were cast in the role of the "bad guys" on this issue, they did no more than what the liberals would have done if the positions had been reversed. They fought hard to avoid a disadvantageous shift in the balance of political power, and their only regret, quite properly, is that they lost.—H.M.

News Notes

U. N. Conference on Energy Sources To Meet in Rome

The United Nations Conference on New Sources of Energy, which will examine practical problems and experience in the utilization of solar energy, wind power, and geothermal energy—with especial reference to the problems of the less developed countries—will be held at the invitation of the Italian Government in Rome from 21 to 31 August 1961.

Prospects for the practical utilization of new sources of energy other than the atom were reviewed initially in a report prepared in 1957 for the United Nations Council by Secretary-General Dag Hammarskjold. In April 1959 the council decided that an international conference could yield especially interesting results for areas which have a shortage of conventional energy resources. At three preliminary meetings of experts, in Madrid, Grenoble, and Rome in May, June, and July of 1960, the program agenda and substantive guidelines for potential contributors of papers to the conference were drawn up.

Conference Agenda

The conference objective is to bring together experts in the fields of solar energy, wind power, and geothermal energy, as well as people interested in energy development in general, to provide participants with up-to-date information on progress, problems, potentialities, and limitations in utilizing these three sources of energy, especially in areas lacking conventional energy sources or facing high energy costs. Participants in the conference, who will attend as individuals and not as representatives of governments, organizations, or societies, will emphasize applications of these forms of energy rather than scientific principles or basic research.

The agenda provide for two parallel

series of technical discussions, one devoted basically to the utilization of geothermal energy, wind power, and solar energy for power purposes; the other to solar energy for purposes other than power.

Participation will be by invitation of the U.N. Secretary-General. Participants will be selected from among duly qualified persons who have been nominated to attend. Nominations will be made by governments of member states or their governmental services, by the United Nations and its specialized agencies, and by interested nongovernmental organizations or societies. It is expected that qualified individuals will also apply for invitations, and their requests will receive particular attention.

As a result of the preliminary meetings in 1960, some specialists have already been asked to submit papers. In addition, the Secretary-General is inviting 16 outstanding specialists to serve as rapporteurs on agenda items. A rapporteur will introduce the subject for which he is responsible, having first reviewed the papers contributed in that area and prepared a general report suggesting the main lines for discussion. In addition, the rapporteurs will summarize problems and findings in the plenary meetings. Before the meeting, they will also screen papers and advise the secretariat in preparatory work.

The United Nations has issued an information bulletin covering organizational arrangements for the conference and including application forms for participation. The Secretary-General has appointed Alfred G. Katzin of his office to be executive secretary of the conference.

Harvard Sponsoring Program on Science and Public Policy

The Graduate School of Public Administration of Harvard University, with the aid of a grant from the Rockefeller Foundation, has undertaken a research and training program on science and public policy, including an unusual seminar for advanced students that is in its first year of operation. The level of the seminar is apparent from a list of some of the 1960–61 guest speakers: former presidential science adviser George B. Kistiakowsky; Admiral Rawson Bennett, the retiring head of the Office of Naval Research; Elting E. Morison of Massachusetts In-

stitute of Technology; Caryl P. Haskins of the Carnegie Institution of Washington; Major General James McCormack, USAF (retired), vice-president of M.I.-T.; and Sir Charles P. Snow, physicist and author and former United Kingdom Civil Service commissioner.

Admission to the Seminar

About 15 students are admitted to the seminar each year. As in other research seminars of the school, students are selected primarily from among candidates who have had a number of years of experience in government or in comparable research or administrative positions and who seek to prepare themselves to deal with public policy issues at a higher level of responsibility.

Seminar participants are expected to make a contribution to the study of some aspect of the broad range of problems involved in the application of science to the formulation and determination of public policy, and in the financing and administration of scientific research. Admission is based on a man's academic record, including graduate work, if any; on public service experience; and on recommendations, especially from his government agency if he has been selected by it for training.

The breadth and flexibility of the school's programs make them especially appropriate for men in those government agencies which, because many of their leaders in administration and policy are drawn from technical or professional fields, seek to combine technical training and scientific research with executive development. A student who wishes to participate in the research seminar in science and public policy will be considered for admission regardless of his intention to qualify for a degree.

Fellowships

All federal and certain other public agencies have authority to pay expenses for advanced training at nongovernment institutions, where this is part of the agency's approved training program. Employees of such agencies are encouraged to investigate their eligibility for such training before applying for admission.

Several fellowships are available for candidates who are not eligible for training at government expense. Fellowship stipends will be sufficient to cover tuition and, on the basis of need, most of a student's living expenses.

Application blanks, catalogs, and

other information may be obtained by writing to the Registrar, 123 Littauer Center, Harvard University, Cambridge 38, Mass. Applications for admission for the academic year 1961–62 are due on 15 March, but late submission can be arranged, especially if advance notice is given informally by candidates selected by government agencies for advanced training. The academic year 1961–62 will begin 5 September and end 5 June.

Member of Scott's Last Expedition Returns to Antarctic after 47 Years

Sir Charles S. Wright, a member of the ill-fated 1911–1913 expedition of Robert Falcon Scott, has returned to Antarctica as a scientist with the U.S. Antarctic Research Program. A Canadian member of Scott's expedition, Sir Charles was one of the party that on 12 November 1912 discovered the bodies of Scott and three companions, who had perished on the return trek from the South Pole when beset by blizzards and the approaching winter.

Sir Charles, a physicist with the Pacific Naval Laboratories, Canadian Defense Research Board, is on loan to Stanford University to participate in a joint Stanford-PNR study of very low frequency radio waves. His return to

the Antarctic was arranged by the National Science Foundation, which manages the U.S. scientific program there. His transport was provided by the U.S. Navy, responsible for logistic support of the science program.

The Stanford-PNR study involves work at Byrd Station, Antarctica, by Sir Charles and Donald J. Evans, and at Great Whale River, Canada—Byrd's conjugate point—by Stanford personnel. Stanford has received an NSF grant of \$59,740 in support of the work.

NASA Setting up Institute for Space Studies

The National Aeronautics and Space Administration is establishing a theoretical research group in New York City. Designated the Goddard Institute for Space Studies, the group will serve as an arm of the Theoretical Division of the Goddard Space Flight Center, located at Greenbelt, Md. Robert Jastrow will serve as director of the institute and will also remain in his present position as chief of the Theoretical Division at Goddard.

The institute will begin formal operations in May 1961. Its staff of approximately 50 will work in close association with universities and research institutions in the New York area. An office site has not yet been selected.

The regular staff will be supplemented by scientists from nearby universities, who will be appointed on a part-time consulting basis to participate in the research program. Such appointments for part-time research have been accepted by Maurice Ewing of Columbia University and Bëngt Strömgren of the Institute for Advanced Study at Princeton.

The program of the institute will in-

The program of the institute will include basic theoretical research in fields having a bearing on the NASA space science program. Major areas of activity in the program will be the structure of the earth, the moon, and other planetary bodies in the solar system; the atmospheres of the earth and other planets; the origin and evolution of the solar system; the properties of the interplanetary plasma; sun-earth relationships; celestial mechanics; and the structure and evolution of the stars.

Heart Association Reports More Research Support Needed

The American Heart Association has contradicted published statements that the availability of funds for medical research has outstripped the availability of qualified investigators to use them properly. In its 1960 annual report, issued on 26 January, the association declares that "double the sums now available could be used effectively to speed conquest of heart disease."

Quoting its national research committee, the association urges that every aspect of research support be expanded and essential new programs be added. At the same time, the report emphasizes that the largest share of the association's expenditure in fiscal year 1959–60—\$9,053,592 out of a total of \$24,377,435—was assigned to support of scientific research.

The report notes further that despite this record-breaking research allotment, funds were lacking to support all grants approved as scientifically worth while by the research committee. Forty-two applications had to be denied outright, sums requested for grants-in-aid were cut by one-third, and the number of new "career investigator" appointments had to be limited to two-"although many excellent candidates are considered deserving in this most important area." The career investigatorship provides lifetime research support for outstanding scientists working in the broad field of heart and blood-vessel diseases.



Sir Charles Wright visits the darkroom of Scott's hut at Cape Evans, Antarctica. This darkroom was used by the famous Antarctic photographer Herbert Ponting during the Scott 1911-1913 expedition, of which Sir Charles was a member.

In an introduction to the report, Oglesby Paul of Chicago, association president, emphasized the need for major expansion in all aspects of the program to combat cardiovascular disease.

News Briefs

Business aids education. Twenty-one Cleveland business firms will give a minimum of 1 percent of their income (before taxes) to help higher education during the next 3 years. In "A Proposal to Those Who Believe in American Leadership," the company leaders called on business and industry to follow their example. The aid planned may take the form of grants for capital construction, unrestricted operating grants, endowed chairs, or funds to match alumni contributions by employees.

According to recent estimates, corporation aid to higher education amounts to \$150 million, representing one-third of 1 percent of earnings before taxes. The Council for Financial Aid to Education, whose studies have indicated the need for increased business support for higher education, cooperated in working out the new program.

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Meteorite collection. Arizona State University recently purchased Nininger Meteorite Collection with the financial assistance of a private donor, the National Science Foundation, and the Arizona State University Foundation. The collection contains 1220 catalogued specimens, plus several thousand small particles, from 684 of the 1600 known meteorite falls. The material will be available to scientists but not to the lay public. Carleton Moore of Wesleyan University has accepted the directorship of the Nininger Meteorite Laboratory and will join the Arizona faculty in June.

In connection with the collection, a symposium on meteorites will be held on 10 March as part of the inauguration ceremony for G. Homer Durham, the university's new president. Papers for the symposium should be sent to Dr. Carleton Moore, Wesleyan University, Middletown, Conn. He will edit the symposium volume, with the assistance of an advisory board.

Industrial science award. During the recent AAAS meetings the association's Industrial Science Section presented its

annual Industrial Science Achievement Award to the Bell Telephone Laboratories for its work in the field of universal communication during the year 1960. Among the advances cited were the successful experiments in longdistance communication through reflection of radio signals from the satellite Echo I (conducted in cooperation with NASA); the development of a new switching system that more than doubles the message-carrying capacity of existing submarine cable facilities; and development of the first electronic telephone switching system, which was placed in full-time experimental service at Morris, Ill., in November 1960.

NASA life sciences laboratory. A Life Sciences Research Laboratory was opened at the National Aeronautics and Space Administration's Ames Research Center, Moffett Field, Calif., on 1 February. Clark T. Randt, director of the NASA Office of Life Sciences Programs, says the installation at Ames will eventually have a staff of 60 scientists and some 140 supporting technicians.

The new facility was opened with the assignment of Richard S. Young as chief of the Environmental Biology Branch. The laboratory will be headed by a director who will serve as assistant director to Smith J. DeFrance, now in charge of the Ames Research Center. Under the laboratory director there will be three divisions—flight medicine and biology, space medical and behavioral sciences, and space biology.

History of science. At a recent meeting of the George Sarton Memorial Foundation it was announced that funds are being sought to obtain a distinguished historian of science from abroad to be a featured speaker at the 10th International Congress for the History of Science, to be held at Cornell University and in Philadelphia in 1962. The foundation also announced its intention to maintain funds for a featured speaker on the history and philosophy of science at the AAAS annual meetings. Retiring AAAS president Chauncev D. Leake, of Ohio State University, is the foundation's new president.

Japanese satellite. Japan has announced that it will inaugurate a space program this year and plans to launch an earth satellite by 1963. This would be sent into orbit with American rockets from a site in the United States.

Grants, Fellowships and Awards

Allergy. The Scientific and Educational Council of the Allergy Foundation of America has announced the availability of a limited number of quarterly or summer scholarships at \$600 each in approved medical schools in the United States and Canada. The awards, for students who have completed their second or third year in medical school, are to support a minimum of 8 weeks of training in both clinical and research aspects of allergy.

Each medical school is invited to submit the name of one applicant through the dean's office, accompanied by a supporting letter from the dean. Applications should be sent by 1 March to Dr. William B. Sherman, Chairman, Scientific & Educational Council, Allergy Foundation of America, 801 2nd Ave., New York 17, N.Y.

Hydromechanics. The Navy's David Taylor Model Basin has announced that proposals for the Bureau of Ships Fundamental Hydromechanics Research Program for the next fiscal year should be received by 15 March. Areas of interest are resistance, propulsion, stability, control, sea-keeping characteristics, radiation of underwater sound, and other hydromechanics problems which may be applicable to all types of Navy craft. Information concerning the program may be obtained by writing to the Commanding Officer and Director, David Taylor Model Basin, attention Contract Research Administrator (Code 513), Washington 7,

Laboratory development. The National Science Foundation has announced that *1 March* is the next closing date for receipt of proposals in the Graduate Laboratory Development Program. This program requires at least 50-percent participation by the institution with funds derived from nonfederal sources.

The purpose of the grants is to aid institutions of higher education in modernizing, renovating, or expanding graduate-level basic research laboratories used by staff members and graduate students. Only those departments having an on-going graduate training program leading to the doctoral degree in science at the time the proposal is submitted are eligible at present. Proposals, as well as requests for additional information, should be addressed to: Office of Institutional Programs, NSF, Washington 25, D.C.

Scientists in the News

Louis P. Hammett, physical chemist of Columbia University, has won the 1961 Willard Gibbs Medal of the American Chemical Society's Chicago Section. The award is made annually to a scientist "who, because of his eminent work in, and original contributions to, pure and applied chemistry, is deemed worthy of special recognition."

Hammett will receive the medal on 19 May at a dinner celebrating the 50th presentation. He is being honored for having laid the foundations of modern physical organic chemistry and for his outstanding record as a teacher, administrator, and research worker. Hammett, who also won the ACS Priestly Medal for 1961, is the newly elected chairman of the society's board of directors.

Frank T. McClure, chairman of the Research Center at the Johns Hopkins University Applied Physics Laboratory, Silver Spring, Md., recently received a \$3000 award from the National Aeronautics and Space Administration for his invention of a satellite Doppler navigation system. The award was the first made under the invention award authority of the 1958 Space Act. McClure's invention was basic to the Navy Department's navigational satellite program, Project Transit.

Curt Stern of the University of California, Berkeley, is the new presidentelect of the American Society of Zoologists. He replaces C. Ladd Prosser, who has become president.

Ray D. Owen, geneticist and immunologist, has been appointed acting chairman of the Biology Division of the California Institute of Technology. He succeeds Nobel laureate George W. Beadle, who is leaving to become chancellor of the University of Chicago.

Milton J. Schiffrin has been appointed director of clinical research, Medical Research Department, Hoffman-La Roche, Inc., Nutley, N.J. He has been at the firm's Chicago regional office for the past 15 years. In his new post he will supervise the activities of the company's regional medical offices in Houston, Tex., San Francisco, Calif., and Chicago, Ill.

Garrison Cattell and Dorothy Hancock succeed the late Jaques Cattell as editors of American Men of Science.

Elmer McCollum, emeritus professor of blochemistry at Johns Hopkins University, received the New York Academy of Medicine Medal on 5 January "in recognition of his basic research which ushered in the era of the newer knowledge of nutrition; of his fruitful efforts which contributed to the eradication of deficiency diseases; of his demonstration of the tremendous significance of nutrition . . . for the promotion of health and prolongation of life; and of his influence upon the dietary habits of man throughout the world, through his research, writing and teaching." This was the 15th presentation of the medal in 32 years.

The 1960 Franz Alexander Prize of the Chicago Institute for Psychoanalysis was awarded on 25 January to W. Donald Ross and Frederic T. Kapp, associate professors of psychiatry at the Univerity of Cincinnati, for their paper, "A technique for self-analysis of countertransference."

Marcus Singer, professor of zoology and of child development and family relationships at Cornell University, has been named Henry Willson Payne professor of anatomy and director of the department in the School of Medicine at Western Reserve University. Also at Western Reserve, Howard A. Schneiderman, now associate professor of biology at Cornell, has been appointed professor of biology. Both appointments will become effective on 1 July.

A. B. Cambel, chairman of the mechanical engineering department at Northwestern University, will tour as a national lecturer of the Society of Sigma Xi during the 1961–62 academic year. He will speak on magneto-gas dynamics.

The American Meteorological Society has announced the election of a new president and vice president—respectively, **Thomas F. Malone**, director of research for the Travelers Insurance Company, Hartford, Conn., and **Patrick D. McTaggart-Cowan**, director of the Canadian Meteorological Service, Toronto, Ontario.

The China Medical Board of New York, Inc., has announced that Kenneth L. Duke, associate professor of anatomy at Duke University School of Medicine, has been selected as the recipient of the 1961 Alan Gregg Travel Fellowship in Medical Education. Duke

plans to make a comparative histological study of the ovaries of mammals in Southeast Asia. He will spend approximately 6 months in that area, mostly at the University of Malaya.

Hugh Bradner, of the Lawrence Radiation Laboratory at the University of California, received an honorary degree from Miami University on 29 January, when he was the speaker at ceremonies of mid-year graduation and dedication of a new science building.

Ralph C. Graber has been named assistant chief of the U.S. Public Health Service's newly formed Division of Air Pollution. Formerly he was chief of the Air Pollution Engineering Services, an agency no longer in existence.

Abraham Hyatt has been named director of the National Aeronautics and Space Administration's Office of Program Planning and Evaluation. He succeeds Homer J. Stewart, who has returned to his professorship at the California Institute of Technology, Pasadena. Previously Hyatt was deputy director of NASA's Launch Vehicle Programs.

Recent Deaths

Ralph L. Belknap, Ann Arbor, Mich.; 62; associate professor of geology at the University of Michigan; 17 Dec.

Francesco Giordani, Naples, Italy; 64; professor of general and inorganic chemistry at the University of Naples and former president of the Italian National Committee for Nuclear Research; in 1956–57, helped lay the groundwork for Euratom, the six-nation European nuclear energy community; 24 Jan.

Irving Lorge, New York, N.Y.; 55; professor of education and executive officer of the Institute of Psychological Research at Teachers College, Columbia University; leader in psychological testing who, in collaboration with the late E. L. Thorndike, developed the Lorge-Thorndike Intelligence Test; 23 Jan.

Abraham I. Rubenstone, Philadelphia, Pa.; 71; professor emeritus of clinical medicine at Hahnemann Medical College and former chief of medical service at Einstein Center, Southern Division; 22 Jan.

Wayland F. Vaughan, Needham, Mass.; 59; professor of psychology at Boston University and head of the department from 1934 to 1946; 21 Jan.