

tics and the evaluation of procedures used in prophylaxis. Other recommendations include a simple guide for physicians in treating persons bitten and for dealing with the problem faced by governments importing cats and dogs from countries where rabies is known to exist.

In the Americas, the countries are receiving assistance with their rabies problems from the Pan-American Sanitary Bureau, Regional Office of WHO for the Americas.

Extensive studies in rabies from bats have been made in Mexico and in the United States-Mexico border area, with the assistance of PASB. Assistance was provided to Mexico in the establishment of equipment and techniques for the production of chick-embryo type of vaccines, including one for the immunization of cattle.

In 1957, a WHO Regional Rabies Training Course is planned which will be held in Caracas, Venezuela. This will be attended by rabies control personnel from each country in the Americas. In addition, PASB/WHO will provide a special adviser to the countries to assist in improving rabies diagnosis, the promotion of antirabies programs, and the production of rabies vaccines and antirabies serum.

Permanent Magnet

A major advance in magnet technology, one that is expected to lead to the commercial development of an unusually versatile and powerful permanent magnet, has been announced by the General Electric Instrument Dept., West Lynn, Mass. The company reports that with a new fine-particle ferromagnetic material it has already produced experimental permanent magnets equal to the strongest commercial magnets now available, and there is every expectation that a magnet can be made that is 10 times stronger.

The new magnet is made from elongated single-domain iron particles of high coercive force with properties that confirm the existence of the shape-anisotropy effect. The submicroscopic particles can be imbedded in plastics, metals, rubber, or glass. The resulting magnets have properties not heretofore attainable, for they can be easily machined, drilled, tapped, and molded precisely into any desired shape, opening up new possibilities to the design engineer. The elimination of cobalt and nickel in the new process makes possible for the first time the application of magnets in nuclear reactors, which so far has been limited because of the potential radioactivity of cobalt.

Key members of the research team that developed the magnet are on the

staff of the Measurements Laboratory of the company's Instrument Department at West Lynn, Mass. They are T. O. Paine, laboratory manager, F. E. Luborsky, and L. I. Mendelsohn. Paine and his associates were honored for their work at the recent Industrial Science Citation Dinner sponsored by the AAAS Industrial Science Section.

The permanent magnet is of fundamental importance to industry. Every year more than 50 million magnets are produced and used in the United States. A single bombing plane requires at least 200 magnets in its instrumentation, and a magnet is an essential part of radios and television sets.

Transplantation of Human Tumors

Because of the many requests for such instruction, a 3-day session on the techniques and problems associated with the heterologous transplantation of human tumors will be held 4-6 Mar. at the Sloan-Kettering Institute, New York. In addition to lectures and laboratory demonstrations, opportunities will be provided for participants to work with various transplantable human tumors, a variety of animal hosts, and chick eggs. Tissue cultures derived from the transplantable human neoplasms will be demonstrated also. The value of these tumors in various research programs will be discussed.

The session, for which there will be no charge, will be given by H. Toolan, D. Karnofsky, A. Moore, G. Woolley, and J. Harris. Inasmuch as attendance will be limited to 25 people, requests for participation should be sent as soon as possible to Dr. Helene W. Toolan, Sloan-Kettering Institute, 410 E. 68 St., New York, N.Y.

Spectrophotometric Data

M. J. Kamlet of the chemistry division, Naval Ordnance Laboratory, and H. E. Unguade of the Los Alamos Scientific Laboratory, Los Alamos, N.M., are preparing for publication a collection of all the spectrophotometric data in 60 journals for the period 1946-56. They are currently looking for additional contributors who might help in this project.

New Science Journal for the Public

A new weekly popular science journal, *The New Scientist*, began publication in London late last year. The journal is "published for all those men and women who are interested in scientific discovery and in its industrial, commercial and social consequences." The magazine car-

ries, among other sections, editorials, lead articles, news, an American newsletter, overseas news, book reviews, letters to the editor, and a scientific crossword puzzle. It is published by Cromwell House, Fulwood Place, High Holborn, London, W.C.1. The annual subscription rate for the U.S.A. is \$8.50.

Shutdown at AEC's Dana Plant

The U.S. Atomic Energy Commission has announced that operation of its heavy water plant near Dana, Ind., will be discontinued and the facility placed in a standby condition. Dana is one of the commission's two heavy water units. The other is at the Savannah River Plant in South Carolina. Forecasts of future heavy water requirements now indicate that only one of the heavy water production units will be needed during the next few years.

Shutdown at Dana will be accomplished over a period of 9 months, with first layoffs of the approximately 900 employees beginning in the early spring of 1957. A slow, orderly closure is planned to permit maximum recovery of the material in the plant vessels and to assure careful preservation of equipment. The plant is expected to be in full standby condition late in 1957.

Marriage Statistics

The U.S. Public Health Service has announced that an improved system of collecting marriage statistics will be adopted by the National Office of Vital Statistics in cooperation with 29 states and four territories. The system will record data on more than half the marriages that occur in the nation, making it easier to obtain facts about the formation of new families in the participating states. Such information is needed for community planning and many other purposes.

The participating states and territories have agreed to maintain central files of marriage records by securing reports from local officials. (In many states, at present, marriage records are available only in local communities; this makes it difficult for heirs and others to locate old marriage records if they do not know exactly where the marriage occurred.) The 29 states have also agreed to cooperate in making periodic tests of the completeness and accuracy of their marriage registrations. The states will use most of the items on a recommended Standard Record of Marriage.

Standard birth and death registration statistics have been collected for many years and are now nation-wide, providing data which are used by health and