computer built "primarily of unit-packaged electronic circuits assembled one on top of the other in a steel framework". Designed and constructed by the Burroughs Corporation, UDEC has been installed at the Wayne University Computation Laboratory as part of a $500 000 community industrial education project instituted by the University and paid for by more than a score of Detroit's major industries. Primary purpose of UDEC in Wayne's educational program is to help train urgently needed personnel for the operation of the country's growing number of electronic computers and to seek new developments in the field of automatic data-processing equipment. In addition, the laboratory will be at the disposal of industry for the solving of practical problems in engineering, research, production, inventory control, and certain other business operations. The only computer similar to UDEC is the original experimental model in Burroughs' Philadelphia Research Center.

A transistor capable of dissipating 20 watts has been announced by the Minneapolis-Honeywell Regulator Company. By contrast, present commercial transistors are said to be capable of handling only about 0.2 watt. The improved unit was made possible by a new method of removing heat from the germanium-alloy junction and is at present in pilot plant production.

Publications

Transistors and diodes and other solid state devices are the subject of a new research bulletin now being issued by National Scientific Laboratories, Inc., Washington, D. C., a research and development concern specializing in electronics and related fields. The *Transistor Research Bulletin*, which made its initial appearance in December, is edited by Michael C. Ellison, director of the Company's solid state physics department, and is being published every second month on a subscription basis. The first issue, in addition to some generally descriptive literature, contains a three-page international bibliography of recent semiconductor literature. Information concerning the bulletin can be obtained from the editor at 2010 Massachusetts Avenue, N.W., Washington 6, D. C.

Technical data on acoustical materials manufactured by members of the Acoustical Materials Association are contained in a new AMA bulletin now ready for distribution. Copies (50 cents each) can be obtained from the Association at 59 East 55 Street, New York 22, N. Y.

A report entitled "The Relations of Hearing Loss to Noise Exposure" has been prepared by Exploratory Subcommittee Z24–X–2 of the American Standards Association Z24 Sectional Committee on Acoustics, Vibration, and Mechanical Shock, of which the Acoustical Society of America is sponsor. Subcommittee Z24–X–2 was assigned the task of exploring the possibility of establishing bio- and psycho-acoustic criteria for noise control, particularly in the area of industrial noise exposure. This report summarizes the fact-finding mission undertaken by the Subcommittee; it suggests no standards and proposes no criteria. It has not been submitted for review or approval to the Z24 Sectional Committee. Copies of the report are available from the American Standards Association, 70 East 45th Street, New York 17, New York at $1.50 per copy.

Acta Metallurgica, the international journal for the science of metals, started its second year of publication with the January 1954 issue. As the American Institute of Physics is one of the Cooperating Societies, members of the Institute may subscribe to the journal at the special rate of $9 per year. The regular rate to nonmembers is $12 per year. Copies of all six 1953 issues are still available and new 1954 subscribers may obtain the first volume for a limited time for $9. To enter your subscription or for further information about the journal write to the Secretary, American Institute of Physics, 57 East 55th Street, New York 22, New York.

Francis E. Fox, professor of physics and acting dean of the School of Engineering and Arichitecture at the Catholic University of America, Washington, D. C., died on December 29th at the age of forty-four. He received his PhD from Catholic University in 1937. Active in research in ultrasonics, he was a member of the Ultrasonics Committee of the Acoustical Society of America and a consultant on acoustics for the Office of Naval Research. He belonged both to the Acoustical Society and to the American Physical Society.

Howard M. Fry, chairman for 11 years of the department of physics and electricity at Franklin and Marshall College in Lancaster, Pennsylvania, died on November 3rd. He was sixty-four years old. Professor Fry had taught physics at Lehigh University for 15 years, and for 28 years at Franklin and Marshall. He was a member of the American Physical Society, the American Association of Physics Teachers, and Sigma Pi Sigma.

Frederick A. Maxfield, head of the Given Manufacturing Company Research Laboratory in Washington, D. C., died on November 6th at the age of forty-five. After receiving his PhD at the University of Wisconsin, Dr. Maxfield worked from 1929 to 1934 with the Westinghouse Research Laboratory and then returned to Wisconsin where he taught until 1941. With the outbreak of World War II he joined the Naval Ordnance Laboratory and in 1943 transferred to the Navy Bureau of Ordnance where he took part in the acoustical torpedo development project and served until his resignation in 1952 as chief civilian scientist in the Bureau's underwater ordnance section. He received the Distinguished Service Award for his work. He belonged to the American Physical Society.

Robert A. Millikan, Nobel Laureate in physics and former chief administrative officer of the California

Institute of Technology, died on December 19th at his home near Pasadena after a long illness. He was eighty-five years of age. Actively engaged in physics research since 1895, Dr. Millikan joined Caltech in 1921 as director of the Norman Bridge Laboratory of Physics and chairman of the Institute Executive Council after a quarter-century of teaching and research at the University of Chicago. He retired as chief administrative officer in 1945 and became vice-president of the Institute board of trustees and professor emeritus of physics. Born in Illinois in 1868, he was graduated from Oberlin College and received his PhD in physics at Columbia University in 1895, after which he spent a year abroad at the Universities of Jena, Berlin, and Göttingen. In 1896 he accepted an offer from A. A. Michelson, later the first American Nobel Laureate in physics, to come to the University of Chicago as an assistant. By 1910 he had risen to professor of physics. Widely known for his work on the isolation and measurement of the electron, for the direct photoelectric determination of Planck's constant, and for the investigation of the character and distribution of the penetrating radiation in the atmosphere which he termed "cosmic rays", Dr. Millikan was awarded the Nobel Prize in 1923, becoming the second American physicist to be so honored. A former president of the American Physical Society (1916–17), he was the author or joint author of a score of books, including more than a dozen textbooks and several volumes of a philosophical nature. His most recent work was his autobiography (Prentice-Hall, Inc., 1950) in which he summarized his personal attitudes with the observation: "Human well-being and all human progress rest at bottom upon two pillars, the collapse of either one of which will bring down the whole structure. These two pillars are (1) the spirit of religion, (2) the spirit of science (or knowledge)." It was also in his autobiography that he remarked, "it has been the lot of all the generations of mankind up to the two generations which my life span has covered to leave the world at death very much the same kind of place they found it at birth. But this will not be true of those of us who come from the vintage of '68."

Stefan Pienkowski, professor and director of the Institute of Experimental Physics at the University of Warsaw since 1919, died last November at the age of seventy. Professor Pienkowski had been in charge of Poland's atomic research since 1947. He was a member of the Polish Academy, a past president of the Polish Physical Society, and had served two four-year terms as rector of the University of Warsaw.

George Rosengarten, professor of physics and mathematics at the Philadelphia College of Pharmacy and Science since 1922, died on November 23rd in Philadelphia. He was sixty-six. Professor Rosengarten, who received his doctorate at the University of Pennsylvania in 1920, was a member of the American Association of Physics Teachers and the Physics Club of Philadelphia, for which he served as president in 1930.