search Administration will be responsible for the direction of a project that will involve the building and testing of apparatus to contain and heat an electron stream by means of crossed electric and magnetic fields.

The proposed experiment with electrons is intended as a model for the similar heating and containment of hydrogen in the hope that it may prove to be a useful approach in the study of thermonuclear power generation. The particular configuration of fields and particle flow to be tested is an outgrowth of research at the University on crossed-field vacuum tubes used in the production of microwaves.

The one-year project, financed by a grant of $31 250 from the Consumers Power Company in Jackson, Mich., will be carried out by a research engineer and two graduate students. An additional sum of $7600 for preliminary investigation and special equipment has been allocated to the project by the University.

### *Radiation Sources*

A new high-intensity radiation development laboratory (HIRDL), equipped to carry out experimental programs with radiation sources in the million-curie range, was dedicated on November 22 at the Brookhaven National Laboratory. The $1.85-million facility was established as a part of the Atomic Energy Commission's Radiation Development Center at Brookhaven, where it is housed in a laboratory building that has been under construction for the past three years.

The primary aims of HIRDL are to obtain engineering data on gamma-radiation sources, to develop more efficient techniques for handling high-intensity sources, and to train scientists and engineers in the uses of such sources in research and in industrial applications. The laboratory has an irradiation cell for its experimental programs and a work preparation cell where various types of sources will be made ready for experimental use. Both cells were designed by the staff of Brookhaven's Nuclear Engineering Department. Most of the work will involve the use of cobalt-60 and cesium-137 sources.