

be brought before Congress, since nothing can be done unless Congress is willing to authorize and then appropriate the money to go ahead.

What makes a controversy of some sort inevitable either way is that the problem is more than complicated enough so that it will be easy to make a case in favor of either approach, and nearly everyone will have no trouble convincing himself that the view he would tend to favor in the lack of any evidence is, by some happy coincidence, precisely the view supported by a careful study of the arguments on both sides.

The Test Ban

The Vienna talks were a "success" within the terms set by the Administration at the outset. No false hopes were raised, and the meetings ended with no illusions of accommodation. The meetings gave Kennedy a chance to size up Khrushchev in person, and vice-versa; Kennedy had apparently made a strong impression on the Europeans; and these limited accomplishments were enough to satisfy most observers that the episode had been, as Administration spokesmen described it, "useful."

The meetings, nevertheless, left the Administration with the problem of how to deal with the test-ban talks, and with no longer much hope that the Russians are going to make the decisions any easier. Khrushchev confirmed the Russian interest in merging the talks with the general disarmament discussions to begin later this year, and, according to reports, he vigorously defended the new Soviet doctrine of three-headed control bodies for international agencies, including those to police disarmament, with the Soviet, Western, and neutral blocks each having a veto. To the West, this is like a court in which either of the opposing attorneys can veto the judge's decisions. For the moment, the Administration's negotiators at Geneva continue to press on day after day, even though there no longer seems much to negotiate about, in order to impress on the world our willingness to reach an agreement, if it is at all possible. At home, the United States Information Agency, under Edward R. Murrow, and other agencies are working on the problem of how to minimize the adverse world reaction that seems inevitable should it become necessary, after all, to resume nuclear testing.—H.M.

Announcements

A vehicle designed to do the work of a diver on the ocean floor is undergoing performance trials at the Scripps Institution of Oceanography, La Jolla, Calif., where it was designed. The machine, called a **remote control underwater manipulator**, or RUM vehicle, has a hand-like manipulator which is controlled from shore through a coaxial cable carrying, simultaneously, 38 sets of commands to the machine and two television signals from it.

The vehicle is driven by an electric motor and is able to withstand water pressures of 10,000 pounds per square inch. Two of its television cameras scan the ocean ahead, one searches behind, and the fourth follows the movements of the manipulator. When ready for operation, the vehicle will be used in various oceanographic research projects.

Britain and Russia have signed a 5-year agreement for collaboration on the **peaceful uses of atomic energy**. The first of a series of exchange visits will take place before the end of the year. The agreement was signed by V. S. Emelyanov, chairman of the State Committee for Atomic Energy of the Soviet Council of Ministers, and Sir Roger Makins, chairman of the United Kingdom Atomic Energy Authority.

A new scientific association, the **International Union of Geological Sciences**, was recently formed after a meeting of geologists from 25 countries held at UNESCO House, Paris. The union, now a member of the International Council of Scientific Unions, was formed on the basis of a proposal adopted at the 1960 meeting of the International Geological Congress. J. M. Harrison, head of the Geological Survey, Ottawa, Canada, has been elected president; vice presidents are I. I. Gorski (U.S.S.R.), L. Hawkes (United Kingdom), Teichi Kobayashi (Japan), Lamago (Brazil), Jean Lombard (France), and B. C. Roy (India).

A new **information and analysis center**, to evaluate reports and publications containing seismic information on explosions and earthquakes, has been established by the University of Michigan's Institute of Science and Technology. Supported by a contract from the Advanced Research Projects

Agency (ARPA), the institute's Fluid and Solid Mechanics Laboratory is setting up the VELA Seismic Information Analysis Center (VESIAC). The center will evaluate and disseminate information gathered in the seismic research portion of the ARPA Vela-Uniform program, the national program of research in the detection and identification of underground nuclear tests. It will also be responsible for summarizing current seismic knowledge which may be useful to the program.

Grants, Fellowships, and Awards

Fulbright scholarships for graduate study or predoctoral research in 32 countries will be available to over 800 graduate students for the 1962-63 academic year. In addition, awards for graduate study in Latin America and Ireland will be offered. Requests for application forms must be postmarked not later than *1 October 1961*; applications will be accepted until 1 November. (Information and Counseling Division, Institute of International Education, 1 E. 67th St., New York 21)

Modest grants to assist individuals wishing to study at the Chicago Natural History Museum are available for work in any of the following fields: **anthropology** (with a natural-history orientation), **botany** and **geology** (including paleontology), and **zoology**. An applicant should briefly describe the proposed study, state how long he would like to study at the museum and the amount of money needed, and name one reference. (Chairman, Karl P. Schmidt Fund, c/o Chicago Natural History Museum, Roosevelt Rd. and Lake Shore Dr., Chicago 5)

The National Science Foundation is accepting applications for fellowships under its **postdoctoral fellowship** program *through 5 September*. The awards consist of a stipend of \$5000 per year, dependency allowances, and limited travel allowances. Eligibility requirements include U.S. citizenship, special aptitude for advanced training, and a doctoral degree or its equivalent in education and experience. Fellows will be selected on the basis of ability as evidenced by letters of recommendation and other evidence of scientific attainment. (Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C.)

Meeting Notes

An international symposium on **aerospace nuclear propulsion**, sponsored jointly by the Atomic Energy Commission, the Institute of Radio Engineers' Professional Group on Nuclear Science, and the National Aeronautics and Space Administration, will be held 24-26 October. Tentative topics include advanced propulsion systems, engine characteristics and dynamics, recent advances in nucleonic instrumentation, engine simulation and control, effects of nuclear radiation on controls and instruments, and non-nuclear and nuclear instrumentation for aerospace propulsion. Rough drafts and 500-word abstracts of papers to be presented should be submitted by 1 July. (P. M. Uthe, Lawrence Radiation Laboratory, Livermore, Calif.)

A workshop on **dynamic programming**, sponsored by the Nonlinear Control Subcommittee of the American Institute of Electrical Engineers, will be held at the University of Colorado on 27 June. The basic theory of dynamic programming will be presented in addition to its present applications, sample problems, and directions of new study. (Richard Kuba, Power Equipment Co., P.O. Box 3556, Beechwood Station, Columbus 14, Ohio)

Scientists in the News

Irving Klotz, biochemist at Northwestern University, has won the American Chemical Society's Eli Lilly award for his studies of proteins.

Alan Johnson, assistant professor in the department of medicine at New York University Medical Center, has been appointed director of a new research laboratory to be established at Bellevue Hospital by the American National Red Cross. Johnson will supervise investigation on the dissolution of blood clots similar to those responsible for coronary thrombosis, phlebitis, and strokes.

John F. Flagg, manager of the materials engineering laboratory, General Electric Company, Schenectady, N.Y., has been appointed director of research for American Cyanamid Company's Central Research Division. Prior to joining GE in 1946, Flagg was assistant professor of chemistry at the University of Rochester.

Richard L. Dobson, assistant professor and head of the dermatology division at North Carolina School of Medicine, has been appointed associate professor of dermatology at the University of Oregon Medical School. Also appointed to a new position at the school was **Robert E. Swanson**, assistant professor of physiology at the University of Minnesota Medical School, who will become associate professor of physiology.

E. B. Brown, Jr., professor of physiology at the University of Minnesota, will become professor and head of the department of physiology at the University of Kansas Medical School on 1 July.

Jackson W. Foster, professor of microbiology at the University of Texas, has been named by the U.S. Office of Naval Research to undertake a special study of the status of microbiological science in Europe and the Middle East. He will be assigned to the U.S. Embassy in London as scientific officer for approximately 1 year, beginning 1 September.

George H. Morrison, head of inorganic and analytical chemistry at General Telephone & Electronics Laboratories, Bayside, N.Y., has been appointed professor of chemistry at Cornell University, effective in July. He will also head the analytical program of the university's Materials Science Center.

James A. Halsted, who formerly held the posts of assistant to the vice president, associate professor of medicine, and director of postgraduate medical education at the University of Kentucky Medical Center, has been appointed chief of the department of medicine at the Metropolitan Hospital and Clinics, Detroit, Mich.

William M. Brown, associate professor of electrical engineering at the University of Michigan, has been appointed head of the radar laboratory at the university's Institute of Science and Technology. He succeeds **L. J. Cutrona**, who resigned in order to devote more time to teaching.

William E. Koch, Jr., professor of clinical radiodontics at the Washington University School of Dentistry, has been appointed professor of oral diagnosis and radiology at the university.

Theodore Lidz, professor of psychiatry at Yale University School of Medicine, is the first recipient of the Frieda Fromm-Reichman award for research in schizophrenia, presented 6 May at the Chicago meeting of the American Academy of Psychoanalysis.

James M. Ham, professor of electrical engineering at the University of Toronto, is currently visiting the U.S.S.R. Academy of Sciences under the official exchange agreement between the academy and the National Research Council of Canada.

Harry S. Gear, director of pneumoconiosis research for the Council for Scientific and Industrial Research-Industrial Medicine in Johannesburg, South Africa, will become secretary general of the World Medical Association on 1 July.

Recent Deaths

Harry A. Bright, 71; metallurgist; was chief of the National Bureau of Standards' analytical chemistry section from 1936 to 1960; 22 May.

Lindsay P. Disney, 65; tides expert and assistant chief of the U.S. Coast and Geodetic Survey's marine data division; 23 May.

Manfred Engel, 31; radiation bacteriologist in Oak Ridge National Laboratory's Biology Division since 1958; 1 May.

George I. Finlay, 85; professor emeritus of geology at New York University; 5 May.

Arnold L. Gesell, 80; child psychologist and former research consultant for the Gesell Institute of Child Development; previously professor of child hygiene at Yale University School of Medicine; 29 May.

Ivor Griffith, 70; president of the Philadelphia College of Pharmacy and Science since 1941; 16 May.

E. Lee Kinsey, 57; professor of physics and former chairman of the department at the University of California, Los Angeles; 27 May.

Cleon Nafe, 69; surgeon and associate professor of surgery at Indiana University Medical School; 29 Apr.

Harry P. Newton, 65; chemist at the U.S. Department of Agriculture from 1927 until his retirement in 1956; 21 May.

Louis M. Orr, 61; urologist and president of the American Medical Association in 1959-60; 22 May.