8) Both parties agree to inform the World Health Organization of the activities carried out under this section of this agreement. . . .

**Section X. Exchange of Publications**

1) Both parties, having exchanged their views on the problems of distributing the magazines *Amerika* in the Soviet Union and *U.S.S.R.* in the United States, have agreed on the desirability of facilitating the distribution of these magazines on the basis of reciprocity. Examination of measures taken by both parties to achieve this end will continue, with the aim of increasing the distribution of these magazines to 77,000 copies each.

2) Both parties agree to assist in the exchange of books, magazines, and other publications devoted to scientific, cultural, technical, and educational subjects by encouraging exchanges of books and publications between universities and public libraries of the U.S. and U.S.S.R.

**Section XI. Exchange of Exhibitions**

1) Both parties will provide for the exchange of exhibitions during 1960–61.

Soviet exhibitions in the U.S.A.: (a) medicine and medical services; (b) children's books and illustrations; (c) children's artistic and technical work (drawings, models, and toys made by children).

United States exhibits in the U.S.S.R.: (a) medicine and medical services; (b) plastics; (c) transport.

2) Other exhibitions, as well as participation in internation exhibitions which take place in each country during 1960–61, will be determined by mutual agreement. The parties will likewise discuss in the near future the possibility of exchanging national exhibitions in subsequent years.

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## Radioactive Waste Disposal Discussed in Monaco

A week of discussions at the international conference in Monaco on the disposal of radioactive waste ended on 21 November on a note of general agreement that whatever methods of disposal are chosen, they must have the overriding aim of not endangering man either immediately or in the long run. This view was summed up in a closing speech by G. W. C. Tait, director of the Division of Health, Safety, and Waste Disposal of the International Atomic Energy Agency, which had organized the conference jointly with UNESCO and in cooperation with the Food and Agriculture Organization. The conference was attended by 308 specialists from 32 countries and 11 international organizations.

The meeting opened on 16 November with a speech by the IAEA director general, Sterling Cole, who emphasized that the problem of radioactive waste was really one of storage rather than of disposal. Even if there is no ready use for this material now, he said, this does not mean that a use will not be found in the course of time.

In the papers presented at the conference and in the course of the discussions that followed, the problem of waste disposal was discussed from all the major practical and theoretical points of view. Some scientists gave an indication of the amount of the wastes now being produced or likely to be produced in the future. For example, an American scientist stated that in the United States alone, the nuclear power industry would have produced, by the year 2000, wastes amounting to about 3 million curies of activity.

### Solutions in Various Countries

One scientist expressed the view that the normal operation of a nuclear reactor raises no great problems; the main danger lies in the operation of fuel reprocessing plants. As for the problem of atmospheric contamination, he said, the solution lies both in good design of nuclear plants, so as to limit the production of wastes, and in improved methods of cleaning the air released by these plants.

An expert from Norway, speaking of the potential suitability of the earth's atmosphere for disposal operations, said that radioactive particles remain in the stratosphere for a period long enough to allow certain substances to become harmless before they return to the earth's surface. A scientist from the Danish Atomic Energy Commission told how the Riso research establishment has constructed a decontamination plant for reducing radioactivity in liquid waste to less than one-tenth of the maximum set for drinking water. A scientist from the U.K. Atomic Energy Authority described disposal methods at Harwell, where extreme care has to be taken because low-level liquid waste is discharged after special treatment into the Thames, the main source of London's drinking water. No solid waste is buried at Harwell, because of the danger of possible seepage into the river. Methods now being tested in France for the disposal of solid wastes were described by two experts from the French Atomic Energy Commission. A Soviet scientist said that the fixation of radioactive material in glass under high temperature is being studied in the Soviet Union; this process is intended to make the material solid and to reduce its solubility before it is buried.

Several papers dealt with the legal, administrative, and other general aspects of waste disposal. Some of the experts stressed the international nature of the problem and said that existing regulations in other, similar fields might serve as models in devising international regulations for the disposal of radioactive waste.

### Sea Disposal

A subject which provoked considerable discussion concerned waste disposal in the sea. A Soviet scientist said that experts in his country hold the view that no isolation of deep waters exists in the oceans. An expert on oceanography from the United States said that ten times as much money and as many facilities as are now available are needed for research on this subject; that radioactive waste is bound to get into the seas, whether one wants it or not; and that the more we find out about the circulation of radioactive elements in the oceans, the more economically we will be able to dispose of them. A Soviet scientist suggested that physicists and chemists should collaborate with oceanographers in studying the problem. Another Soviet expert maintained that disposal in the ground is the safest method available today; that the material should be enclosed in solid blocks of concrete or glass and stored at appropriate depths and under the permanent control of human beings.

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## News Briefs

The History of Science Society will meet in Chicago, 29–30 December, at the Congress Hotel, in cooperation with the American Historical Association. A broad program has been arranged by the officers of the History of Science Society, under the direction of Henry Guerlac, president of the society and professor of the history of medicine at Cornell University. The program will include a business meeting of the society, as well as a business meeting of the George Sarton Memorial Foundation. The latter, a nonprofit institution,

has been established to seek funds to promote the study of the history of science in American colleges and universities through lectureships and fellowships, as well as through publication of material relating to the history of science.

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Some 80 U.S. laboratories and industrial firms are contributing to the United States exhibit at the First World Agricultural Fair that opened in New Delhi, India, on 11 December. The fair, which will continue through 14 February 1960, is probably the largest agricultural exhibit ever held. The estimated cost to the U.S. government for participation in the event is $2 million; rupees acquired by this country through the sale to India of U.S. farm commodities will cover a large part of these costs. Fifteen foreign nations are exhibiting at the fair.

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The American Institute of Physics, 335 East 45 St., New York 17, N.Y., has announced publication of the *Journal of Mathematical Physics*, a bimonthly devoted to new mathematical methods for the solution of physical problems and to original research in physics furthered by such methods. The first issue will be dated January-February 1960.

## Grants, Fellowships and Awards

**Psychometrics.** The Educational Testing Service is offering for 1960–61 two fellowships in psychometrics leading to the Ph.D. degree at Princeton University. These are renewable research fellowships which provide for part-time training in the general area of psychological measurement in the Princeton offices of the Educational Testing Service, in addition to the usual program of graduate studies at Princeton University.

Suitable undergraduate preparation may consist either of a major in psychology with supporting work in mathematics, or a major in mathematics with some work in psychology. However, in choosing fellows primary emphasis is given to superior scholastic attainments and research ability, rather than to specific course preparation. To be considered, a candidate must either (i) have taken the Graduate Record Examination in 1959 or (ii) register by 1 January to take these examinations on 16 January. Fellowship applications will be closed on *1 January 1960*. For information write to Harold Gulliksen, Director, Psychometric Fellowship Program, Educational Testing Service, 20 Nassau St., Princeton, N.J.

**Sex.** The Division of Medical Sciences of the National Academy of Sciences–National Research Council is accepting applications for grants-in-aid for research for consideration by the Committee for Research in Problems of Sex. The funds for support of this program are provided by the Rockefeller Foundation and the Ford Foundation. The committee is concerned primarily with encouraging research on the mechanisms underlying sexual behavior, with special emphasis on the higher mammals and man. Proposals involving endocrinological, neurological, psychological, anthropological, phylogenetic, and genetic studies directed toward this objective are therefore invited. Requests that deal with the physiology of reproduction or with related biological and biochemical fields should be addressed to the committee only if they give promise of shedding light upon behavioral mechanism.

Preliminary inquiries should be addressed to Room 411, Division of Medical Sciences, National Academy of Sciences–National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C. Completed applications for the fiscal year 1960–61 should be postmarked on or before *15 January 1960*.

## Scientists in the News

**Alexander Brunschwig**, attending surgeon, Memorial Center for Cancer and Allied Diseases, and professor of clinical surgery at Cornell University Medical College, New York, was one of seven scientists awarded an honorary doctorate at a special commencement on 22 November at the University of Strasbourg, France, held to commemorate the return of Alsace to France. The ceremonies were presided over by President DeGaulle.

One of the recipients of an honorary degree was **F. Staudinger**, Nobel laureate in chemistry, from Freiberg im Breisgau. This was the first time since the return of Alsace to France that the University of Strasbourg has so honored a German scholar.

**Loren Eiseley**, professor of anthropology and provost of the University of Pennsylvania, has received the 1959 Phi Beta Kappa Science Prize of $1000. This is the initial award of the science prize, which will be offered annually by Phi Beta Kappa for the best book published during the preceding college year on science or the interpretation of science. Eiseley earned the 1959 award for *Darwin's Century*, published by Doubleday.

**George B. Kistiakowsky**, special assistant to President Eisenhower for science and technology, has won the 1960 Willard Gibbs Medal of the American Chemical Society's Chicago Section. The medal will be presented on 20 May. Kistiakowsky is on leave from Harvard University, where he is professor of chemistry.

In 1944, he was chief of the explosives division of the Los Alamos Laboratory of the Manhattan District, where he prepared the explosives necessary to detonate the first atomic bomb. Kistiakowsky is widely recognized not only for his outstanding contributions to the chemistry of explosives but also for his achievements in chemical kinetics, molecular spectroscopy, and the thermodynamics of organic molecules.

**Karl Folkers**, executive director of fundamental research of Merck and Company, is to receive the 54th annual Perkin Medal, which is given in recognition of outstanding achievement in chemistry. The medalist is elected by a jury of award representing the American Section of the Society of Chemical Industry, the American Chemical Society, the American Institute of Chemical Engineers, and the American Section of the Société de Chimie Industrielle. Folkers will be honored at the annual Perkin Medal dinner of the Society of Chemical Industry, to be held on 5 February at the Waldorf-Astoria Hotel, New York.

*Erratum*: In the article by R. W. Hendler, "Self-absorption correction for carbon-14 [*Science* **130**, 772 (25 Sept. 1959)], the last term, $\alpha$, in the fourth equation of the group in column 3, page 776, should have been the left-hand member of the fifth equation. The last three equations in the group should thus have read

$$0.32 = \frac{R}{I_\infty} m \left( \frac{10^{-am}}{1-10^{-am}} \right)$$

$$= 0.068m \left( \frac{10^{-am}}{1-10^{-am}} \right)$$

$$\alpha = \log \left( \frac{m+4.7}{4.7} \right) \Big/ m$$

In addition, the units of specificity shown in the legends of Figs. 2 and 3 (page 774) should have been counts, rather than centimeters, per minute per milligram. In Table 1 (page 775), the seventh and ninth entries in column 1 should have been 2.47 and 120.0, mg/cm$^2$, respectively, not 24.7 and 74.