News and Notes

Dental Medicine

The American Academy of Dental Medicine held its 8th annual meeting, 14–16 May, when the Philadelphia section acted as host to an international gathering of more than 300 dentists and physicians. The scientific portion of the meeting consisted of symposiums and discussion groups and featured the latest developments in the diagnosis and treatment planning of oral diseases and the systemic conditions often related to them. Several business meetings were held, and George F. Clarke of Boston was installed as president for 1954–55. Others elected to serve with him were pres.-elect, S. Leonard Rosenthal, Philadelphia; v. pres., William H. Copperthwaite, Red Bank, N.J.; sec., William M. Greenhut, New York; and treas., George Stewart, Philadelphia. Irving Yudkoff of New York is editor of the Academy's *Journal of Dental Medicine*.

Anthony Sindoni, Jr., medical director of St. Agnes Hospital and chief of Metabolic Service at the Philadelphia General Hospital, stated that medical achievements had helped reduce the mortality rate in diabetes in this country from 17.2 percent per 1000 population in 1900 to 9.7 percent in 1949. He said that both increased cooperation between physicians and dentists in recent years and the expansion of research have resulted in improved care for the patient. Dr. Sindoni also pointed out that the dentist's better understanding of the signs and symptoms of diabetes would enable him to help discover some of the 2 million or more unknown diabetics throughout the nation when he examines their mouths during dental treatment.

Norman G. Schneeberg, chief of the endocrine clinic at the Albert Einstein Medical Center, spoke on diseases of the important glands of the body that sometimes result in darkening of the skin as in suntanning. He stated that any marked changes from normal pink mouth tissue—especially newly developing spots on the lips, gums, or tongue—were clues to the same types of glandular disease.

The diagnosis of allergies having symptoms that are reflected in the mouth was discussed by M. Harris Samitz of the University of Pennsylvania. He said many allergies are caused not by food but by such unsuspected offenders as toothpastes, mouthwashes, and lipsticks. Dr. Samitz also stated that ultraviolet light is proving helpful in distinguishing leukoplakia, a potentially dangerous mouth condition, from a harmless one called lichen planius that closely resembles it. Occasionally it becomes almost impossible to differentiate between the two diseases. The ultraviolet light, with a special filter attached, is flashed in the patient's mouth. If the condition is precancerous, it will shine with a white fluorescence; if it is not, the light will not pick it up. The speaker described the mouth as a window through which many ailments in other areas of the body can be seen and also as a mirror that reflects the general health of the patient. Ulcerative colitis, for instance, occasionally is accompanied by lesions of the mouth. Dr. Samitz reported a study of 189 persons who suffered from ulcerative colitis. A third of the patients had some sort of skin manifestations, many of them in the mouth. Research is going on to ascertain the connection between colitis and mouth sores.

In a symposium on the dental phases of diagnosis and treatment planning, Jack Balin of South Norwalk, Conn., emphasized the importance of proper equilibration of dental occlusion; Samuel Charles Miller, professor of periodontia at New York University College of Dentistry, discussed the early recognition of periodontal disease and its control and cure through early and properly planned treatment. Endodontics, the treatment of pulp canals, was outlined by Samuel Seltzer of the University of Pennsylvania School of Dentistry; and the successful rehabilitation of the mouth through dental prosthetics was presented by Morton Amsterdam of Temple University School of Dentistry.

Dean Gerald Timmons of Temple University School of Dentistry and Dean Lester W. Burket of the Thomas W. Evans Museum and Dental Institute, both of Philadelphia, were elected to honorary membership in the Academy, and at a dinner on 16 May suitable awards were presented to them in recognition of their outstanding contributions to the field of dental medicine. Academy fellowships were given to Albert LaFerriere of Canada, Harry Roth of New York, and S. Leonard Rosenthal of Philadelphia.

WILLIAM M. GREENHUT, *Secretary*
American Academy of Dental Medicine

Science News

Army authorities have announced that Bernard Martin, a technical writer suspended a year ago from Fort Monmouth as a purported security risk, was notified on 9 July that he could return to work at the electronics center. The Army did not disclose whether Mr. Martin, who was informed of the charges against him in Sept. 1953, would be put back on his old job. Mr. Martin reportedly was one of 21 Fort Monmouth employes suspended from their jobs as alleged security risks and given hearings by the First Army Review Board. Thus, he would be the first of the group **cleared publicly.**

Fritz London, professor of chemical physics at Duke University since 1939, died on 30 Mar. at the age of 54. In the July issue of *Physics Today* one of his colleagues writes that he "was a man dedicated to his work . . . the embodiment of the pure scholar . . . forever probing new ideas and perfecting old ones. . . . His were the highest standards of intellectual integrity . . . a man of culture with wide interests. . . ."

Dr. London was educated at Munich, Goettingen,

and Paris, and was engaged in research in Europe before he went to Duke. While at Zurich he wrote, with Heitler, the famous paper that gave the quantum mechanical explanation of the homopolar bond. Later he concerned himself with the dynamics of atomic and molecular interactions. In 1953 he was awarded the Lorentz Medal of the Netherlands Royal Academy of Science. This year he was honored at Duke with a James B. Duke distinguished professorship.

In the August issue of *The Scientific Monthly,* D. E. Ferguson of the Oak Ridge National Laboratory discusses the economics of chemical processing for a breeder-type reactor intended primarily for power production. The purpose of chemical processing is to enable the reactor to produce power as economically as possible by removing the fission products—the nuclear "ashes" which lower the efficiency of reactor operation—and by reclaiming unspent fuel and source material. The costs that vary with the frequency of processing may be optimized, and the cost of processing per unit of electric energy produced may be expressed in terms of such variables as the value of fissionable material as fuel, the unit cost of chemical processing, and the fraction of material lost during processing. The author has evaluated the effect of these variables on the cost of nuclear energy.

According to a recent release from the Polish Embassy, 22 new research centers will be established by the **Polish Academy of Sciences** this year. Their activities will cover a wide range of problems in biology, mathematics, the physical and social sciences, and technology. By the close of 1954 research centers functioning under the Academy's auspices will total 67 as against 6 in 1952.

The Canadian Dominion Bureau of Statistics reported on 3 June, in its first breakdown of population estimates by marital status, age, and sex, that only one out of every four females and one out of every three males of 15 yr and over were single in 1952 as compared with one out of every three women and two out of every five men a decade earlier. In the 10-yr period the **number of married Canadians** increased by one-third.

A light-weight **respirator** weighing only 23 lb has been developed by the Swedish Gasaccumulator Co., Stockholm. The apparatus, called the Pulmospirator, is powered by a mixture of compressed oxygen and air. A pulsating valve controls admission of the oxygen-air mixture in the inspiratory phase, and exhalation is through a side tube. A feature which might not find enthusiastic acceptance is that the method involves use of a tracheotomy incision for administration of the oxygen-air mixture.

A new kind of **package that prevents spoilage** of living tissue-culture cells and other temperature-sensitive materials during shipment has been developed by Maria Telkes, Hyman Steinberg, and other members of the research division of New York University's College of Engineering. Key feature of the thermally insulated container is a can filled with a compound such as Glauber's salt that emits or absorbs heat upon freezing or melting, thus keeping the temperature inside the package within a range that can be adjusted by changing the compound. The National Foundation for Infantile Paralysis, which made the grant for the development, will use the new package in its nationwide evaluation study of the effectiveness of the Salk vaccine for poliomyelitis.

A **nova** was discovered in the constellation of Scorpio the night of 4–5 July by Guillermo Haro and Lauro Herrara of the Observatorio Astrofisico Nacional, Tonanzintla, Puebla, Mexico, an area in which Scorpio is nearly overhead. The nova's position, based on the 1875 equinox, was reported as 17 hr, 50 min in right ascension, – 36 deg, 15 sec in declination.

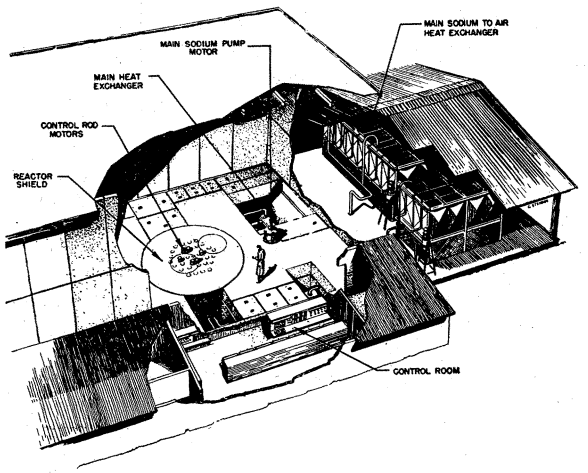
Only those who are south of the 40th parallel, about on a line from Philadelphia to Denver, can see the nova when away from city lights. Now of magnitude 7.5, it is just a bit fainter than the dimmest stars visible to the naked eye, but it can be seen with binoculars or a small telescope.

T. Dale Stewart, physical anthropologist at the Smithsonian Institution, has fitted together the skull fragments of the **most ancient American.** The fragments were found at the prehistoric water hole near Midland, Tex., by an amateur archeologist, Keith Glasscock, of Pampa. The skull, which has been dated by geologic evidence as at least 12,000 yr old, and possibly as much as 20,000, is nevertheless no different from the skull of a modern Indian, according to Dr. Stewart. For this reason, it is believed that the former dating may be more nearly correct.

Standard hospital techniques for **disinfecting scalpels** are often unreliable bacteriologically and also destroy the keenness of the cutting edge. In the July issue of *Surgery, Gynecology and Obstetrics,* Clinton Van Zandt Hawn and Carl W. Walter of Peter Bent Brigham Hospital and Harvard Medical School have reported a sterilization method that does not dull the instrument. Each scalpel is hermetically sealed in a foil package that has been sterilized by dry heat and that can easily be opened by pulling two tabs.

The first **sodium-graphite reactor** in the United States will be developed and constructed in a $10 million project sponsored jointly by the Atomic Energy Commission and North American Aviation, Inc. The reactor, which is expected to be in operation by mid-1957, will be an experimental model of a full-scale power reactor already in the preliminary design stage. It will use metallic fuel elements of either slightly enriched uranium or a combination of thorium and uranium-233.

North American has agreed to assume up to $2.5 million of the total cost and to supply a building site, without charge to the Government, near the company's



Sketch of experimental sodium-graphite reactor.

field test laboratory in the Santa Susana Mountains, north of Los Angeles. The company will operate the facility for approximately 2 yr, but title to the equipment will remain with the Government. Since it is experimental, the plant will generate only about 20,000 kw of heat. This reactor is one of five types on which the AEC is concentrating in its 5-yr program for the development of economic nuclear power.

Scientists in the News

Three newly appointed assistant vice presidents of the U.S. Steel Corp. and their respective fields of responsibility are **James B. Austin,** fundamental research; **Max W. Lightner,** applied research and development; and **Robert W. Holman,** operations research. The appointments were made to implement a reorganization of technical personnel into three separate but coordinated groups.

John S. Burlew, formerly with the Cambridge Corp., Cambridge, Mass., became assistant director of The Franklin Institute 26 July. He also has served with the Carnegie Institution and the Office of Scientific Research and Development.

The following faculty members were added to the Fisk University science departments during the 1953–54 academic year:

Ivar Cooke, research associate in chemistry; **J. Russel Gabel, Woodrow H. Jones,** and **Charles Weise,** assistant professors of biology; **Samuel Proctor Massie, Jr.,** who has recently received a Public Health Service grant for research on carcinogenic compounds, chairman of the chemistry department; **Gertrude F. Rempfer,** associate professor of physics; and **Robert W. Rempfer,** associate professor of mathematics.

Emerson Day has been appointed chief of the preventive medicine division of Sloan-Kettering Institute, Memorial Center for Cancer and Allied Diseases, and professor of preventive medicine at the Sloan-Kettering division of Cornell University Medical College. Since 1950 he has served as director of the Strang Cancer Prevention Clinic at the Center.

Staff members have paid tribute to retired **Vernor Finch,** chairman of the department of geography at the University of Wisconsin from 1928 to 1945, by converting his long-time office into the Finch Seminar Room. Prof. Finch has donated to the department almost 1000 colored slides showing interesting geographic views of the United States and Canada.

Prof. Finch, who received B.S. degrees from Kalamazoo College and from the University of Chicago in 1908, joined the staff at Wisconsin as an assistant in economic geography in 1911. He has served the Government in the Department of Agriculture and on the U.S. Shipping Board. In 1925 he was named to the National Research Council's committee on geology and geography. He is a past president of the Association of American Geographers.

George J. Fischer, formerly a metallurgist at the Western Electric Co., has been named director of the metallurgical department of Sam Tour & Co., Inc., New York.

Frank C. Foley, newly appointed state geologist and director of the State Geological Survey of Kansas, will begin his duties 1 Aug. He will also serve as professor of geology at the University of Kansas. Dr. Foley succeeds **Raymond C. Moore,** who has served as the State geologist for 38 yr. Dr. Moore has been named principal geologist of the Kansas Geological Survey. He will continue as a professor of geology at the university, but will relinquish his duties as chairman of the department. His successor as chairman is **M. L. Thompson** of the University of Wisconsin.

For putting vitamins back into white bread as well as outstanding work in improving other foods, **Charles N. Frey,** retired director of research of Fleischmann Laboratories at Standard Brands, Inc., and at present industrial consultant and lecturer at Massachusetts Institute of Technology, has been honored with the 1954 Nicholas Appert medal. Presentation was made at a special banquet during the recent 14th annual meeting of the Institute of Food Technologists.

Horace W. Gerarde, toxicologist with the Standard Oil Development Co., has been named an honorary associate research specialist in the Rutgers University Graduate School for 3 yr effective 1 July. These honorary appointments, now numbering 7, are limited to persons of distinction in their fields who are rendering specific service in instruction and research at the university. His work at Rutgers is largely concerned with research on biochemistry, pharmacology, and the metabolism of petrochemicals.

Winifred Goldring, state paleontologist with the New York State Museum, Albany, will retire 1 Aug. after 40 yr of service.

Gordon Go Lu has joined the staff of the Johnson & Johnson Research Foundation as senior research associate in charge of the direction of all pharmacodynamic and drug screening work. He will concentrate particularly on the development and application of newer methods of study in pharmacology. Born in Kiangsu, China, he received his M.D. in 1941 at Shanghai. In 1947 Dr. Lu became a member of the faculty at Stanford University School of Medicine; later he received a Ph.D. after 2 yr of study and service at the University of Maryland School of Medicine.

Beno Gutenberg, professor of geophysics and director of the Seismological Laboratory of the California Institute of Technology, has been elected a foreign member of the Geological Society of London in recognition of his "great contributions to seismological science and thus to our understanding of the earth and its structure."

Thomas M. Hahn, Jr., professor of physics at the University of Kentucky, has succeeded **Frank L. Robeson** as head of the physics department at Virginia Polytechnic Institute.

George R. Harrison, dean of science at the Massachusetts Institute of Technology, will address the 7 Sept. meeting of the Franklin Institute RESA branch on the topic "The interferometer-controlled ruling engine." At the 9 Nov. meeting, **Linus Pauling,** of the California Institute of Technology, will speak on the "Structure of proteins." All interested persons are welcome.

Thomas J. Higgins, professor of electrical engineering at the University of Wisconsin, was presented the George Westinghouse award of $1000 for outstanding teaching, one of the nation's highest honors for men in the field of engineering education.

The appointment of **Augustus B. Kinzel** as director of research, Union Carbide and Carbon Corp., became effective 1 July. He has been with the company since 1926.

Charles O. Lee, a professor at the Purdue University School of Pharmacy, retired on 30 June. He first joined the staff in 1915, but in 1920 resigned to spend 5 yr as a medical missionary (pharmacist) with the Methodist Church in China. He returned to his former position at Purdue in 1926. A leave was given to him in 1949–50 to serve as a visiting professor in the College of Pharmacy, University of Puerto Rico. For the coming academic year, Dr. Lee will be visiting professor of pharmacy in the Ohio Northern University College of Pharmacy.

Appointment of **Charles D. Luke** of Syracuse University as director of the Office of Classification has been announced by the Atomic Energy Commission. He will succeed **James G. Beckerley,** who is resigning 31 Aug. to return to private industry. During World War II military service, Dr. Luke was assigned to the Manhattan Engineer District and the Oak Ridge Plant. In his new post he will be responsible for the administration of the AEC's policies for the classification and declassification of atomic energy information.

Jerre L. Noland, biochemist at the Chemical Corps Medical Laboratories, Army Chemical Center, Md., has been appointed chief biochemist of the newly established research laboratory at the Veterans Administration center, Wood, Wisc.

George Morris Piersol is new dean of the Graduate School of Medicine, University of Pennsylvania. He received his M.D. from the U. of P. in 1905, and began his teaching career there 2 yr later. He is best known for his work in physical medicine and rehabilitation of the handicapped. Since its opening last January, Dr. Piersol has been director of the University's Rehabilitation Center for teaching, research, and care of the physically disabled.

Thorndike Saville of New York University's College of Engineering has received the 27th annual Lamme award of the American Society for Engineering Education.

As a token of appreciation for his valuable service to the Chinese people and Government, **Hubert Gregory Schenck** has received the Decoration of Ching Hsing (Auspicious Star). He served for 3 yr as the chief of the Mutual Security Mission to China, first under M.S.A. and later under F.O.A., following many years of work in the fields of geology and paleontology.

New head of the communicable disease section of the preventive division at the Bureau of Medicine and Surgery, Washington, is **John R. Seal,** Cdr, MC, USN.

Ralph R. Shaw, chief librarian of the U.S. Department of Agriculture, has been appointed professor of library service in the Graduate School of Library Service at Rutgers University.

H. Horton Sheldon, formerly dean of the division of research and industry, University of Miami, Florida, has been appointed consultant to the Organization for European Economic Cooperation, with headquarters in Paris.

Fordham University announced the appointment of **Albert J. Sica** as associate dean of the College of Pharmacy. He will continue as associate professor and chairman of the department of pharmacy.

Francis Scott Smyth resigned as dean of the University of California School of Medicine, San Francisco, 1 July. He will continue as professor of pediatrics in the school.

Alan P. Stansbury, formerly of the National Bureau of Standards, has joined the staff of the Edison Research Laboratory, West Orange, N.J., where he will initiate electronics research and design as required by the various studies being conducted by the laboratory.

Alex J. Steigman, professor of child health, has been appointed chairman of the department of pediatrics at the University of Louisville School of Medicine, where he has taught for the past 4 yr. In addition to serving as chief of pediatrics of the Louisville General Hospital, Dr. Steigman will be physician-in-chief at Children's Hospital, a 150-bed affiliated institution.

Jacinto Steinhardt, director of the Operations Evaluation Group in the Office of the Chief of Naval Operations and of the Operations Research Group in the Office of Naval Research, has been elected president of the Operations Research Society of America. Both of the groups that he directs are administered by the Massachusetts Institute of Technology, where he is currently investigating the acid denaturation of ferrihemoglobin.

Appointment of **Chester Bryant Stewart** as dean of medicine at Dalhousie University, Halifax, N. S., has been announced. Dr. Stewart was compelled to asume his new duties earlier than had been anticipated because of the sudden death of Dean **H. G. Grant,** a member of the faculty of Medicine since 1932.

The New York Botanical Garden has presented distinguished service awards to **A. B. Stout** for his investigations and accomplishments in plant breeding and in recognition of his ability to combine theoretical botany with practical plant improvement; and to **John C. Wister** for his service to horticulture.

R. K. Stratford, scientific advisor to Imperial Oil Ltd. and president of the Research Council of Ontario, has won The Chemical Institute of Canada Medal for 1954, which is awarded annually for outstanding contributions to Canadian chemistry and chemical engineering. Dr. Stratford is noted for his research in the petroleum field, particularly for work that resulted in the use of phenol as a selective solvent for extracting lubricating oil. About one-half of the world's supply of lubricating oil is now produced by this process.

Emil Truog retired 1 July after 45 yr in the soils department, College of Agriculture, University of Wisconsin. Prof. Truog, a graduate of the College of Agriculture in 1909, joined the Wisconsin staff as a graduate assistant in the soils department, where he worked for his M.S. degree and later taught. He served as chairman of the department of soils from 1939 to 1953. Prof. Truog is a past president of the American Society of Agronomy, and at present is serving as president of the Soil Science Society and vice president of the Wisconsin chapter of the Soil Conservation Society of America. He also has been a member of a committee of the Food and Agricultural Organization of the UN.

Thirteen veteran scientists and engineers at Ohio State University, whose campus service totals 453 yr, will retire from active duty this summer. Heading the list in terms of service are **William D. Turnbull,** junior dean of the College of Engineering, and **E. J. Gordon,** clinical professor in the department of medicine, both with 44 yr at Ohio State.

Others are **Cecil E. Boord,** research professor in the department of chemistry, 42 yr; **Charles W. Strosnider,** College of Dentistry, 41 yr; **Harry E. Nold,** department of mining and petroleum engineering, 38 yr; **James D. Grossman,** chairman of the department of veterinary anatomy, 35 yr; **Vaughn B. Caris,** department of mathematics, 34 yr; **Arthur C. Kennedy,** department of agricultural engineering, 34 yr; **John M. Montz,** department of civil engineering, 32 yr; **Grace A. Stewart,** department of geology, 31 yr; **John C. Prior,** department of civil engineering, 30 yr; **George A. Bole,** department of ceramic engineering and Engineering Experiment Station, 28 yr; and **Frank A. Hartman,** department of physiology, 20 yr.

Geoffrey A. Wheatley, scientific officer at the National Vegetable Research Station in Wellesbourne, Warwickshire, England, will spend the next 4 mo in the entomology department of the Connecticut Agricultural Experiment Station. The W. H. Kellogg Foundation has awarded him a fellowship for 6 mo study and research in the United States.

Three scientists at the U.S. Department of Agriculture's Eastern Regional Research Laboratory in Wyndmoor have received the Superior Service award, the Department's second highest honor, for their development of a process for intensifying the flavor of maple syrup. They are **Charles O. Willits, William L. Porter,** and **Margaret L. Buch.**

Meetings

The **American Academy of Dental Medicine** will hold its 9th mid-annual meeting and luncheon at the Hotel Statler in New York City on Dec. 5. There will be a business meeting for members at 10:30 A. M. Following the luncheon, there will be a symposium on bone, with papers by Harry Sicher on "Bone formation and resorption"; by J. P. Weinmann on "Variations in the structure of bone tissue and their significance in radiology"; and by Lester Cahn on "The correlation between clinical, roentgenologic and histologic studies in bone lesions." All members and interested dentists and physicians are cordially invited. For reservations and programs address the national secretary, Dr. William M. Greenhut, 124 East 84 St., New York 28.

At the meeting of the **American Society of Limnology and Oceanography,** Pacific Section, in Pullman, Wash., on 23 June, 15 papers were presented. These covered a wide range in the oceanographic and limnological fields, including a discussion of terminologies, biological studies of lake populations, the determination of strontium in sea water, physical oceanography of inlets, and the effect of high pressure on marine bacteria. Some 25–40 members and guests participated.

At the annual business meeting the following officers

were elected: pres., M. B. Schaeffer, Scripps Institution of Oceanography, La Jolla, Calif.; v. pres., E. C. LaFond, U.S. Navy Electronics Laboratory, San Diego, Calif.; sec.-treas., G. L. Pickard, University of British Columbia, Vancouver.

Papers ranging from basic theories of light and vision through many of the application fields will be presented before the national technical conference of the **Illuminating Engineering Society,** 13–18 Sept., at the Chalfonte Haddon Hall Hotel in Atlantic City.

The first national meeting of the **Institute of Radio Engineers' Professional Group in Nuclear Science** will be held in Chicago on 6–7 Oct. jointly with the National Electronics Conference.

The program will consist of invited and contributed papers. Among the invited speakers are Alvin M. Weinberg, Oak Ridge National Laboratory; W. M. Brobeck, Radiation Laboratory, Berkeley, Calif.; Lyle B. Borst, University of Utah; Robert Vestergaard, Stockholm, Sweden; J. Walker, A.E.R.E., Harwell, England; and W. B. Lewis, A.E.C.L., Chalk River, Ontario, Canada. For further information communicate with S. Goslovich, Argonne National Laboratory, Box 299, Lemont, Ill.

The **Mathematics Division of the American Society for Engineering Education** met on 16–18 June. Four well-attended sessions were held. The following officers were elected at the annual business meeting: chairman, C. O. Oakley, Haverford College; sec., W. E. Restemeyer, University of Cincinnati; director, R. S. Burington, Bureau of Ordnance, Navy Department. H. M. Gehman, University of Buffalo, and C. V. Newsom, State University of New York, will continue to serve as directors and H. K. Justice, University of Cincinnati, continues as council member of ASEE. The next annual meeting of the ASEE Mathematics Division will be held in June 1955 at Pennsylvania State University. For further information write to Prof. W. E. Restemeyer, University of Cincinnati.

Reduction of machinery noise in industry will be the theme of the 5th annual **National Noise Abatement Symposium** to be held 21–22 Oct. at the Illinois Institute of Technology. More than 300 industrial, civic, and research leaders are expected to attend.

The **Swedish Medical Association** celebrated its 50th anniversary in Stockholm, 18–20 June, in the presence of 300 physicians and scientists and some 30 foreign guests. Nuclear radiation as an aid to medical science and proposed measures for protection against injuries from atomic radiation were among the subjects discussed. It was revealed that among treatments tried at Radiumhemmet (the Radium Home) of Stockholm, phosphorus radiation has proved beneficial against polycythemia and other blood diseases, while radioactive iodine has been useful for goiter troubles. Cancerous disturbances in the lymphatic glands have been treated with radioactive colloidal elements. The danger of destroying the genetic elements in the human race by subjecting it to strong radiation was emphasized by one of the speakers.

Some 50 examples of American industrial design have been shipped to Italy, where they will be displayed at the **10th Triennale Fair** in Milan, an important international exhibition. Industrial design is the major theme of this year's fair, which will run from 25 Aug. to 15 Nov.

A **World Symposium on Applied Solar Energy** will be held at Phoenix, Ariz., Jan. 12–15, under the leadership of Stanford Research Institute. The Association for Applied Solar Energy—formed last March by a group of Southwestern industrialists, bankers, agriculturists and educators—is sponsoring the meeting, which will be under the general chairmanship of Lewis W. Douglas, former ambassador to Great Britain and chairman of the board of Southern Arizona Bank and Trust Co. Merritt L. Kastens, assistant director of Stanford Research Institute, is vice chairman.

Major centers of solar energy research in the United States will be represented, and arrangements are being made for presentations by solar scientists from England, France, Germany, India, Japan, Australia, and South Africa.

Education

Mechanical and electrical devices can be used to improve instruction in arithmetic, spelling, and reading in the lower elementary grades, writes B. F. Skinner professor of psychology, Harvard University, in a recent issue of the *Harvard Education Review.* "We have every reason to expect," he says, "that the most effective control of human learning will require instrumental aid. The simple fact is, that as a mere reinforcing mechanism, the teacher is out of date. . . . She must have the help of mechanical devices."

Medical education has expanded considerably since 1945, according to an article in the July issue of *The Journal of Medical Education.* Since then three medical schools have opened, at the universities of Washington, California at Los Angeles, and Miami; the universities of Alabama and North Carolina, have expanded to 4-yr curriculums; and Chicago Medical College has gained approval. There are now 79 approved medical schools in the United States.

G. Ralph Spindler of the West Virginia University School of Mines reports that the number of college freshman throughout the country planning a career in **mining engineering** increased 19 percent this past year. There are 29 accredited mining institutions in the country.

The fall session of the **Norelco X-ray Diffraction School,** which has been held for the past 8 yr in the New York area, will take place this year at the

Knickerbocker Hotel, Chicago, during the week of 25–29 Oct. Since the National Metals Show will be held in Chicago the week of 1–5 Nov. in the International Amphitheatre, the company expects a number of show visitors to come early in order to attend the school. No fee will be charged. Those who wish to participate are urged to enroll promptly since accommodations will be limited.

A new undergraduate program to train badly needed community health educators will be launched this September by the School of Public Health on the Los Angeles campus of the University of California. It will be a 2-yr upper division curriculum designed to prepare students for positions in the **public health** field and for graduate work leading to careers as public health educators. Graduates will receive the B.S. degree in public health. After 3 yr of experience in the field, they will be qualified for training leading to a master of public health degree.

Rutgers University plans to establish a **Radioisotope Center** to provide instruction in the use of radioisotopes for industrial, agricultural, and fundamental research. First step will be to set up a basic course similar to that provided at Oak Ridge. Initial financing of the proposed center would be by $1000 memberships from New Jersey concerns, several of whom have already indicated their support.

C. Ladd Prosser of the University of Illinois and Marston Bates of the University of Michigan will each spend 5 wk at **Stanford University's Marine Station** in Pacific Grove, where they will deliver the annual Timothy Hopkins lectures. These are part of the regular teaching program and were established by the station to honor its founder.

Prof. Prosser and Arthur C. Giese of Stanford have collaborated on a course in comparative physiology during the first half of the summer session; and in the final half, Prof. Bates will give a series of lectures on interrelationships between the biological and social sciences.

The **University of Texas** has announced the addition of the Ph.D. degree in pharmacy to the degrees offered through its College of Pharmacy. This brings to four the number of Ph.D. degrees offered by the College of Pharmacy, the remaining three being available in the fields of pharmaceutical chemistry, pharmacognosy, and pharmacology.

Grants and Fellowships

The **Arctic Institute of North America** is sponsoring the following projects this summer.

A Bursa, New York City. Annual cycle of phytoplankton production in the Arctic Ocean.

P. A. Dehnel, dept. of zoology, University of California. Productivity of organic matter in the sea, with particular reference to the waters in the vicinity of Mt. Edgecombe, Alaska.

R. L. Edwards, Waltham, Mass. Hydrographic and ecological studies of 4 representative marine areas in James Bay and Hudson Bay, Canada. Analysis of water exchange between Richmond Gulf and Hudson Bay.

D. V. Ellis, dept. of zoology, McGill University. Distribution and ecology of the littoral and shallow water fauna and flora of the Canadian Arctic.

D. B. Ericson, Lamont Geological Observatory, Columbia University. Micropaleontological, petrographic, and chemical examination of sediment cores from arctic and subarctic waters as factors reflecting climatic shifts, ocean current circulation, and glaciology.

G. D. Hanna, dept. of geology, California Academy of Sciences. Geology of the continental shelf in the vicinity of Point Barrow, Alaska.

R. Mazzeo, Massachusetts Audubon Society. Ornithology, botany, geology, and geomorphology of certain portions of Bylot Island.

R. H. McBee, Montana State College. Thermophilic bacteria in arctic soils and waters in the vicinity of Point Barrow, Alaska.

J. L. Mohr, dept. of zoology, University of Southern California. Ecology of arctic crustaceans with emphasis on the interrelations with the fish population.

D. C. Nutt, Dartmouth College Museum. Hydrobiological study in the coastal waters of Labrador.

G. C. Ray, dept. of zoology, Columbia University. Environmental zoological investigations in the vicinity of Juneau, Alaska.

R. W. Rex, Scripps Institute of Oceanography. Oceanographic and limnological investigations at Point Barrow, Alaska.

P. F. Scholander, Woods Hole, Oceanographic Institution. Osmotic pressures in the blood of arctic and subarctic marine fishes.

J. Sonnenfeld, Bowman dept. of geography, The Johns Hopkins University. Changes in subsistence economy among Point Barrow Eskimo.

W. C. Steere, dept. of biological sciences, Stanford University. Conclusions derived from consultation with specialists and investigations of specimens in European institutions, in direct connection with bryological problems arising from W. C. Steere's arctic field work.

D. Q. Thompson, dept. of zoology, University of Missouri. Ecology of the lemmings in the vicinity of Point Barrow, Alaska.

I. L. Wiggins, Natural History Museum, Stanford University. Comparison of collections made in Arctic Alaska with authentic specimens in U.S. herbaria and completion of an account of the systematics and ecology of the seed plants occurring in the Petroleum Reserve No. 4.

R. T. Wilce, dept. of botany, University of Michigan. Marine flora in the Strait of Belle Isle, Newfoundland.

N. J. Wilimovsky, Natural History Museum, Stanford University. Survey of fishes of Arctic Alaska with particular reference to those of importance to the military and naval services; determination of the relative nutriment content of ice-melt waters in the vicinity of Point Barrow, Alaska, and in comparison with similar factors in neighboring open seas.

D. E. Wohlschlag, Natural History Museum, Stanford University. Usefulness of fishery resources and the determination of the nature and extent of fish stocks of individual species in the waters of Arctic Alaska on morphological, ecological and physiological bases.

Research grants and fellowship awards of the **Damon Runyon Memorial Fund,** announced in June, amounted to $143,100.

Sloan-Kettering Institute: A. E. Moore and H. W. Toolan. Preclinical studies of viruses as antineoplastic agents, $25,000; C. P. Rhoads, R. W. Rawson, and J. E. Rall. Serum iodine and serum protein in relation to thyroid function and to treatment with radioiodine, $11,000.

Columbia University. College of Physicians and Surgeons. H. C. Taylor and S. Lieberman. Cytochemistry and biochemistry of differentiation in human neoplastic disease, $23,900.

New York University, Bellevue Medical Center. N. Nelson and W. E. Smith, Chemical nature of environmental carcinogens, $11,500.

Polytechnic Institute, Brooklyn. D. Harker. Protein structure project, $15,000.

Massachusetts Institute of Technology. J. M. Buchanan. Enzyme systems and the purification and isolation of enzymes involved in the synthesis of nucleo-proteins, $11,000.

Tufts College Medical School. F. Homburger. Tumor growth in hormone-susceptible transplantation sites, $8400.

University of Colorado. R. C. Lewis. Some endocrinological aspects of neoplasia and physicochemical characterization of biologically specific macromolecules, $14,500.

Cancer Institute, Miami, Fla. C. G. Grand. Effects of antibiotics and chemotherapeutic agents on carcinoma *in situ* and related tissue culture studies, $10,700.

University of Louisville. J. B. Rogers and R. C. Taylor. Carcinogenesis in tumor-susceptible guinea pigs, $6700.

Fellowship renewal

J. C. Opsahl, with W. C. MacKenzie. University of Alberta. Training for correlation between clinical studies and basic endocrinology, $5400.

Eight fellowships for study at the Guggenheim Jet Propulsion Center, Princeton University, have been awarded by the **Daniel and Florence Guggenheim Foundation.**

Renewals

A. F. Burke, Pittsburgh, and S. M. Scala, Chester, Pa.

New awards

R. Hirschkorn, Lynn, Mass.; P. Lieberman, Brooklyn, N. Y.; S. H. Lam, Bronx, N. Y.; D. A. Mahaffy, Wichita Falls, Tex.; and E. S. Wilson, Xenia, Ohio.

Four winners of **Howard Hughes fellowships** in science and engineering, established for the training of research engineers and physicists at the California Institute of Technology, have been announced. Recipients and their fields are George S. Campbell, mathematics and aeronautics; Roy W. Gould, electromagnetic theory; James E. Mercereau, solid state physics; James W. Sedin, microwave tubes.

A number of fellowships for the academic year 1954–55 are available for the support of research at the **International Children's Centre,** Paris. At present the program there deals primarily with problems of antituberculosis vaccination and antipertussis immunization. The grants amount to 60,000 French francs per month. Traveling expenses will have to be borne by the recipient. An application, together with curriculum vitae, record of previous work, and testimonials from department heads should be sent to Prof. Bugnard, International Children's Centre, Chateau de Longchamp, Paris 16.

The **Jane Coffin Childs Memorial Fund** for Medical Research has announced the following appropriations, totaling $258,329, made by its Board of Managers in Oct. 1953, Feb. 1954, and May 1954 for support of cancer research projects and fellowships.

Projects

S. C. Finch, Yale University School of Medicine. Immunologic mechanisms in leukemia, 1 yr, $4200.

W. H. Gaylord, Jr., and S. L. Palay, Yale University School of Medicine. Intracellular development of virus particles and its relation to neoplasia, 1 yr, $5000

G. C. Godman, College of Physicians and Surgeons, Columbia University. Effects of certain metabolites, as illustrated by cytochemistry, on nucleic acid and protein synthesis, 1 yr, $4324.

M. W. Gordon, Institute of Living, Hartford. Adaptive enzyme formation in the embryo chick, 2 yr, $14,500.

H. S. N. Greene, Yale University School of Medicine. Biological study of cancer, 3 yr, $76,440.

A. Haddow and associates, Royal Cancer Hospital, London. Chemistry, virology, and chemotherapy of cancer, 1 yr, $5000.

H. Kaplan, Stanford University School of Medicine. Intermediate phases of lymphoid tumor induction, 1 yr, $12,800.

L. L. Miller, University of Rochester School of Medicine and Dentistry. (i) Physiological chemical studies of protein synthesis as related to neoplastic growth, and (ii) Steroid hormone metabolism in normal and tumor-bearing animals, 3 yr, $67,500.

J. Monod, Institut Pasteur, Paris. Synthesis of specific proteins in cellular growth, 1 yr, $10,400.

National Research Council, U.S. National Committee on the International Union Against Cancer. (i) Contribution to U.S. portion of expenses of the union, $500. (ii) Allotment toward expenses of four U.S. scientists to attend VIth International Cancer Congress in São Paulo, $2400.

E. Schwenk, Worcester Foundation for Experimental Biology. Biogenesis of cholesterol and companion substances in cancerous and noncancerous rats in various endocrine states, 3 yr, $23,415.

E. L. Tatum, Stanford University. Biological and enzymatic effects of chemical carcinogens in inducing mutations, 2 mo, $850.

H. W. Toolan, Sloan-Kettering Institute for Cancer Research. Propagation of transplantable human tumors in animals, 1 yr, $10,000.

L. L. Weed, Yale University School of Medicine. Pyrimidine metabolism in human tumors, 3 yr, $16,500.

Fellowships

J. T. Hakala, Yale University School of Medicine, with A. Welch, $4000.

P. A. Srere, Yale University School of Medicine, with E. Racker, $500.

Effective 1 July, 32 organizations and institutions received awards from the **National Foundation for Infantile Paralysis.** The awards will be used for both research and professional education.

Virus research

California Institute of Technology. L. Pauling, dept. of chemistry, $32,126.

California State Department of Public Health. E. H. Lennette, Viral and Rickettsial Disease Laboratory, $41,284.

University of California. W. M. Stanley, Virus Research Laboratory, $144,473.

Camden Municipal Hospital, N. J. L. L. Coridell, $69,930.

University of Colorado. T. T. Puck, dept. of biophysics, $19,430.

Connaught Medical Research Laboratories, Toronto. R. D. Defries, $179,025.

Florida State Board of Health. A. V. Hardy, Bureau of Laboratories, $18,280.

Institut Pasteur, Paris. A. M. Lwoff, dept. of microbial physiology, $16,670.

Johns Hopkins University. K. F. Maxcy, dept. of epidemiology, $133,472.

Johns Hopkins University. M. M. Mayer, department of microbiology, $43,550.

University of Kansas. H. A. Wenner, dept. of pediatrics, $105,111.

University of Minnesota. J. T. Syverton, dept. of bacteriology and immunology, $74,870.

New York University–Bellevue Medical Center, M. H. Adams, dept. of microbiology, $16,173.

University of Pennsylvania. G. W. Rake, dept. of microbiology, $198,495.

Washington University. B. Commoner, dept. of plant physiology, $26,330.

Western Reserve University. L. O. Krampitz, dept. of microbiology, $49,044.

Yale University. J. R. Paul, dept. of preventive medicine, $129,356.

Prevention of polio and treatment of its after-effects

Children's Medical Center, Boston. W. T. Green, dept. of orthopedic surgery, $23,798.

Columbia University. A. L. Barach, dept. of clinical medicine, $25,394.

Harvard University. J. L. Whittenberger, dept. of physiology, $57,398.

University of Maryland. J. E. Finesinger, dept. of psychiatry, $28,455.

Massachusetts General Hospital. H. K. Beecher, dept. of anesthesiology, $44,954.

Tulane University. H. W. Kloepfer, dept. of anatomy, $8030.

Professional education and recruitment of medical service workers

American Association of Medical Social Workers. M. L. Hemmy, $52,735.

American Occupational Therapy Association. M. Fish, $19,500.
American Physical Therapy Association. M. Elson, $66,715.
Creighton University. H. N. Neu, dept. of medicine, $114,436.
Duke University. J. E. Markee, dept. of anatomy, $38,875.
Duke University. L. D. Baker, $2467.67.
Mary Imogene Bassett Hospital, Cooperstown, N. Y. J. Bordley III, $5319.
Meharry Medical College. E. P. Crump, dept. of anatomy, $20,500.
Meharry Medical College. M. Walker, dept. of surgery, $18,600.
Meharry Medical College. G. B. Brothers, dept. of medicine, $5300.
National League for Nursing. A. Fillmore, $201,557.
New York University College of Medicine. H. A. Rusk, dept. of physical medicine and rehabilitation, $22,680.
New York University College of Medicine. E. C. McEwan, $9720.
University of Oklahoma. C. L. Cross, $6504.35.
University of Southern California. C. W. Anderson, dept. of physical therapy, $5810.
University of Southern California. A. A. Howard, dept. of occupational therapy, $12,476.
Western Reserve University. J. T. Wearn, $230,600.
D. T. Watson School of Physiatrics, Leetsdale, Pa., $21,300.

The Surgeon General of the U.S. Public Health Service has announced a predoctoral research fellowship program at the **National Institutes of Health.** These fellowships in health, medical sciences, and related fields are open to candidates with bachelor's or master's degrees or equivalent training. Stipends are awarded in accordance with the year of training after the bachelor's degree: first year, $1400; intermediate year, $1600; terminal year, $1800. In addition, basic tuition and certain travel expenses are paid, and there is a $350 allowance for spouse and each dependent child. Apply at any time to the Research Fellowships Branch, Division of Research Grants, National Institutes of Health, Bethesda 14, Md.

Three **Westinghouse Electric Corp.** engineers have received 1-yr graduate scholarships. They are David B. Breedon and Loren F. Stringer of the East Pittsburgh plant and Robert C. Ohlmann of the Westinghouse Research Laboratories. Each award is valued at about $2500 plus an allowance for tuition and fees. In addition to meeting the educational requirements for the awards, recipients must have had at least 2 yr of service with Westinghouse. They have their choice of any accredited university in the United States, Canada, or Europe, subject to final approval by the scholarship committee.

The **Williams-Waterman Fund,** which is administered by the Research Corp., has announced the award of 11 grants, totaling $79,730, to combat dietary diseases.

Clemson Agricultural College. E. J. Lease. Improvement of nutritive value of certain staple southern foods, $8000.
Tulane University. G. Goldsmith. Clinical investigation of nutritional diseases, $9500.
National Research Council. Food and Nutrition Board, $7500.
Columbia University. M. L. Caldwell. Relationship of amylase activity of crystalline swine pancreatic amylase to its chemical structure, $3600.
Fundacion de Investigaciones Medicas, Havana. L. F. Smith. Enrichment of cereals for Cuba, $5000.
University of Pittsburgh. R. E. Olson. Metabolic role of vitamin E in the prevention of liver injury, $4800.
Washington University. H. B. Burch. Riboflavin enzymes, $10,720.
American Bureau for Medical Aid to China, Inc. T. C. Tung, National Taiwan University, and others. Enrichment of white rice in Formosa and new equipment for National Defense Medical Center and clinical surveys, $12,000.
Merrill Palmer School, Detroit. I. M. Hoobler. Completion of publication of research performed under the Children's Fund of Michigan, $8850.
College of Medical Evangelists. B. W. Halstead. Poisonous fishes and their relationship to protein food sources, $1800.
National Multiple Sclerosis Society. H. Sobotka, Mount Sinai Hospital. Vitamins in the cerebrospinal fluid in multiple sclerosis, $7960.

In the Laboratories

The **Bersworth Chemical Co.** of Framingham, Mass., manufacturer of amino acid chelating agents, has announced that the name of the company has been changed to **"Versenes Incorporated."** No other change in name, structure, or personnel of the concern is contemplated.

A $1,275,000 research laboratory for the film department of the **Du Pont Co.** is to be built at the company's experimental station in Wilmington. The new laboratory, which will accommodate approximately 45 employees, will be devoted primarily to exploratory research in synthetic polymers for the general field of packaging and industrial films. It is scheduled for completion by the end of 1955.

Expansion of the **Hercules Powder Co.** synthetic resins plant at Burlington, N.J., will be completed in 1954 and will double the output of Abitol, technical hydroabietyl alcohol. Largest single use of Abitol is in petroleum additives. Also under construction at Burlington is a $4,000,000 plant for the production of dimethyl terephthalate (DMT), basic raw material for polyester fiber.

Construction has begun on **Jones & Laughlin Steel Corp.'s** new $1,500,000 research center. The facility, to be completed in mid-1955, will consist of several buildings that can house a research staff of approximately 100 persons. The more theoretical aspects of J&L's research will be moved into the new location, which is 15 min from downtown Pittsburgh. Research at most of the existing installations will be continued—metallurgical research at the Pittsburgh Works research laboratory, coal and coke research at Aliquippa Works, and ore research at Negaunee, Mich.

Stockholders of Olin Industries, Inc. and Mathieson Chemical Corp. voted to approve the merger of the two companies, both founded in 1892, to form the **Olin Mathieson Chemical Corp.** The new corporation will have approximately 36,000 employees, 43 plants in 24 states in this country, and 16 plants in foreign countries.

Developmental **research in India** made a big forward step with the official opening of the first building of the Central Laboratories for Scientific and Industrial Research in Hyderbad, Deccan, early this year. Main purpose of the laboratories is to carry out develop-

mental research and to adapt the results to the industrial needs of the area. Research sections deal with fuels, heavy chemicals and fertilizers, chemical engineering, physical chemistry and x-rays, oils, ceramics, paper and fibers, entomology, biochemistry, organic chemistry, pharmaceuticals, and drugs.

The first of the new facilities at the **U.S. Naval Radiological Defense Laboratory** in San Francisco is now in operation, a two-story structure housing a Van de Graaff accelerator, a laboratory, and offices. The second building is a six-story main laboratory, which should be ready for occupancy in the spring of 1955.

A multi-million-dollar sound laboratory and test center for large, high-power transformers will be built at the transformer division plant of **Westinghouse Electric Corp.,** Sharon, Pa. The laboratory will be 70 ft long, 56 ft wide, and 55 ft high; it will have a 3-ft-thick concrete floor. The 5-ft-thick walls will be made of concrete, several inches of air space, and Fiberglas. The inside walls will be covered with Fiberglas wedges and wire mesh, egg crate style to prevent reflection of sound. Metallic shielding will exclude interfering radio waves from the laboratory.

The soundproof room will be large enough to test transformers weighing up to 400 tons and with power ratings exceeding 500,000 kv amp, larger and more powerful than any transformers now being manufactured.

Necrology

Martin E. Adamo, 72, president of the New England College of Pharmacy, Jamaica Plains, Mass., 4 July; **George A. Blakeslee,** 74, retired director of neurology and psychiatry at the New York Postgraduate Medical School, New York City, 9 June; **Ludlow Bull,** 68, Egyptologist, author, professor, and associate curator at the Metropolitan Museum of Art, New York City, 1 July; **José Angel Caparo,** 66, author and former professor of electrical engineering at the University of Notre Dame, Notre Dame, Ind., 12 July; **Karl T. Compton,** 66, research physicist, author, former president of the American Association for the Advancement of Science, of the American Society for Engineering Education, and of the American Physical Society, retired chairman of the Research and Development Board of the National Military Establishment, and chairman of the corporation of the Massachusetts Institute of Technology, Cambridge, Mass., 22 June; **Howard Dittrick,** 77, author, editor, and founder of the Historical Museum of the Cleveland Medical Library Association, Cleveland, Ohio, 11 July; **Saul Dushman,** 71, physical chemist, authority on high vacuum research, and retired assistant director of the General Electric Research Laboratory, Schenectady, N.Y., 7 July; **Jan J. L. Duyvendak,** author, professor, and Sinologist, Leyden, Netherlands, 9 July.

Egon W. Fischmann, 69, chairman of the department of obstetrics and gynecology at the Chicago Medical School, Chicago, Ill., 13 June; **Allen W. Freeman,** 73, epidemiologist, author, professor, and former dean of The Johns Hopkins School of Hygiene and Public Health, Baltimore, Md., 3 July; **Joseph E. Greaves,** 74, author, professor emeritus, and former head of the department of bacteriology and biochemistry at the Utah State Agricultural College, Logan, Utah, 6 June; **F. Ross Haviland,** 74, author and former clinical professor of psychiatry at the Long Island College of Medicine, L.I., N.Y., 27 June; **Melvin Henderson,** 71, professor and founder of the Orthopedic Surgery Section of the Mayo Clinic, Rochester, Minn., 17 June; **Ernest E. Hubert,** 66, author, authority on wood decay, lecturer and research pathologist at the College of Forestry, University of Idaho, Moscow, Idaho, 2 June; **George W. Kosmak,** 80, gynecologist, author, editor, and former president of the American Gynecology Society, New York City, 10 July; **Carl W. Larson,** 73, first chief of the Bureau of Dairy Industry, U.S. Department of Agriculture, Buffalo, N.Y., 13 June; **Sidney O. Levinson,** 50, pioneer in antipolio and blood serum research, assistant professor at the University of Illinois School of Medicine, and executive director of the Michael Reese Research Foundation, Chicago, Ill., 20 June; **James O. Lewis,** 68, petroleum geologist and former chief technologist for the U.S. Bureau of Mines, Houston, Tex., 15 June; **Perry M. Lichtenstein,** 67, psychiatrist, criminologist, and author, New York City, 14 June; **David G. McCaa,** 72, pioneer in radio telephony and civilian engineer for the Army Signal Corps, Fort Monmouth, N.J., 22 June; **Edward E. Marbaker,** 66, chemist and senior research fellow at the Mellon Institute, Pittsburgh, Pa., 2 June.

Marks Neidle, 63, industrial chemist, former professor of physical chemistry at the University of Pittsburgh, and president of Timeproof Paint Products, New York City, 4 July; **Hugo B. C. Riemer,** 78, surgeon and associate professor of ophthalmology at the Harvard Medical School, Boston, Mass., 10 July; **Herman A. Spoehr,** 69, author, investigator of photosynthesis, and retired chairman of the Carnegie Institution's Division of Plant Biology at Stanford University, Stanford, Calif., 21 June; **C. M. A. Stine,** 71, former professor, research chemist, and retired director for the Du Pont Co., Wilmington, Del., 28 May; **Joseph C. Tucker,** chief of the Administrative Division, Armed Forces Medical Library, Washington, D.C., 18 June; **John R. West,** 36, investigator in heart and lung diseases, assistant professor of medicine at the Columbia University's College of Physicians and Surgeons, New York City, 29 June; **Herbert L. Whittemore,** 77, inventor, author, former professor, and retired chief of the Engineering Mechanics Section of the National Bureau of Standards, Washington, D.C., 11 July; **Ralph G. Wright,** 79, retired professor of chemistry at Rutgers University, New Brunswick, N.J., 21 June; **Sergei Yudin,** 64, expert in the surgical treatment of diseases of the lungs and stomach, and on blood transfusion, Moscow, Russia, 14 June; **Warren H. Yudkin,** 30, assistant professor of chemistry at Northwestern University, Evanston, Ill., 6 June.