

scientific principles which can be demonstrated by simple equipment that classroom teachers can construct. Each traveling lecturer will spend from 3 to 5 days at approximately 30 to 40 representative secondary schools throughout the geographical area served by the regional center. The traveling teachers will give demonstrations to students (using the special equipment which they carry with them), assist local science teachers, encourage students' interest in science, and meet with other groups as required during a 1-week stay at each school visited during the 1959-60 school year.

Organizations and educational institutions desiring to submit proposals may wish to collaborate in the use of their facilities, in order to serve their areas more effectively. Use of community resources such as museums, where this is appropriate for training purposes, is encouraged.

Suggestions for preparing proposals and necessary details of this program may be obtained from the Special Projects in Science Education Section, Scientific Personnel and Education Division, National Science Foundation, Washington 25, D.C. Proposals for programs beginning in the summer of 1959 should be received by the foundation not later than *15 December*.

Undergraduate research. The National Science Foundation has announced plans to make a limited number of grants to colleges, universities, and nonprofit research institutions to provide, on an experimental basis, opportunities for properly qualified undergraduates majoring in the physical, biological, mathematical, and engineering sciences to participate in research projects being conducted by experienced scientific investigators. This experimental program may operate either during the academic year or during the summer. Approximately 1000 undergraduates at some 100 institutions throughout the country are expected to participate in these laboratory and field programs.

The foundation will provide support for undergraduates, in accordance with prevailing campus practices, for a maximum of 400 hours per student. Expendable supplies and secretarial and administrative expenses directly attributable to this student training will also receive support.

Directions for preparing proposals may be obtained from the Special Projects in Science Education Section, Scientific Personnel and Education Division, National Science Foundation, Washington 25, D.C. Proposals for programs beginning in the summer or fall of 1959 should be comprehensive for all participating departments within an institutional unit, and should be received not later than *15 December*.

Scientists in the News

CARLOS A. BERNARDES of Brazil has been elected chairman of the 23-member Board of Governors of the International Atomic Energy Agency for the coming year. The election took place in Vienna on 6 October, when the board also elected two vice chairmen, WILHELM BILLIG of Poland and NAZIR AHMAD of Pakistan. This was the first meeting of the newly constituted Board of Governors.

Bernardes was a delegate to the conference on the statute of the IAEA held in New York in 1956. He served as president of the IAEA Preparatory Commission in Vienna in 1957, and as a delegate to the second general conference of the IAEA, recently concluded in Vienna.

Billig has since 1956 acted as high commissioner of the Polish Atomic Energy Authority and chairman of the State Council on the Peaceful Uses of Atomic Energy. He headed his country's delegation to IAEA's second general conference.

Ahmad is at present chairman of Pakistan's Atomic Energy Commission and president of the Academy of Sciences. He was leader of the Pakistan delegation to the IAEA's general conference.

JOHN W. DAWSON, formerly director of the Chemical Sciences Division at the Army's Office of Ordnance Research, Durham, N.C., has been named chief scientist, Office of Ordnance Research. He succeeds GEORGE GLOCKLER, who retired several months ago to resume his research interests, and to serve as a lecturer at Duke University.

The following mathematicians have reported new appointments for the academic year 1958-59.

S. A. AMITSUR, associate professor at the Hebrew University, Jerusalem, Israel, has been appointed to a visiting professorship at the University of Notre Dame.

H. P. ATKINS, dean of men of the University of Rochester, has been appointed to a professorship at the University of Richmond.

W. W. BOONE of the University of Oslo, Oslo, Norway, has been appointed to an associate professorship at the University of Illinois.

RENE DE VOGELAERE, associate professor at the University of Notre Dame, has been appointed an associate professor and an associate research mathematician in the Computer Center, University of California, Berkeley.

J. W. ELLIS, associate professor at Florida State University, has been appointed to an associate professorship at Louisiana State University and Agricultural and Mechanical College.

S. R. FARY, associate professor at the University of Montreal, Canada, has been appointed to an associate professorship at the University of California, Berkeley.

GLADYS GIBBENS has retired from the University of Minnesota with the title, associate professor emeritus.

G. P. HOCHSCHILD, professor at the University of Illinois, has been appointed to a professorship at the University of California, Berkeley.

L. K. JACKSON, associate professor at the University of Nebraska who is on leave for 1 year, has been appointed to a visiting associate professorship at the University of Oregon.

J. X. JAMRICH, dean of Doane College, has been appointed to an associate professorship at Michigan State University.

The Vitro Corporation of America has announced the following changes in organization, effective 1 November.

WILLIAM A. BAIN, JR., has been named executive vice president of Vitro Laboratories, with offices at Silver Spring, Md. He was formerly vice president of Vitro Laboratories and director of Vitro's West Orange Laboratory, West Orange, N.J. He has been succeeded at West Orange by ARTHUR S. LOCKE, formerly associate director. LEWIS H. ROGERS, senior chemist at the Air Pollution Foundation, Los Angeles, Calif., has been named associate director of the West Orange laboratory to succeed Locke.

ANDREW J. ERICKSON will become vice president of Vitro Laboratories and general manager of Vitro Weapons Service (formerly Armament Test Activity) at Eglin Air Force Base, Fla. He has been director of Armament Test Activity. EDWARD W. CLARNO has been promoted to assistant general manager of Vitro Weapons Services.

HERBERT H. FRIEDMAN, U.S. Naval Research Laboratory, has been appointed superintendent of the laboratory's Atmosphere and Astrophysics Division. He succeeds HOMER E. NEWELL, who is transferring to the newly established National Aeronautics and Space Administration, where he will be assistant director for space science.

R. F. RINEHART has taken leave of absence from Case Institute of Technology for the academic year 1958-59 to assume the position of director of special research and operations research in the department of mathematics at Duke University.

MAHDI S. HANTUSH of Iraq is visiting the New Mexico Institute of Mining and Technology at Socorro, where he will direct a ground-water re-

search program. Hantush, who holds a doctoral degree from the University of Utah, recently served as dean of the College of Engineering at the University of Baghdad.

Rear Admiral HYMAN G. RICKOVER, pioneer in nuclear powered engines, was awarded the first Michael I. Pupin 100th Anniversary Medal of the Columbia Engineering School Alumni Association for "service to the nation."

GUSTAVE FREEMAN, head of the clinical pharmacology and therapeutics section at the Cancer Chemotherapy National Service Center, Bethesda, Md., has joined the biological sciences department at Stanford Research Institute as program director of medical research. He will direct preclinical cancer research at S.R.I. and clinical studies conducted with neighboring hospitals. He will also work on an advanced program in nucleic acids with G. W. Beadle at California Institute of Technology. They will study the action of selected cancer chemotherapeutic agents on nucleic acids.

WILLIAM E. PARHAM, professor of chemistry at the University of Minnesota, has been appointed chief of the university's Division of Organic Chemistry. He succeeds LEE I. SMITH, who is retiring from administrative duties but who will continue his research and teaching.

JOSEPH G. BENTON, associate professor of clinical physical medicine and rehabilitation at the New York University College of Medicine, has been appointed professor and chairman of the newly established department of rehabilitation medicine at the State University of New York Downstate Medical Center, Brooklyn, and director of the rehabilitation department at Kings County Hospital Center, also in Brooklyn. Benton has been associated since 1948 with Howard Rusk, director of the Institute of Physical Medicine and Rehabilitation of the New York University-Bellevue Medical Center.

HARRY GREEN, formerly chief of biochemical research at the Wills Eye Hospital, Philadelphia, Pa., has joined the biochemistry research section of Smith Kline and French Laboratories, Philadelphia.

CHARLES E. PALM has been named dean of the New York State College of Agriculture at Cornell University, effective 1 July 1959. Former head of the university's department of entomology and limnology, he is now director of the Cornell Agricultural Experiment Station

and research director for the State College of Agriculture and Home Economics.

The following appointments and staff changes have occurred in the physics department at the University of Maryland.

ERNST OPIK of Armagh Observatory, Northern Ireland, has been appointed a visiting professor for the academic year 1958-59. ROY BRITTEN of the Carnegie Institution of Washington is teaching biophysics during the fall as a part-time visiting professor. JOHN L. WARD of the University of Miami is a visiting research professor for the summer and fall sessions, 1958.

GEORGE SNOW, formerly of the Naval Research Laboratory, has been appointed associate professor. He will conduct experimental and theoretical research in high energy physics.

Two Maryland physicists are in Europe this year as John Simon Guggenheim Memorial Foundation fellows. JOHN S. TOLL, chairman of the department, is at the Institute for Theoretical Physics in Copenhagen. ELLIOTT MONTROLL, professor, is spending the year at the Free University of Brussels. ROY S. ANDERSON, associate professor, is also on leave of absence; he is conducting research at the University of California in Berkeley.

HOMER J. STEWART, professor of aeronautics at California Institute of Technology and chief of the liquid propulsion systems division in the institute's Jet Propulsion Laboratory, has been appointed director of the Office of Program Planning and Evaluation of the National Aeronautics and Space Administration.

VICTOR HICKS, chief physicist at the Allen-Bradley Company, Milwaukee, Wis., has been appointed research professor of physics at Marquette University. He will retain his position as chief physicist at Allen-Bradley.

S. H. BAUER, professor in the department of chemistry at Cornell University, has been appointed professor at the Cornell Aeronautical Laboratory, Buffalo, for the academic year 1958-59.

OSCAR E. OLSON has been named dean of the graduate division at South Dakota College. He will continue in his present position as head of the agricultural experiment station biochemistry department.

JOHN H. BLAND, associate professor of medicine at the University of Vermont, began in September a year of study and research with J. H. Kellgren,

director of the Rheumatic Center, University of Manchester, England.

Also at Vermont, A. EDWARD CLINTIN ANDREWS, JR., formerly of Johns Hopkins Hospital, has been appointed associate professor of pathology.

R. C. ELDERFIELD, professor of chemistry at the University of Michigan, will discuss "Australian Trees and High Blood Pressure" as a Sigma Xi national lecturer at a number of colleges and universities during November and December.

E. A. VUILLEUMIER, member of the Dickinson College faculty for 38 years, has been succeeded as chairman of the chemistry department by HORACE E. ROGERS, one of his former students and professor of analytical chemistry at the college.

MILTON C. KLOETZEL, professor of organic chemistry at the University of Southern California, has been promoted to dean of the Graduate School.

Recent Deaths

RAYMOND H. BARROWS, Pleasantville, N.Y.; 59; executive vice president of the National Foundation, formerly the National Foundation for Infantile Paralysis; Red Cross vice president and area manager in the Pacific zone, 1949-51; formerly construction engineer for the National Carbonic Machinery Company; 22 Oct.

LOUIS E. BERNARD, North Tarrytown-on-Hudson, N.Y.; 60; owner and director of Stony Lodge, Ossining, a private psychiatric hospital; associate director of the Croton Manor Sanitarium, 1945-49; 23 Oct.

ALVIN D. CASKEY, Mountainside, N.J.; 77; retired in 1947 as a chemist with the Westinghouse Electric Company, Bloomfield, N.J.; had worked with Thomas A. Edison; 23 Oct.

NIKOLAI N. SLAVYANOV, Moscow; U.S.S.R.; 81; geologist and hydrogeologist, who published 120 papers in a career than began in 1908; 15 Oct.

GEORGE K. STRODE, Brattleboro, Vt.; 72; specialist on public health; director of the International Health Division of the Rockefeller Foundation, 1944-51; between 1920 and 1938 worked in Brazil, Europe, Africa, and the Near East; received decorations from the governments of Norway, Denmark, Bulgaria, Portugal, France, Rumania, and Sweden; author of *Yellow Fever*; 28 Oct.

ROBERT R. TUFTS, Cleveland, Ohio; 49; professor of engineering administration and head of the management development program at Case Institute of Technology; 14 Oct.