This symposium is the first of a series which will be sponsored jointly by ASTM and the Atomic Industrial Forum.

The Atomic Industrial Forum, which is an association devoted primarily to assist industry entering this new field, has a great many activities. Among others, one of the most important is that of collecting and disseminating information. About a year and a half ago, recognizing that materials were probably among the most critical items in the nuclear field, the Forum created the Industrial Committee for Reactor Materials. This committee was organized primarily to promote industrial cooperation by carrying out the particular objective of collecting and disseminating reactor materials information to industry.

The ICRM, as it is known, has organized a number of subcommittees, among them the Subcommittee on Radiation Effects. This subcommittee started about a year ago to plan the best method for making a collection of information on radiation effects and making it available to industry in package form. About this time the opportunity occurred to join with ASTM Committee E-10 on Radioisotopes and Radiation Effects in presenting this Symposium.

In organizing this particular symposium it was found that much more information is available than could be squeezed into a single day's symposium. A great deal of the information which was developed over the past ten or more years, kept in the classified talks, has recently been declassified. Also there is a tremendous amount of new information that has been made available. As time goes on, new information will continue to flow and additional symposia of this type are definitely indicated. A second symposium is being planned now for the 1957 Annual Meeting of the ASTM. This again will be a joint symposium sponsored by Committee E-10 of the ASTM and the Subcommittee on Radiation Effects of the ICRM of the AIF. Additional symposia are anticipated on a continuing basis. For instance a Symposium on Nondestructive Tests in the Nuclear Energy Field was held in Chicago on April 16, 17, and 18, 1957, with ASTM, the Society for Nondestructive Testing, the American Nuclear Society, American Institute of Chemical Engineers, and the Atomic Industrial Forum as co-sponsors.

This first AIF-ASTM symposium on radiation effects is divided into three categories:

2. Radiation facilities and mechanics of testing.
3. Experimental tests and results on
   (a) Fuel and graphite materials.
   (b) Structural materials, including organics.
The data and evaluations presented are made as a contribution to the understanding of existing code and specification values as they apply to nuclear reactor structures and components. The known properties of materials must be evaluated in the light of the actual reactor operating conditions. By adapting and interpreting the vast backlog of data on unirradiated materials with the sparse but accumulating knowledge on irradiated materials, we can allow cautious extrapolation within the limits of experimental error.