and then selected the winners from the nominations. The award is based on research on the tomato that Wittwer and Teubner have carried out during the last three years. Their findings, which have led to increases in yield, have been applied to greenhouse-grown crops in Michigan, Ohio, and Indiana.

Wittwer was born at Hurricane, Utah, in 1917. He obtained the B.S. degree at Utah State College in 1939 and his Ph.D. in horticulture at the University of Missouri in 1943. Since 1946 he has been employed at Michigan State University. Teubner was born at St. Louis, Missouri, in 1927. He received the B.S. degree from the University of Missouri, Columbia, in 1949 and continued at that institution for the M.S. and Ph.D. degrees in horticulture, receiving the latter in 1953. Since then he has been at Michigan State University.

## Satellite Design

Natural scientists at the California Institute of Technology have developed a cylindrical satellite that they hope will measure cosmic ray activity, temperatures, and meteoric impacts in outer space. William M. Pickering, director of the institute's jet propulsion laboratory, reports that the first flight will be made sometime between the first of the year and the end of March.

The satellite, 1 foot high and about 5 inches in diameter, will be fired in a multistage Jupiter-C rocket, under development at Redstone Arsenal, Huntsville, Ala. Incorporated in the satellite will be C.I.T.'s new "microloc" communications system, which permits transmissions over very long distances with very low power.

# Grants, Fellowships, and Awards

Cancer. The American Cancer Society has announced that 1959-60 clinical fellowships at the senior resident level may be applied for by institutions accredited by the Council on Medical Education and Hospitals of the American Medical Association to give training in the following specialties, with emphasis on the diagnosis and treatment of cancer: internal medicine, malignant diseases, neurological surgery, obstetrics-gynecology, orthopedic surgery, otolaryngology, pathology, public health, radiology, surgery, and urology. The annual stipend, tax exempt, is \$3600. Applications must be received before 15 February by the Director of Professional Education, American Cancer Society, Inc., 521 W. 57th St., New York 19, N.Y.

Educational Testing. The Educational Testing Service is offering a visiting as-

sociateship in science to a school or college teacher for the summer of 1958. The candidate should have a strong background in at least one of the physical sciences. The stipend is \$700; transportation costs will be paid. Application forms must be received before 28 February by Mrs. W. Stanley Brown, Test Development Division, Educational Testing Service, 20 Nassau St., Princeton, N.J.

# Mendeliana

The University of Illinois has acquired what are probably the only remaining letters, photographs, experiment notes, and personal papers of Gregor Mendel, founder of the science of genetics. The material was purchased from the widow of Hugo Iltis, biographer of Mendel, who assembled an extensive collection of Mendeliana at Brunn, Czechoslovakia, before fleeing the Nazis in 1939. The Mendeliana left behind in Czechoslovakia appear to have been lost or destroyed.

Mendel, a monk, published his laws of inheritance in 1865. Ignored and misunderstood, his epochal work was forgotten until his principles were rediscovered and acclaimed in 1900, and by then most of his scientific records had been discarded.

#### New Maser

A new amplifier that may extend the range of radio telescopes ten times farther out among the galaxies has been developed in the Gordon McKay Laboratory of Applied Science at Harvard University. This device, which may enable man to "hear" the radiation from hydrogen clouds in galaxies beyond the range of any present instruments, was operated in a laboratory test for the first time on 7 December. Scientists believe that the device will allow detection of signals 1/1000 as strong as those which can be observed now. The three-level solid state maser (the term maser was coined from the words microwave amplification by stimulated emission of radiation) was developed by Nicholaas Bloembergen, Gordon McKay professor of applied physics, who proposed the device in July 1956; J. O. Artman, research fellow in applied physics; and Sidney Shapiro, graduate student.

Thomas Gold, Harvard astronomer, reports that the Harvard College Observatory hopes soon to apply the maser to the radio telescope, with the assistance of the division of engineering and applied physics. The job cannot be done immediately because of the complicated and experimental nature of the device.

# Census of Future Scientists

The U.S. Office of Education is conducting the first nationwide census of college juniors majoring in the sciences and mathematics. About 1100 colleges and universities have been invited to participate in the survey; more than 600 of these institutions have assisted in pretesting the questionnaire that is being used.

The count will provide a basis for estimating the number of new scientists and mathematicians with bachelor degrees who will be available 2 years hence, and of those with doctorates 6 years hence. Several months will be required for completion of the survey, which is to be conducted annually.

### Science League

The Science League, a nonprofit association for amateur scientists who are also radio amateurs, has been founded by Nelson M. Griggs, R.D. 2, Old Baltimore Rd., Boyds, Md., for the purpose of organizing better communications channels between amateur scientists. Participants meet each evening on 3525 kilocycles at 6 p.m. E.S.T. and on 7125 kilocycles at 9 p.m. They relay information of a scientific nature to the various member clubs and individuals, and, in addition, act as a clearing house for such information as originates with them.

The Science League net in no way interferes with existing "ham" radio projects and radio nets that concern themselves with special projects. Founding members envision that the Science League will continue long after the International Geophysical Year is over. Membership is open to all.

#### **News Briefs**

The American Institute of Chemical Engineers will begin its golden jubilee year on 29 January 1958 with a commemoration of the first meeting. A golden jubilee celebration will be held 22–27 June. Both events will take place in Philadelphia, the birthplace of the institute.

A committee has been formed to establish, in honor of Samuel Brody, a lectureship memorial in agricultural science at the University of Missouri. Contributions may be mailed to the Samuel Brody Memorial Committee, Eckles Hall, University of Missouri, Columbia.

A Committee of the Section of Biochemistry, International Union of Biological Sciences, has recently been formed. It is essentially a coordinating

committee between the IUBS and the International Union of Biochemistry. The committee is specifically concerned with chemical biology within the framework of the unions federated in the International Council of Scientific Unions. An important function of the committee will be to make proposals for international symposia to both IUBS and IUB. It is hoped that a full committee meeting will shortly be held, perhaps during the 4th International Congress of Biochemistry in Vienna in September 1958.

The committee, as at present constituted, consists of M. Florkin (Liége), president; O. Lindberg (Stockholm); R. Brunel (Toulouse); F. Lynen (Munich); P. Boyer (Minneapolis); and T. W. Goodwin (Department of Biochemistry, University of Liverpool), secretary.

A colony of 12,000 mice, representing 20 to 30 inbred pure genetic strains, will be maintained at the University of Michigan Laboratory of Mouse Genetics when renovations for converting the Laboratory of Vertebrate Biology are completed. A grant of \$111,843 from the National Institutes of Health, U.S. Public Health Service, has supported the renovation. Five similar centers will be set up throughout the country with NIH support.

Southern Methodist University has opened a computing laboratory. A new building houses a Univac scientific 1103 computer, the Remington Rand Service Bureau, and the S.M.U. Computing Laboratory offices and classrooms. The computer is operated jointly by Remington Rand as a service to industry and by S.M.U. as an academic service for research and teaching. The S.M.U. operation is associated with the university's new Graduate Research Center. Professors and students may use the machine for academic research and training. Computing projects are now under way in the fields of engineering, mathematics, psychology, law, religion, management and others.

# Scientists in the News

RAYMOND M. G. BOUCHER, former head of the Aerosols Department, Experimental Laboratory, National Conservatory of Arts and Sciences in France, has been appointed head of a new research program in airborne ultrasonics at the Vibro-Ceramics Division of Gulton Industries, Inc., Metuchen, N.J.

VLADIMIR HAENSEL, director of refining research, Universal Oil Products Company, Des Plaines, Ill., has received the Professional Progress Award of the American Institute of Chemical Engineers for his "important contributions to the development of catalytic processes for the treatment of petroleum products."

Also, THOMAS J. HANRATTY, assistant professor of chemical engineering at the University of Illinois, has received the A.I.Ch.E. Junior Award for excellent contributions to A.I.Ch.E. publications by a younger member of the Institute.

BRUNO OETTEKING has retired from Columbia University and from the Museum of the American Indian, Heye Foundation, New York. Also, he has been named a corresponding member of the German Anthropological Association.

ANTONI K. OPPENHEIM, associate professor of mechanical engineering at the University of California, Berkeley, has been appointed visiting professor of engineering in the department of chemical and metallurgical engineering at the University of Michigan.

R. G. ORELLANA, after completing an assignment in Peradeniya, Ceylon, for the Food and Agricultural Organization's Technical Assistance Program, has resigned his position with the Inter-American Institute of Agricultural Sciences in Costa Rica. He has been appointed plant pathologist in the Oilseed and Industrial Crops Research Branch of the U.S. Department of Agriculture in the division of plant pathology, University of Florida, Gainesville. He is now investigating diseases of castorbean and sesame.

PAUL A. SIPLE, antarctic explorer, has received the Army's Distinguished Civilian Service Award for his scientific leadership at the South Pole. Siple has just returned from Antarctica, where he has been serving since October 1956 as deputy to the officer in charge of the United States antarctic programs for the International Geophysical Year.

C. E. DAVIS has retired as secretary of the American Society of Mechanical Engineers after 23 years of service in that office and nearly 38 years in the service of the society. Davis will continue to serve as coordinator for the United Engineering Center. He is succeeded in the secretaryship by O. B. SCHIER, II.

The last three in the series of five William Pyle Philips Lectures on advances in microbiology will take place at Haverford College as follows: 13 Feb., DAVID M. BONNER of Yale University, "Genes and Their Action"; 12 March, JOSHUA LEDERBURG of the University of Wisconsin, "Reproductive Versatility in Bacteria"; and 11 Apr., ARTHUR KORNBERG of Washington University, "Enzymatic Approaches to the Chemical Basis of Heredity." The two first lectures

were delivered by S. E. LURIA of the University of Illinois and ROGER Y. STANIER of the University of California.

HOWARD P. McCOLLUM has recently been appointed supervisor of science for the state of Louisiana. Similar appointments affecting science teaching have been made in North Carolina, Connecticut, New York, Pennsylvania, and New Mexico.

PAUL E. BROWN, formerly a senior engineer with the General Electric Company, has accepted a position with Argonne National Laboratory as an associate engineer in the reactor engineering division.

CLARK T. ROGERSON, assistant professor of botany at Kansas State College and assistant mycologist at the Kansas Agricultural Experiment Station, has been named curator of the cryptogamic herbarium of the New York Botanical Garden, effective 1 February. Dr. Rogerson's special studies have been on the parasitic fungi of Kansas and the taxonomy of Ascomycetes and the Hypocreales.

#### Recent Deaths

F. A. BANKS, San Marino, Calif.; 74; U.S. Reclamation Bureau engineer, became responsible in 1933 for the construction of Grand Coulee Dam; supervised the dam's operation until 1950; 14 December.

C. F. BECKWITH, New York; 70; mechanical engineer and cofounder of Aqua Systems, Inc., manufacturers of equipment for gasoline service stations; 17 December.

HENRY C. CORTES, Dallas, Tex.; 65; vice-president and director of Magnolia Petroleum Company; 6 December.

H. ELIASBERG, New York; 67; associate clinical professor of pediatrics at Cornell University Medical College; codiscoverer in 1920 of epituberculosis; 16 December.

GUSTAF W. ELMEN, Englewood, N.J.; 80; former metallurgist at Bell Telephone Laboratories and specialist in magnetic research; 10 December.

EARL T. ENGLE, Suffern, N.Y.; 61; professor of anatomy at the College of Physicians and Surgeons of Columbia University; 17 December.

HARVEY A. K. WHITNEY, Ann Arbor, Mich.; 63; founder of the American Society of Hospital Pharmacists; 15 December.

Erratum: On page 1173 of the 6 December issue of Science, it was stated incorrectly that Floyd H. Allport is professor emeritus at the University of Oregon. He is professor emeritus at Syracuse University.