so seriously alter the numerical level of the species that they could no longer maintain themselves in a natural state.

■ A helicopter has been flown into the fuming crater of Mount Ngauruhoe in New Zealand four times in order to deposit scientific instruments attached to cables that connect the volcano with an observation station 6 miles away. Seismologists are hoping to collect facts that will enable them to forecast the volcano's eruptions.

■ Prompt reporting of unusual or adverse reactions to drugs is the objective of a new joint study being carried on by 11 leading hospitals. The pilot reporting system, which is sponsored by the Food

and Drug Administration, is being developed with the collaboration of the American Association of Medical Record Librarians, the American Society of Hospital Pharmacists, the American Medical Association, and the American Hospital Association.

■ Ancient pines, more than 4000 years old, have been found growing in the upper timberline of the White Mountains in eastern California by Edward Schulman of the University of Arizona Laboratory of Tree-Ring Research and his assistant, C. W. Ferguson, Jr. The trees are the oldest known living things, and exceed the age of the oldest dated giant sequoias of California by about 1000 years. The discovery is reported in a recent publication by Schulman titled *Dendroclimatic Changes in Semiarid America*.

Scientists in the News

GEORGE GAMOW, professor of physics at the University of Colorado, received the Kalinga prize from the director-general of the United Nations Educational, Scientific, and Cultural Organization in a brief ceremony that took place recently at United Nations Headquarters. The prize, awarded annually by UNESCO to a science writer selected by an international jury, was established in 1952 by B. Patnaik, of Cuttack, Orissa, India, for the dual purpose of recognizing outstanding interpretation of science to the general public and of strengthening scientific and cultural links between India and other nations. The winner receives a prize of 1000 pounds sterling and also is invited to the annual meeting of the Indian Science Congress and to spend a month visiting and lecturing in India.

LESTER LEWIS, an industrial physicist, has been appointed professor and chairman of the department of physics at Wagner College (Staten Island, N.Y.). In the past 18 years he has served as a physicist for the American Radio and Research Corporation, the General Electric Company, the National Bureau of Standards Textile Foundation, and the Radiation Laboratory at Massachusetts Institute of Technology.

FREDERICK SEITZ, professor of physics at the University of Illinois and chairman of the governing board of the American Institute of Physics, has been appointed to the National Bureau of Standards Statutory Visiting Committee. The visiting committee consists of five scientific and industrial leaders appointed by the Secretary of Commerce. Their function is to visit the bureau at

least once a year and report to the Secretary "upon the efficiency of its scientific work and the condition of its equipment."

Appointed for a 5-year period, Seitz replaces J. H. VAN VLECK of Harvard University, whose term expired this year. The other members of the committee are M. J. KELLY, president of Bell Telephone Laboratories; CLYDE E. WILLIAMS, president of Battelle Memorial Institute; CRAWFORD H. GREENEWALT, president of E. I. duPont de Nemours and Company; and D. W. BRONK, president of the National Academy of Sciences.

CURTISS M. EVERTS of Portland, Ore., has been named by the Surgeon General of the U.S. Public Health Service to direct initial operation of the construction grants program authorized by the new Federal Water Pollution Control Act. This act provides for grants of \$50 million during the current fiscal year to assist municipalities in the construction of sewage treatment works needed for pollution control and water conservation.

The program marks a new step by the Federal Government to further local and state efforts to control pollution of streams and conserve the nation's diminishing supply of usable water. Everts will be on leave from his duties as chief sanitary engineer of the Oregon State Board of Health.

PARK H. MILLER, Jr., until recently professor of physics at the University of Pennsylvania, has joined the General Atomic Division of General Dynamics Corporation, San Diego, Calif.

PAUL H. HARVEY, professor and head of the department of field crops at North Carolina State College, has received the 1956 national award for distinguished service to agriculture that is sponsored annually by Gamma Sigma Delta, national honor society of agriculture.

HOWARD C. LUDWIG, of the metallurgy department staff at the new Westinghouse Research Laboratories near Pittsburgh, Pa., received the 1956 James A. Lincoln gold medal at the American Welding Society metal congress that took place recently in Cleveland, Ohio. The medal is awarded annually for the best paper presented at society conferences during the previous 12 months. Ludwig was honored for his work on "Metal transfer characteristics in gas shielded arc welding."

CHARLES M. MOTTLEY, formerly director of the planning division in the Office of the Assistant Secretary of Defense for Research and Development,