

particularly with respect to radioactive fallout and strontium-90. The committee did not attempt at this time a quantitative assessment of the genetic hazards of radiation. The fundamental purpose of the discussion on this topic was to obtain a consensus of opinion on a number of fundamental points which enter into the field of assessing genetic hazards of radiation. An equally important objective was to define and to exchange views on certain gaps in the existing knowledge of this matter.

"Before the committee were 74 reports submitted by 27 governments up to 8 April 1957, as well as the report of a study group of the World Health Organization and a report from the World Meteorological Organization. A free exchange of ideas on a purely scientific level was held. This discussion was very useful and revealed that there was little divergence among the participating scientists.

"It is hoped that the first draft of the committee's report to the General Assembly will be prepared between now and the committee's next session, which is expected to take place at the end of 1957. The committee fully expects that further information received from governments during this period may cause it to change this preliminary draft but feels that the draft will be most useful as a working paper for the next session. A tentative decision was taken to subdivide the report into the following chapters: Introduction; General; Radiological Data and Methods of Measurement; Fundamental Cellular Radiobiology; Genetic Effects; Somatic Effects; Collected Evaluations; Conclusions and Recommendations.

"It is expected that the somatic effects of radiation will be the principal topic of discussion at the committee's next session."

### **First South Pole Temperature Report**

The results have been announced of the first soundings of the temperature at the 10,000-foot-high Amundsen-Scott South Pole Station of the International Geophysical Year. Temperatures of  $-71^{\circ}\text{F}$  at the surface,  $-31^{\circ}\text{F}$  at 3300 feet, and  $-62^{\circ}\text{F}$  at 11,500 feet above the surface were reported on 27 Mar. The temperatures were taken by a thermometer attached to a balloon sent aloft with a radiosonde, an instrument that broadcasts information in the form of tone signals to a listening post on the ground.

Because late March roughly corresponds to September in the Northern Hemisphere, temperatures are expected to drop further as the South Pole mid-winter approaches. The station scientific

leader, Paul Siple, has estimated that the temperatures may go down to  $-120^{\circ}\text{F}$ .

The lowest temperature observed thus far at the South Pole is  $-89^{\circ}\text{F}$  on 2 Apr. 1957. This temperature exceeds the lowest ever recorded for North America,  $-81^{\circ}\text{F}$  observed at Snag, Yukon Territory, Canada, in February 1947, and is  $1^{\circ}$  above the all-time world's record of  $-90^{\circ}\text{F}$  set in northeastern Siberia in February 1933.

The study of temperatures and the circulation of air in the Antarctic will yield knowledge of the polar icecap and its effect on the world's weather and, over a longer period of time, world climate. Comparison of the relatively clean air of the Antarctic with the atmosphere of coal and oil-consuming regions is expected to give data on the suspected "greenhouse" effect caused by the release of large amounts of carbon dioxide.

Meteorological data from all the IGY Antarctic stations are relayed to the Weather Central at Little America Station, where for the first time in history twice-daily weather maps of the Antarctic are being prepared. The results of the first South Pole sounding were given to Harry Wexler, chief scientist of the US-IGY Antarctic Program, by Edwin C. Flowers of the U.S. Weather Bureau, chief meteorologist at the IGY Amundsen-Scott South Pole Station.

### **Occupational Health Information Exchange**

To help industry protect its workers from health hazards arising from the great number of chemicals introduced each year, an Occupational Health Information Exchange is now being set up by the U.S. Public Health Service. The Exchange will be part of the Occupational Health Field Headquarters in Cincinnati, Ohio.

It is estimated that from 1000 to 10,000 new compounds are being developed annually for industrial application. There is need for one central agency to collect and disseminate specific information on the toxicity of these new materials as well as on the substances and processes that have long been used in industry. Sickness absenteeism in industry is equivalent to 2 million workers being off the job each day. Part of this absenteeism is directly related to occupation.

A fund of unpublished information is available from scattered sources. By bringing together this information, it will be possible to predict answers to questions on how new materials and processes may be related to occupational diseases.

The Occupational Health Information Exchange will serve as a clearinghouse on the nature and extent of new (disease

problems in industry, total occupational health resources available, and methods for stimulating research in problems under investigation. Data will be provided by industrial establishments, insurance companies, private research organizations, governmental occupational health programs, labor unions, and other federal agencies.

### **Scandinavian Nuclear Research**

The foreign ministers of Sweden, Norway, Denmark, and Finland announced in April that their countries would cooperate in atomic research and that a Scandinavian institute for atomic research would be established in Copenhagen. The four nations also plan to form a joint organization for the exchange of practical applications of nuclear energy.

### **Radiation Biology**

Argonne National Laboratory has announced a special summer course in radiation biology, 1-26 July, at Lemont, Ill. Intended primarily for a limited number of persons with previous experience in biological research, the course will stress general experimental theory and design. Dosimetry and instrumentation needed in doing bioresearch with ionizing and low-energy radiations, and the effect of these radiations on widely diverse biological systems, will be a part of the course. Although not intended as comprehensive preparation in health physics or isotopic tracer techniques, certain special topics of basic interest to these fields will be presented—for example, very low level radiation measurements; multiple tracer techniques; and biosynthetic methods utilizing plants.

Inquiries about the course, for which the fee will be \$25, should be addressed to the Office of the Director, Division of Biological and Medical Research, Argonne National Laboratory, Lemont, Ill. Applications will be accepted from foreign countries as well as the United States. Applications, accompanied by a brief account of educational background, must be received by 1 June.

### **Army Radio Transmitter**

The Department of the Army has announced that a powerful new short-wave transmitter that is effective even when there is severe interference has been developed and will be installed for use by the Pentagon. Called the "World Spanner," the transmitter was designed for the Army's international communication network by the U.S. Army Signal Engi-