H. B. TUKEY, head of the department of horticulture at Michigan State University, has received the Norman J. Colman award of the American Association of Nurserymen.

BOWEN C. DEES and LOUIS LEVIN of the National Science Foundation have been appointed deputy assistant directors, Dees in the scientific personnel and education division and Levin in the biological and medical sciences division. Dees, a physicist, has been program director for fellowships since 1951, a position he will retain for the time being. Levin, who is a biochemist, also will retain his post as program director for regulatory biology.

KWANG SOO LEE, who formerly was associate professor of pharmacology at Jefferson Medical College, has been appointed associate professor of pharmacology at the State University of New York College of Medicine in Brooklyn.

JOHN A. SCHILLING has been appointed the first full-time head of the department of surgery at the University of Oklahoma School of Medicine. Also, LOUIS J. WEST has assumed his post as head of the department of psychiatry following his release from active duty with the U.S. Air Force.

JOSEPH H. ROE, professor of biochemistry and chairman of the department at the George Washington University Medical School (Washington, D.C.), has been selected by the American Association of Clinical Chemists to receive the 1956 Ernst Bischoff award for his work in clinical chemistry. He has contributed particularly to knowledge of carbohydrate metabolism, especially of fructose, of glycogenesis, and of vitamin C.

WALTER J. HAMBURGER, director and treasurer of Fabric Research Laboratories, Dedham, Mass., has received the 1956 Olney medal of the American Association of Textile Chemists and Colorists.

MERRILL M. FLOOD, formerly of Columbia University, has been appointed professor of industrial engineering and associate director of the Engineering Research Institute at the University of Michigan.

EDWARD ABRAMS, former head of the textile section at the Southern Research Institute, Birmingham, Ala., has joined the staff of the newly formed chemical preservative department of the National Gas Company, Chicago. He will direct the department's research activities. JAMES K. HUNT, technical and educational adviser of the Du Pont Company's public relations department, has



retired after 30 years with the company. For many years he was a research chemist in the chemical department at the Experimental Station in Wilmington, Del., and in his

more recent career he has been active in the local and national affairs of the American Chemical Society and the National Science Teachers Association. He has been particularly interested in the educational activities of industrial and professional organizations, including the science fairs that have now become annual events.

Hunt joined Du Pont in 1926, where he conducted research on a wide variety of subjects, including paints, varnishes, lacquers, drying oils, asphalt compositions, cellulose derivatives, coated fabrics, and textile finishes. Since 1937 he has been technical and educational adviser in the public relations department, in which capacity he has also worked closely with the authors of technical articles and with the editors and publishers of science textbooks.

Hunt was graduated from Alabama State Teachers' College in 1910 and from Alabama Polytechnic Institute in 1923. In 1926 the University of Wisconsin awarded him the Ph.D. degree.

LADISLAUS L. MARTON, chief of the electron physics section of the atomic and radiation physics division at the National Bureau of Standards, has been elected to the Royal Academy of Belgium in recognition of his contributions to science and particularly to the development of the electron microscope. Marton, who is the only American physicist among the foreign members of the academy, fills the vacancy left by the late J. Verschaffelt of the Netherlands.

The National Science Foundation has awarded travel grants to the following scholars to enable them to attend the eighth International Congress for the History of Science and the fourth general assembly of the International Union for the History of Science, to be held in Florence and Milan, Italy, 3-10 Sept.: GIORGIO D. DE SANTILLANA, Massachusetts Institute of Technology; CHARLES C. GILLISPIE, Princeton University; C. DORIS HELLMAN, Pratt Institute; THOMAS P. HUGHES, Washington and Lee University; GENE-VIEVE MILLER, Western Reserve University; CHARLES D. O'MALLEY, Stanford University; DUANE H. D. ROLLER, University of Oklahoma; ED- WARD ROSEN, City College of New York; RICHARD H. SHRYOCK, Johns Hopkins Medical School; WILLIAM D. STAHLMAN, Massachusetts Institute of Technology; G. KASTEN TALLMADGE, Marquette University; ILZA VEITH, University of Chicago; LESLIE P. WILLIAMS, Yale University; HARRY WOOLF, University of Washington.

RONALD C. VICKERY, British chemist who has worked for the past 5 years with the Commonwealth Scientific Industrial Research Department in Australia, has been appointed head of the chemistry department of Horizons Incorporated, research organization in Cleveland, Ohio. He is a specialist in rare earths.

HOWARD S. COLEMAN, who joined the Bausch and Lomb Optical Company in 1951, has been named vice president in charge of research and engineering.

Recent Deaths

GEORGE M. BALL, Jr., Haverford, Pa.; 81; retired civil engineer; 24 July.

WALTER E. BUFFEY, Elizabeth, N.J.; 74; retired consulting chemist; 25 July.

ĆASPER V. CASPER, South Norwalk, Conn.; 59; chemical engineer; chief production engineer for the American Machine and Foundry Company; 29 July.

GUNNAR DAHLBERG, Uppsala, Sweden; 63; professor of genetics and director emeritus of the State Institute of Human Genetics at the University of Uppsala; 25 July.

ALBERT FISCHER, Copenhagen, Denmark; 65; cancer specialist who received the Louis Pasteur Commemorial Diplome de Grand Prix for his pioneering research; 31 July.

JOHN A. FLEMMING, Washington, D.C.; 79; internationally known geophysicist; retired director of the department of terrestrial magnetism for the Carnegie Institution of Washington; 29 July.

MARTIN B. GENTRY; Southern Pines, N.C.; 69; retired mining engineer; 31 July.

ALBERT V. HALLOWELL, Philadelphia, Pa.; 55; member of the Bureau of Medical Surgery of the U.S. Navy; associate professor of laryngology from 1924–40 at Hahnemann Medical College; 28 July.

ULRICH A. HAUBER, Davenport, Ia.; 71; professor and head of the department of biology at St. Ambrose College; 1 July.

RUSSELL D. HOLT, Sr., Staunton, Va.; 86; member of the Indian Field

Medical Service for 35 years, including duty among the Navajos and Apaches in Arizona and the Pueblos in New Mexico; 26 July.

FRED R. JONES, Madison, Wis.; 71; former plant pathologist for the Bureau of Plant Industry, U.S. Department of Agriculture, and research associate at the University of Wisconsin; 5 Apr.

JOSEPH P. LAZANSKY, Homewood, Ala.; 57; associate dean of the University of Alamaba School of Dentistry; formerly associated with the University of Rochester School of Medicine and Dentistry and Tufts College; 27 July.

ROSCOE F. LEE, Washington, D.C.; 58; first Negro to receive national certification in the field of oral surgery; founder and former head of the oral surgery department at Freedmen's Hospital; 29 July.

MARTIN MEYER, New York, N.Y.; 57; retired professor and chairman of the department of chemistry at Brooklyn College; formerly associated with Antioch College and City College of New York; 28 July.

LEWIS F. MILLHAN, Scotia, N.Y.; 75; retired engineer for General Electric

Company; 26 July.

HENRY B. MITCHELL, Riverdale, N.Y.; 82; former professor of mathematics at Columbia University; 30 July.

ROSCOE H. SUTTIE, New Haven, Conn.; 70; professor emeritus of civil engineering at Yale University; 30 July.

BENJAMIN H. UTAL, Philadelphia; 64; civil engineer; 30 July.

JOHN VON DANCZ, Newark, N.J.; 73; staff member of the Kennedy Research Laboratories; 25 July.

HARRY R. WAHL, Kansas City, Kans.; 70; professor of pathology at the University of Kansas Medical Center; former chairman of the department of Pathology and dean of the medical school at the University of Kansas; 18 June.

Education

■A \$38,000 grant from the Carnegie Corporation of New York to the American Society for Engineering Education will make possible a comprehensive study of technical institute education in the United States. G. Ross Henninger, assistant director of the engineering extension service at Iowa State College, will be director of the project, which will have a threefold purpose: (i) to identify the industrial, technological, and educational trends that influence the education and careers of graduates of 2-year technical institutes; (ii) to assess the place of the technical institute in higher education, and to determine the present capacity and status of technical institutes in the United States; and (iii) to project the future role of the technical institute in meeting this country's needs for scientific and engineering manpower.

The ASEE has also received a \$40,000 National Science Foundation grant to support a study of the nation's needs for research in engineering. Eric A. Walker, vice president of Pennsylvania State University, will direct this second survey.

- An agency for research on military problems, the Institute for Defense Analyses, has been established at Massachusetts Institute of Technology, one of five educational institutions participating in the institute. The new unit, which will be headed by Albert G. Hill, former director of M.I.T.'s Lincoln Laboratory, is a nonprofit corporation that will conduct scientific analyses of present and future weapons systems. Other initial members of the IDA are California Institute of Technology, Case Institute of Technology, Stanford University, and Tulane University.
- The new University of Tennessee Memorial Research Center and Hospital was dedicated last month. The six-story building has 245,000 square feet of floor space. The general research area has 14 laboratories occupying 12,000 square feet, and there is another 8000 square feet of clinical laboratory space. Hospital capacity is 384 beds.
- The R. T. French Company of Rochester, N.Y., manufacturers of bird foods and bird-care products, has established a professorship and a research fund in the Cornell University laboratory of ornithology. William C. Dilger, assistant professor of biology at St. Lawrence University, will be the first staff member appointed under the grant for the R. T. French professorship of ornithology. His appointment will be in the laboratory of ornithology as assistant director in charge of research projects, and he will also be an assistant professor in Cornell's conservation department.

The company is contributing \$12,000 a year to support the chair and research on bird biology. The research will be especially concerned with studies of behavior, genetics, and nutrition of both caged and wild birds.

In the Laboratories

■ A British engineering firm, Mitchell Engineering, Ltd., London, has developed an automatic method of moving coal from the pit bottoms to hopper cars above ground. At the source, coal is automatically fed into tipplers, which tip the coal onto a moving belt. The belt conveys the coal to coal breakers, which reduce it to 3-inch lumps. These are then carried on the belt to bucket elevators, which carry them to the sur-

face and automatically discharge them into hopper cars. The buckets are unusual in that they operate like grabs rather than by tilting. The system saves labor, inasmuch as only two men—one above and one below ground—are required for supervision of operations. It is expected that the device will permit a 90-percent reduction in the labor force, a saving urgently needed to enable Britain to meet her commitments of more than 1 million long tons of coal annually to the European Coal and Steel Community.

■ Argonne National Laboratory has announced the establishment of a Reactor Physics Constants Center. Plans for the center were made last January at a conference between the United States, the United Kingdom, and Canada, held in Chalk River, Canada. A tripartite group was proposed for the purpose of correlating and standardizing the data used in reactor physics. It was agreed that Argonne National Laboratory should form a group performing this function for the North American Continent, and that a similar group would be set up in the United Kingdom to act as a clearing house for the receipt and transmission of European data.

During the initial period of its operation, the center will be governed by a committee consisting of H. Greenspan, C. Kelber, W. Loewenstein, and B. I. Spinrad. The material covered will be unclassified and will be derived from unclassified sources. It is requested that individuals or laboratories who have data pertinent to the purposes of the center transmit such data, with complete references, to Reactor Physics Constants Center, Argonne National Laboratory, Lemont, Ill.; Attention: B. I. Spinrad, Reactor Engineering Division.

■ The Olin Mathieson Chemical Corporation has announced the formation of a nuclear fuel division to produce nuclear fuel elements and nuclear reactor cores. M. F. Meissner, corporate vice president, will be in charge of the new unit. Meissner also heads the metals division.

In order to begin output as quickly as possible, equipment is now being installed in space that has been reconstructed at the Winchester Arms plant in New Haven, Conn. Pilot operations are scheduled to begin there this month. A larger facility will be made operative within the next 18 months to permit full scale production of nuclear elements. No site has yet been selected for this plant.

Olin Mathieson is also erecting a \$36-million plant at its Lake Ontario Ordnance Works in Model City, N.Y., about 14 miles north of Niagara Falls, where a new high-energy chemical fuel for use in missile and aircraft engines will be produced for the Air Force. The