versity, had heard of the founding of Scientists and Engineers for Johnson. A call to Washington brought a visit from Garth. Between the beginning of October and election day the St. Louis chapter sent out 16,000 solicitations to scientists and engineers in Missouri, and raised $7500 for publicity of various kinds.

The North Carolina chapter signed up 550 members, ran quarter-page ads in six newspapers, covering an estimated 75 percent of the state's population. It sponsored 16 1-minute spot announcements and sent an airplane with a streamer, "We all win with Lyndon," over several football stadiums on the Saturday before the election.

The Southern Ohio chapter reported 500 members, a banquet at which Bronk was the principal speaker, numerous ads and newspaper reports of their activities. And it reported that its most active members were Republicans.

Throughout the country, these patterns were being repeated. And, at chapter after chapter, it turned out that many of the most active workers had previously taken no part whatsoever in political activity.

Thus, less than 6 weeks after MacArthur went to the Pentagon to seek Harold Brown's views on whether scientists and engineers could play a role in the campaign, Scientists and Engineers for Johnson had come into being. It was a thriving, nationwide organization, and with shrewdness and diligence it served, as much as anything else, to convince the American public that Senator Goldwater was a poor choice for the presidency. As Garth said, "By the time we were through, any guy in Pittsburgh in a T-shirt with a can of beer in his hand knew that the smartest people in this country considered Goldwater unfit."

—D. S. GREENBERG

(This is the first in a series on the role of scientists and engineers in the presidential campaign.)

Announcements

Washington University has undertaken a 3-year study of the uses of computers in the selective **dissemination of medical data** to researchers and practitioners. The $333,000 grant from the National Institutes of Health also covers research and evaluation of methods of automated medical diagnoses. Investigators will attempt to develop computer-based systems for storing, retrieving, and selectively disseminating research data and publications to doctors and researchers. If successful, the computer will be able to identify articles of interest to individual physicians, by matchng a profile of their interest categories with the information content of recent research documents. The system will be set up to serve medical needs exclusively. Further information on the program is available from Richard A. Dammkoehler, associate provost for research, and director of University Computing Facilities, Washington University, St. Louis, Missouri 63130.

Yeshiva University, in New York City, has announced the establishment of a Dirac chair in physics, in honor of Nobel laureate Paul A. M. Dirac of Cambridge University, England. It is the second academic chair to be established in the department of physics at the Belfer graduate school of science.

Meeting Notes

The 1965 national conference on **ocean science and ocean engineering** is scheduled 14–17 June, in Washington, D.C. It will be cosponsored by the Marine Technology Society and the American Society of Limnology and Oceanography. Papers are being solicited for the conference, and may cover any aspect of oceanography or limnology; however, preference will be given papers focusing on technological developments, concepts, and applications. Deadline for 150- to 200-word abstracts: *15 January*. (Program Chairman, MTS-ASLO Conf., Marine Technology Soc., The Executive Building, 1030 15th Street, NW, Washington, D.C. 20005)

Papers are being solicited for the Polytechnic Institute of Brooklyn international symposium on **system theory**, scheduled 20–22 April, in New York. It will be sponsored by P.I.B.'s Microwave Research Institute, the Air Force Office of Scientific Research, the Office of Naval Research, and the Army Research Office. Areas to be covered are basic notions of system theory, mathematical representations of systems, dynamic systems (including finite-state machines), systems with random inputs, optimal systems, systems identification, and large-scale systems. Deadline for papers: *15 January*. (Symposium Committee, P.I.B., 333 Jay Street, Brooklyn, N.Y. 11201)

"Human Behavior in Relation to Computer Behavior" will be the theme of the sixth national symposium on **human factors in electronics**. It is scheduled 6–8 May in Boston, and will be sponsored by the Institute of Electrical and Electronics Engineers. General areas to be covered include man-computer interaction, computer simulation of human performance, human models for the design of computing devices, human communication with computers, computer communication with humans, human compatibility of input-output devices, man-computer systems, and psychological, sociological, and economic implications of computer technology. Deadline for papers in final form: *1 February*. (J. Degan, MITRE Corporation, P.O. Box 208, Bedford, Masachusetts)

A call for papers has been issued for a symposium on **signal transmission and processing**, to be held 13–14 May in New York. It will be cosponsored by Columbia University's department of electrical engineering and the Institute of Electrical and Electronics Engineers' circuit theory group. General topics to be included are signal theory—representation of signals and stochastic signal processes; systems and circuits for signal processing; and signal transmission systems. Deadline for 15-page manuscripts: *15 January*. (L. E. Franks, Bell Telephone Laboratories, 1600 Osgood Street, North Andover, Massachusetts)

Courses

Fisk University will sponsor a 3-week course in **Infrared Spectroscopy** to be given at the University of Sao Paulo, Brazil, 1–19 February. The Latin-American Fisk Infrared Spectroscopy Institute is designed to provide persons engaged in research in industrial and academic laboratories with instruction in the techniques, applications, and theory of infrared spectroscopy. (Director, Department of Scientific Affairs, Pan American Union, Washington, D.C. 20006)

Grants, Fellowships and Awards

The National Academy of Sciences and the Smithsonian Institution have announced a joint program to extend **postdoctoral research opportunities** to investigators in the U.S. and abroad. Under the program, visiting research

appointments are available at the Smithsonian Astrophysical Observatory, Cambridge, Massachusetts. They are open to students at the immediate postdoctoral level and senior postdoctoral level (those who have earned their degrees 4 years ago or longer) in the fields of applied and theoretical space sciences, astronomy, astrophysics, geophysics, upper atmosphere physics, and celestial mechanics. The NAS, through its National Research Council, administers the associateships and selects candidates. The stipend for postdoctoral students will be $10,000 per year; for senior postdoctorals, it will be set after consideration of the individual's present salary, and will include a relocation allowance; for foreign awards, the basis will be the level of stipend which would match the salary of the recipient's American counterpart. An appropriate travel grant will be determined for each foreign associate. Applications for the program at the Observatory, with tenure beginning in January, are immediately available. No application deadline has been set by the NAS, because the program is to be a continuing one, with appointments made as openings arise. (Fellowship Office, NAS-NRC, 2101 Constitution Avenue, NW, Washington, D.C.)

Scientists in the News

Eleven scientists and engineers have been named to receive the 1964 National Medal of Science for "outstanding contributions" to scientific knowledge. The awards are to be presented in a White House ceremony early next year. The recipients are:

Roger Adams, emeritus professor of chemistry, University of Illinois, for "contributions to organic chemistry";

Othmar Herman Ammann, consulting engineer and designer of the George Washington and Verrazano-Narrows Bridges in New York, for "a half century of distinguished leadership in the design of great bridges which combine beauty and utility with bold engineering concepts and methods";

Theodosius Dobzhansky, professor at the California Institute of Technology, for "fundamental studies of the genetic determinant of organ evolution";

Charles Stark Draper, professor of aeronautics and astronautics at M.I.T., for "innumerable imaginative engineering achievements" in aeronautics and astronautics;

Solomon Lefschetz, emeritus professor of mathematics at Princeton, for "indomitable leadership" in mathematics, and for "stimulating research in linear control processes";

Neal Elgar Miller, professor of psychology at Yale, for "sustained and imaginative research on principles of learning and motivation";

Marston Morse, professor at the Institute for Advanced Study in Princeton, for "statesmanship in the world of mathematics";

Marshall Warren Nirenberg, head of the laboratory of clinical biochemistry at the National Heart Institute, for "studies of the genetic control of protein synthesis";

Julian Schwinger, professor of physics at Harvard, for "profound work on the fundamental problems of quantum field theory";

Harold Clayton Urey, professor at the University of California, San Diego, for "outstanding contributions to the understanding of the origin and evolution of the solar system"; and

Robert Burns Woodward, professor at Harvard, for his "imaginative new approach to the synthesis of complex organic molecules and for brilliant synthesis of strychnine, reserpine, lysergic acid and chlorophyll."

Sol Nichtern, president of the New York Council on Child Psychiatry, will direct the newly created department of child and adolescent psychiatry at the Hillside Hospital, Glen Oaks, New York.

Ronald E. Myers, formerly director of the Laboratory of Neurological Sciences at Spring Grove State Hospital, Baltimore, Maryland, has been appointed chief of the Laboratory of Perinatal Physiology of the National Institute of Neurological Diseases and Blindness in Puerto Rico.

John D. Dwyer, professor of biology at St. Louis University, has been appointed curator of tropical American plants at the Missouri Botanical Garden and a member of the editorial board of the Garden.

Clarence Ray Carpenter, professor of psychology at the Pennsylvania State University, has been appointed Ford Foundation distinguished visiting professor of behavioral sciences at the Graduate School of Business Administration, University of North Carolina, Chapel Hill.

Recent Deaths

John N. Bowden, 55; executive director of the University of Pennsylvania Hospital; 24 November.

Harlod M. Carothers, 76; dean emeritus of engineering and former acting president of South Dakota State University; 26 November.

Herman Lee Donovan, 77; president emeritus of the University of Kentucky, and a former vice president of the National Association of State Universities; 21 November.

William C. Fels, 48; president of Bennington College at Bennington, Vermont, and former associate provost at Columbia University; 29 November.

Capt. Everett L. Gayhart, 74; developer of high-speed spark lighting techniques (photography), and former member of the Applied Physics Laboratory of Johns Hopkins University; 24 November.

Hans Halban, 56; one of the members of the Frederic Joliot-Curie team which worked on nuclear chain reaction; 30 November.

John B. S. Haldane, 72; British geneticist and physiologist, developer of treatment for tetanus, pioneeer in the development of heart-lung machines for surgery, and a founder of modern population genetics; 1 December.

Thomas W. Murrell, 84; professor at the Medical College of Virginia; 27 November.

Frank H. Reichel, 67; former chairman of the board of American Viscose Corporation; 30 November.

Robert Lee Sanders, 82; past president of the Southern Medical Association, and former governor of the American College of Surgeons; 25 November.

Albert L. Schrader, 68; retired professor of horticulture, University of Maryland, and former professor at the University of Arizona; 28 November.

Wendell Tascher, 66; government soil conservationist and early developer of the study of the composition and treatment of seed corn; 24 November.

Benjamin C. Tharp, 79; professor emeritus of botany at the University of Texas; 29 November.

Albert Lemuel Whiting, 79; manager of the Urbana Laboratories, and an authority in the pioneer studies of symbiotic nitrogen fixation, soil biology, and chemistry; 19 September.

John D. Williams, 55; member of the Research Council of the RAND Corporation, Santa Monica, California, astronomer and mathematician; 20 November.