technical information systems of new design—some manually operated and some mechanized. Of the systems covered, the majority are found within the chemical industry. Copies of the report may be obtained by writing to the National Science Foundation, Washington 25, D.C.

Proposed Legislation

S 2916. Provide for grants to states to assist them to increase salaries of teachers of science in secondary schools and provide necessary equipment to use in connection with instruction of scientific subjects in such schools. Thye (R-Minn.). Senate Labor and Public Welfare.

S 2917. Promote general welfare of U.S. by providing program of scholar-ships for college undergraduate and graduate level education to be administered by Commissioner of Education. Thye (R-Minn.). Senate Labor and Public Welfare.

S 2956. Amend Vocational Education Act of 1946 to promote scientific education. Monroney (D-Okla.), Kerr (D-Okla.), McNamara (D-Mich.). Senate Labor and Public Welfare.

S 2957. Advance national security and welfare; promote progress of science by establishment of a U.S. Science Academy. Thurmond (D-S.C.). Senate Labor and Public Welfare.

S 2967. Provide for establishment of National Science Academy, a program of scientific scholarships; encourage study of mathematics and science by assisting States in providing science education. Gore (D-Tenn.). Senate Labor and Public Welfare.

HR 9620. Amend P.L. 874, 81st Congress, re assistance for maintenance and operation of schools in federally impacted areas, extend its effectiveness for two additional years. Auchincloss (R-N.J.). House Education and Labor.

HR 9634. Expedite utilization of television facilities in our public schools and colleges, and in adult training programs. Boggs (D-La.). House Education and Labor.

HR 9635. Provide for establishment of national program of science scholarships; provide for establishment of a program of loans to educational institutions to aid in providing adequate science facilities. Brooks (D-Tex.). House Education and Labor.

HR 9692. Provide for a scholarship program to aid in maintaining and strengthening U.S. leadership in certain fields of science and technology. Martin (R-Mass.). House Education and Labor.

HR 9830. Authorize appropriation of funds to assist States and Territories in financing a minimum foundation education program of public elementary and secondary schools, and in reducing inequalities of educational opportunities through public elementary and secondary schools, for general welfare. Perkins (D-Ky.). House Education and Labor.

HR 9905. Authorize Secretary of Defense to grant scholarships and fellowships in scientific fields to promote defense and security of U.S. Dingell (D-Mich.). House Armed Services.

S 2994. Provide for holding a White House Conference on Aging to be called by President of U.S. before 31 December 1958, to be planned and conducted by Special Staff on Aging of the U.S. Department of Health, Education and Welfare with assistance and cooperation of other agencies of that department and of other departments and agencies represented on Federal Council of Aging; assist several states in conducting similar conferences on aging prior to White House Conference on Aging. Neuberger (D-Ore.), Kefauver (D-Tenn.). Senate Labor and Public Welfare.

Scientists in the News

ARTHUR W. MARTIN has been named program director for regulatory biology, Division of Biological and Medical Sciences, National Science Foundation. He is on leave of absence from the University of Washington, where he is professor and executive officer, department of zoology. Martin has done extensive research in physiology: cellular metabolism, muscle atrophy in mammals, blood circulation in fish, excretory processes in mollusks, and pharmacological actions of barbiturates and their antagonists.

G. B. KISTIAKOWSKY, Russianborn physical chemist who is chairman of the department of chemistry at Harvard University and a leader in the development of long-range missile propellants, has received Dickinson College's Priestley Memorial Award. The award, a Wedgewood medallion of Priestley and \$1000, is conferred each year upon a scientist for research, discovery, or production benefiting mankind.

C. N. YANG of the Institute for Advanced Study, Princeton, N.J., and 1957 Nobel prize winner in physics, and JULIAN SCHWINGER of Harvard University will spend this summer at the University of Wisconsin as members of the physics staff.

ALBERT C. ZETTLEMOYER, professor of chemistry at Lehigh University and director of the National Printing Ink Research Institute, will discuss "Molecular Interactions with the Surfaces of Solids" as a Sigma Xi national lecturer at

a number of colleges and universities during April and May. Another Sigma Xi lecturer for the same period is JOSEPH W. BEARD of Duke University School of Medicine, whose subject will be "Viruses as a Cause of Cancer."

BARRY G. KING, formerly researchexecutive of the Medical Division, Civil. Aeronautics Administration, has been named vice president, life sciences, at Operations Research Incorporated, Silver Spring, Md.

WILLIAM F. ASHE, chairman of the department of preventive medicineat the Ohio State University College of Medicine, has been named director of a 10-member team of U.S. specialists to conduct a nutrition survey in Spain at the request of the Spanish government. The survey, which will be made this spring, is the seventh of its kind to beconducted under the supervision of the Interdepartmental Committee on Nutrition for National Defense in cooperation with nations of the free world as part of the U.S. technical assistance program. The ICNND is a federal agency whose membership includes the departments of State, Defense, Agriculture, and Health,. Education and Welfare; the International Cooperation Administration; and the Atomic Energy Commission.

FRANK P. McWHORTER, plant pathologist of Oregon State College, has been appointed by the Food and Agriculture Organization of the United Nations to serve as virologist to the Philippine Government to investigate the Cadang Cadang disease of coconuts. Cadang Cadang is a serious virus-like disease of unknown cause. McWhorter has had more than 25 years of experience in the study of virus diseases in Oregon and the Northwest, and in addition has made a 3-year study of plant diseases in the Philippines. His address beginning in April will be United Nations Building, Manila.

WILLIAM W. WILLMARTH, senior reseach fellow at California Institute of Technology and consultant to the Rand Corporation, Santa Monica, Calif., has been appointed associate professor of aeronautical engineering at the University of Michigan.

ALEXANDER SILVERMAN, professor emeritus of the University of Pittsburgh, has received the eleventh Albert Victor Bleininger Memorial Award of the Pittsburgh section of the American Ceramic Society. Silverman, noted as an educator and an international authority on the chemistry of glass, is being honored for his contributions to the ceramic industry.

SAM C. SMITH has been appointed associate director for the biological sciences for the Research Corporation, New York. Smith, who joined the nonprofit philanthropic foundation in 1955, will be associated with the organization's Brown–Hazen Fund. He will also continue in his present position as secretary of the Williams–Waterman Fund.

The Williams-Waterman Fund—which gets its money from patents on the synthesis of Vitamin B₁—makes grants for research in nutrition. The Brown-Hazen Fund was established in May 1957 to support fundamental research in biochemistry, microbiology, and immunology. The fund receives its income from royalties on the production of nystatin, the antifungal antibiotic discovered and developed by ELIZABETH L. HAZEN and RACHEL BROWN of the scientific staff of the New York State Laboratory.

JOHN G. LUDWICK, JR., sedimentologist, Gulf Research and Development Company, Harmarville, Pa., and WIL-LIAM R. WALTON, geologist, Pan American Petroleum Company, Tulsa, Okla., have received the president's award of the American Association of Petroleum Geologists for their article, "Shelf-Edge, Calcareous Prominences in the Northeast Gulf of Mexico," which appeared in the September 1957 issue of the association's Bulletin. The \$100 award is given annually to the author, or authors, under the age of 35, whose article in the Bulletin of the preceding year is considered the most significant contribution to petroleum geology.

JOHN M. HOWARD has been appointed professor and head of the department of surgery at Hahnemann Medical College. He succeeds WILLIAM H. MARTIN, who retires at the close of the 1958 academic year after 16 years as professor of surgery. Howard was formerly Joseph Brown Whitehead professor of surgery and chairman of the department of surgery at Emory University School of Medicine.

ALVIN F. COBURN has been appointed director of clinical investigation for the Laboratories for Pharmaceutical Development, Yonkers, N.Y. Coburn is known for his role in the demonstration of the relationship between an antecedent beta hemolytic streptococcal respiratory infection and rheumatic fever. He is a former member of the faculty of Northwestern University Medical School, where he founded and was director of the Rheumatic Fever Research Institute from 1947 to 1957. In addition to his new post, Coburn will continue to serve as associate professor of pediatrics at the New York Medical College.

GEORGE R. NAGAMATSU, known for research in surgery of the kidneys, has been appointed director of the department of urology, New York Medical College.

CHARLES H. STAUFFER has arrived at St. Lawrence University, Canton, N.Y., to assume his duties as professor of chemistry and head of the university's chemistry department. He replaces WARREN LUX, who resigned to accept a position with Union Carbide Corporation in New York. Stauffer was a member of the Worcester Polytechnic Institute faculty for 20 years, and at the time of his resignation held the rank of associate professor.

FRED. J. EMMERICH, past chairman of the board of directors of Allied Chemical & Dye Corporation, New York, has been chosen to receive the Chemical Industry Medal for 1958 "for conspicuous services to applied chemis-Announcement of the award was made by the American Section of the Society of Chemical Industry, donor of the medal. Formal presentation to Emmerich will be made at a meeting of the American Section following a dinner in the medallist's honor at the Royal York Hotel, Toronto, Ontario, on 18 September. The medal presentation will be the American Section's principal part in the annual meeting of the whole Society of Chemical Industry as guest of its Canadian Section.

The department of ophthalmology of the New York University-Bellevue Medical Center has appointed GOODWIN M. BREININ to the first Daniel B. Kirby professorship of research ophthalmology. Breinin is at present director of research in the department of ophthalmology at the New York University Post-Graduate Medical School, a position which he will continue to fill. His primary field of interest has been electrophysiology of the eye, with particular reference to the extraocular muscles. He has applied electronic engineering principles to neuromuscular problems of the eye and so has opened new avenues of approach to the diagnosis and treatment of strabismus.

The Department of Commerce Gold Medal has been presented to ERLE L. HARDY of the Weather Bureau's Regional Headquarters at Ft. Worth, Tex. Hardy was honored for his outstanding contribution to the public service in the organization of hurricane preparedness plans and for his contributions to effective management as demonstrated during a special assignment to the Weather Bureau's National Weather Records Center at Asheville, N.C.

H. J. ROGERS of the bacterial physiology division, National Institute for Medical Research (Medical Research Council), London, England, arrived in the United States in mid-March to work for 3 months in the laboratory of A. Dorfman, department of pediatrics, University of Chicago.

J. T. PATTERSON, professor emeritus of zoology at the University of Texas, has been elected an honorary member of the Genetics Society of Japan.

The U.S. Public Health Service has announced the appointment of ARNOLD B. KURLANDER to the newly created post of Assistant Surgeon General for Operations. For the past 11 months Kurlander has been serving as an assistant to Surgeon General Leroy E. Burney. A career officer of the Public Health Service, Kurlander was formerly chief of the chronic disease program.

WALTER WASSON, Denver, Colo., radiologist, was awarded the gold medal of the American College of Radiology at special ceremonies in connection with the organization's 35th annual meeting in Chicago. The award, only the 18th in the nearly 40-year history of the college, is presented for outstanding contributions in radiology.

JAMES A. REYNIERS, research professor of bacteriology at the University of Notre Dame, and founder and former director of the university's Lobund Institute, will resign on 9 January 1959. During the interim period he will continue his research at Notre Dame on germ-free life.

Recent Deaths

GEORGE BRYAN, Madison, Wis.; 78; emeritus professor of botany at the University of Wisconsin; author of *Text-book of General Botany*; 7 Mar.

JOHN J. DEMPSEY, Washington, D.C.; 78; member of the U.S. House of Representatives (D-N.M.) who had served on the Joint Committee on Atomic Energy; 11 Mar.

ALFRED GUNDERSEN, Venice, Fla.; 80; for many years curator of plants at the Brooklyn Botanic Garden; specialist in the evolution of the flowering plants; 21 Feb.

HENRY B. McDONNELL, College Park, Md.; 94; physician, chemist, emeritus dean of natural sciences at the University of Maryland; 7 Feb.

JOHN B. WHITNEY, Upper Montclair, N.J.; 76; retired chemical engineer; specialist in the design, construction and operation of sulfuric acid plants; 12 Mar.