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.

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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

August. This is nearly three-fifths of the total for the like period of 1957 and slightly less than one-seventh of the annual average for the corresponding period of 1953–56. The only adverse development so far this year is the excess in the number of paralytic over nonparalytic cases, a reversal of the situation in 1957.

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The Japanese Government proclaimed the national adoption of the metric system a year ago. After a 3-month grace period beginning 1 October, commercial companies and others using the old measures will be liable to fines of up to 50,000 yen ($138.89).

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The Atomic Energy Commission has invited United States architect–engineering firms to submit proposals for studies on a heavy water moderated power reactor capable of operating on natural uranium fuel. The design studies, to be made on a cost-plus-fixed-fee basis, will supplement developmental work already in progress. Proposals must be received by the commission by 29 September 1958 and may be submitted by an individual organization or by groups of organizations. For information, write to: Director of Reactor Development, U.S. Atomic Energy Commission, Washington 25, D.C.

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The centennial of the publication of Rudolph Virchow's *Cellular Pathology* is being celebrated throughout 1958 by the Armed Forces Institute of Pathology, Washington, D.C. The celebration program, which started in March with the first of a series of public lectures, is being concluded with five more lectures. The first will be delivered on 15 October by R. D. Lillie of the National Institute for Arthritis and Metabolic Diseases, and the last is scheduled for 17 December, when K. M. Brinkhous of the University of North Carolina School of Medicine will speak.

Grants, Fellowships and Awards

Arctic. The Arctic Institute of North America is offering field research support in 1959 for scientific investigations dealing with the arctic and subarctic regions of North America. Applications are invited by those who have demonstrated their ability to conduct research work of superior quality in some field of science. Proposals will be considered in any field of arctic scientific research, but those in fields in which scientific knowledge is lacking are especially desired. Priority will be given to field investigations.

Facilities of the Arctic Research Laboratory at Barrow, Alaska, are available for a limited number of scientists for both summer and winter investigations. The facilities include both housing and equipment. Arrangements may be made at other places.

Application forms may be obtained from the Arctic Institute of North America, 3485 University St., Montreal 2, P.Q., Canada, or 1530 P St., NW, Washington 5, D.C. Completed applications should be received *before 15 October.*

Fertility. The Lalor Foundation has announced the program of awards for 1959 which it is offering to college and university faculty members for research in the biological sciences. These awards are to be for support of research on the fundamental biochemical and biophysical mechanisms concerned with fertility and reproduction in various forms of life. The objectives are to work for more complete understanding of the basic phenomena involved and ultimately toward better possibilities for biological regulation and control.

Grants may range up to $8000 per year and will be scaled in proportion to the scope and duration of the projects approved. Preference will be given to younger members of university and college staffs with an upper age limit of 45 years. The work may be carried out at the applicant's own institution or elsewhere.

The foundation will also grant postdoctoral summer or short-term research awards in the field described on projects which, for example, would be appropriate to the Marine Biological Laboratory at Woods Hole, Mass., or elsewhere. For these awards, the stipends will normally not exceed $900 for a single man or a woman, $1100 for a married man working at his home institution, and $1250 for a married man with principal program at another institution.

Applications and inquiries should be directed to the Lalor Foundation, 4400 Lancaster Pike, Wilmington 5, Del. The deadline date for receipt of applications is *15 January 1959.*

General. The deadline for applications for National Science Foundation senior postdoctoral and science faculty fellowships is *15 October.* Inasmuch as this is the first year during which these awards will be made annually rather than biannually, applications for awards for 1959 must be submitted by the October closing date. Application materials may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C.

Awards will be made in the mathematical, physical, and engineering sciences; medical and biological sciences, including anthropology and psychology (excluding clinical); and in selected social science fields. Included as well are interdisciplinary fields which overlap two or more scientific disciplines.

Candidates for senior postdoctoral fellowships must be United States citizens who have held the doctoral degree for a minimum of 5 years or have equivalent education and experience. Under arrangements made by the National Academy of Sciences, candidates' qualifications will be evaluated by carefully chosen panels of scientists. Final selection of approximately 100 fellows will be made by the National Science Foundation.

The science faculty fellowships are directed toward college teachers of science who wish to improve their competence as teachers. These fellowships are open to application by any United States citizen who holds a baccalaureate degree or its equivalent, has ability and special aptitude for science teaching and advanced training, and has taught at the collegiate level as a full-time faculty member for a minimum of 3 years and intends to continue teaching. Under arrangements made by the Association of American Colleges, applicants' qualifications will be evaluated by persons especially competent to make judgments about the demonstrated and potential ability of the applicant as a teacher of science. Final selection of approximately 300 fellows will be made by the National Science Foundation.

Scientists in the News

CARL FRIEDRICH FREIHERR VON WEIZSACKER, German physicist and philosopher, has received the Goethe Prize, high honor bestowed every 3 years by the city of Frankfurt, Germany. In recent years Weizsäcker has come to public attention because of his writings on life in the atomic age. In a series of articles entitled *Leben mit der Atombombe* he has analyzed basic problems of our day from the viewpoints of both the philosopher and the physicist. As he was awarded the Goethe Prize, Weizsäcker was lauded for helping to bridge the gulf between the natural sciences and the liberal arts.

CHARLES M. SPOFFORD, bridge designer and professor emeritus at Massachusetts Institute of Technology, will receive the Frank P. Brown Medal of the Franklin Institute on 15 October. He is being honored for: "The engineering, aesthetic and educational accomplishments of his life work, exemplified in his prompt recognition, espousal and clarification of valid structural theories; his design of many large and beautiful bridges, and other prominent engineering works; his contributions to en-