cialized topics. Despite these views, the U.S. delegation suggested a third meeting in 1961. The matter can be expected to be a topic of discussion during the General Assembly session on the United Nations which is currently convened in New York.

Publication of Proceedings of the United Nations Conference on Peaceful Uses of Atomic Energy

The U.N. has announced the scheduled publication of the various reports and statements made at the conference.

The proceedings of the conference will constitute the means by which the information will be made available throughout the world. The only complete edition, which will be in English will consist of the following:

1) Material relating to the objectives and operation of the conference.

2) The record of all sessions. There was a series of plenary meetings and five concurrent sessions, when approximately 600 selected papers were orally presented and discussed.

3) The complete text of all papers submitted to the conference (approximately 2200).

4) A detailed index volume (subject, numerical, and author.) This is an important and useful addition to the published proceedings.

Two new subjects discussed at this conference were "controlled fusion" and the use of nuclear power for purposes other than the generation of electricity, as, for example, its application to marine propulsion. Further details on these topics are available from U.N. information sources.

While the Proceedings of this conference will be of direct value primarily to the scientist, their importance reaches far beyond the purely scientific interest. Papers on finance, banking, health safety, education, and many other aspects of this question will be of special interest to all whose lives and interests involve atomic energy in its broadest sense.

The complete English edition is expected to consist of 34 volumes. They will be produced by letterpress with an 8½-by-11-inch page size; the volumes will probably average 500 pages each and will have a distinctive cover design and dust jacket.

The first volumes will be available in December 1958, and the last volumes are expected off the presses by July 1959. To insure maximum speed in publication, the work of printing has been assigned to printers in several countries in Europe and North America.

Copies of each volume will be mailed to subscribers as soon as they become available.

The average retail price of the English edition of the proceedings will approximate U.S. $15 per volume, or the equivalent in other national currencies; the regular price for the full set will therefore approximate $510.

In a special prepublication offer the United Nations and local bookstores will now accept orders for the complete English edition of 34 volumes at the special price of $435. For this prepublication price, all orders must be received by the United Nations prior to 30 November 1958. In addition to the very substantial economy achieved, prepublication orders will be given priority.

Two payment methods are available.

1) Full payment may be made of the total prepublication price for the complete English edition of $435 or its equivalent in other currencies; for fully prepaid orders no postage will be charged.

2) Those who prefer longer term payment arrangements are required to deposit 10 percent of the prepublication price ($44 or the equivalent in other currencies). Thereafter, monthly invoices covering the full price of volumes sent during the month must be paid as they are received, until the full prepublication price has been paid; the balance of volumes remaining will then be sent.

Readers who do not wish to subscribe to the full series may record their particular field of interest on the order cards provided by the U.N.; for volumes which fall within the particular subject indicated, further particulars will be sent as soon as they are available. The special prepublication terms are available only to subscribers to the complete series.

Abridged editions in French and Spanish will be published by the United Nations. They will consist mainly of the papers presented orally (approximately 600), the papers submitted in the language of the edition, and a selection of other papers. Each of these editions is expected to comprise 15 volumes, and a prepublication price of $190 is available until 30 November 1958.

Heisenberg Theory

The mathematical formulation of a "uniform field theory" developed by German physicist and Nobel Prize winner Werner Heisenberg was criticized recently at a meeting in Geneva of about 200 physicists from the East and West. Wolfgang Pauli of Switzerland voiced doubts about the accuracy of the mathematical computations on which the theory was based. He said that although this must not necessarily prejudice the conclusions drawn by Heisenberg, the theory nevertheless lacks power of proof. Marvin Goldberger of Princeton University commented that "The idea of the theory is highly admirable, but my personal feeling—and that of many other physicists here—is that the mathematical methods used by Heisenberg to arrive at specific numeral predictions must be regarded as being doubtful."

Support for Academic Freedom Work

The American Association of University Professors has announced receipt of a grant from the Jerome Levy Foundation of "no less than $5000 a year," for a 5-year period, the money to go into the association's Academic Freedom Fund. A chief use of the grant will be to give temporary aid to the professor who is discharged or suspended without pay in apparently clear violation of principles of academic freedom, and who is particularly handicapped in making his defense because he lacks money to live on. In addition, the fund will be used at colleges or universities where a general crisis threatens the academic freedom of a whole institution, and where faculty members rising to meet that threat need financial support.

In a statement to the press, William P. Fidler, AAUP general secretary, pointed out that defense of academic freedom is basically the safeguarding of professors in the performance of their work. He recognized that the objective and dispassionate nature of teaching and research will sometimes be misunderstood by an excited public opinion, and that in its extreme form—when the excitement is about evolution, loyalty oaths, or racial segregation, for example—public opinion can become a tyranny. It is then time, Fidler said, to turn to the AAUP's 1915 Declaration of Principles, which describes the nature and function of a university:

"It should be an intellectual experiment station, where new ideas may germinate and where their fruit, though still distasteful to the community as a whole, may be allowed to ripen until finally, perchance, it may become a part of the accepted intellectual food of the nation or of the world. Not less is it a distinctive duty of the university to be the conservator of all genuine elements of value in the past thought and life of mankind which are not in the fashion of the moment. . . . One of its most characteristic functions in a democratic society is to help make public opinion more self-critical and more circumspect, to

check the more hasty and unconsidered impulses of popular feeling, to train the democracy to the habit of looking before and after."

The Board of Advisers of the Academic Freedom Fund will be: Bentley Glass of Johns Hopkins University, Robert K. Carr of Dartmouth College, Ralph F. Fuchs of Indiana University, and Edward L. Hutton and S. Jay Levy of New York City.

Thermophysical Properties Research Center

The Thermophysical Properties Research Center at Purdue University was started in January 1957 with the ultimate goal of becoming a world center for the collection, analysis, correlation, and dissemination of thermophysical properties information and of providing facilities for research to fill in the gaps in the world knowledge of these properties. The center is under the direction of its originator, Y. S. Touloukian, a member of the staff of the School of Mechanical Engineering. It is housed in a small two-story building that stands between the School of Mechanical Engineering, which administers it, and the Statistical Laboratory, without whose digital computer, magnetic tapes, and other data-processing equipment the organization could not function, for it is essentially a mechanized operation. For example a machine method of abstracting scientific articles should soon be in use. The machine scans a printed page and selects and prints only the sentences relating to a specific subject, thus producing an abstract in the author's own words.

The staff of the center consists of seven scientists drawn from the schools of mechanical engineering, chemical and metallurgical engineering, chemistry, and physics. The initial financial needs of the center have been met by some 20 industrial organizations known as founder sponsors, each of which has agreed to make an annual contribution for 3 years.

The number of founder sponsors will be increased by at least 50 percent before the end of this year. Firms may join the group of founder sponsors up until the end of the first 3-year period, which expires 31 December 1959, after which no more will be accepted.

The center's operation is conceived as a continuous program to serve economically all needs in the field of thermophysical properties information, in contrast to a series of costly "crash programs" on individual problems. Therefore, the objective has been to receive small contributions from many firms—the minimum for a founding sponsor being $2500 per year and the average for all founding sponsors thus far being $3500.

A scheme to classify all matter has been designed, a task that required 1 year and 2 months. The scheme was taken out to experts in the field to be broken down if possible. It stood up. Since the information is vast, a system of coding had to be devised for its mechanization. This also was accomplished in the first year and a half of the center's operation.

During this year and a half, the center has also been able to collect information and conduct research. Some 21,000 items of information have been collected and processed. This has all been accomplished on an operating budget of only $75,000 per year. The center now plans to raise its operating budget to $225,000 a year, increase its personnel, and undertake to serve the total needs of industry, the colleges, the Army, Navy, and Air Force for information on all thermophysical properties of matter.

The center proposes to issue each year a 1000-page *Bibliography on Thermophysical Properties,* the first volume to appear about 1 January 1959. The center also proposes to publish "Most Probable Values of Properties," a set of tables. Touloukian sees the center's responsibility as about equally divided between mechanized search of the literature and the supervision of new experimental research.

Hearings on Soil and Water Research Facilities

The U.S. Department of Agriculture has announced the locations and dates of public hearings to be held in connection with a study of needs for soil and water conservation research facilities. The study is being made at the request of the Senate Committee on Agricultural Appropriations.

Hearings have been scheduled as follows: 14 October, Rapid City, S.D.; 15 October, Salt Lake City, Utah; 16 October, Boise, Idaho; 24 October, Charleston, S.C.; 28 October, Sacramento, Calif.; 30 October, Phoenix, Ariz.; 31 October, Amarillo, Tex.; 6 November, Harrisburg, Pa.; 7 November, Boston, Mass.; 14 November, Washington, D.C.; 17 November, Des Moines, Iowa; 18 November, Fort Wayne, Ind.; 19 November, Nashville, Tenn.; 20 November, New Orleans, La.

Farmers, ranchers, farm organizations, and lay groups interested in soil and water research are invited to present their recommendations at the hearings. Formal channels have been established for federal agencies, state agricultural experiment stations, and state extension services to submit their recommendations direct to the working group. Members of the group are: G. M. Browning of Iowa State College, Ames, representing the state agricultural experiment stations; Gerald E. Ryerson of the Soil Conservation Service, Washington, D.C.; and Cecil H. Wadleigh and Darnell M. Whitt of the Agricultural Research Service, Beltsville, Md.

When the working group was appointed on 29 July, it was directed to focus its attention on problems of national and regional importance, leaving for the attention of the states problems having only state or local significance. The group will consider research needs in watershed engineering, erosion control, water management, soil management, and basic soil problems.

News Briefs

The Atomic Energy Commisison has announced that it proposes to license two New England firms to collect low-level radioactive wastes and to dispose of them at sea. The licenses would be in effect through 31 August 1960. The Walker Trucking Company of New Britain, Conn., will be licensed to dispose of waste byproduct material (radioisotopes) and waste source material (uranium and thorium). The New England Tank Cleaning Company of Cambridge, Mass., will be licensed to dispose of byproduct material (radioisotopes). Each firm will be authorized to collect pre-packaged and labeled waste materials and to dispose of the materials in the Atlantic Ocean in containers made heavy enough to insure sinking to at least 1000 fathoms.

* * *

Clifford F. Rassweiler said recently in his presidential address to the American Chemical Society that the nation needs a fourth military service devoted entirely to research and development. He said the new force ought to be made equal in stature to the Army, Navy, and Air Force and should have its own representatives on the Joint Chiefs of Staff.

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Metropolitan Life Insurance Company statisticians, who have been charting the poliomyelitis experience of the company's industrial policyholders, report that not a single death from the disease occurred in the insured group during the first 6 months of the year, but that there were three deaths in July. Only 2220 cases of poliomyelitis were reported for the whole population of the country in the 35 weeks ending 30