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*Symposium on*

**NONDESTRUCTIVE TESTS in  
the FIELD of NUCLEAR ENERGY**

**Sponsored by**

American Institute of Chemical Engineers,  
Nuclear Engineering Division  
American Nuclear Society  
American Society for Testing Materials  
Atomic Industrial Forum  
Society for Nondestructive Testing



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AMERICAN SOCIETY FOR TESTING MATERIALS  
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*Symposium on*  
Nondestructive Tests in  
the Field of Nuclear Energy

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AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, NUCLEAR  
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AMERICAN NUCLEAR SOCIETY  
AMERICAN SOCIETY FOR TESTING MATERIALS  
ATOMIC INDUSTRIAL FORUM  
SOCIETY FOR NONDESTRUCTIVE TESTING

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*Reg. U. S. Pat. Off.*

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## *Sponsors*

### **AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, NUCLEAR ENGINEERING DIVISION**

The Nuclear Engineering Division was organized by the American Institute of Chemical Engineers in December, 1953. It was the outgrowth of a committee on nuclear energy which had been set up primarily to plan technical programs for meetings. As the field of nuclear energy grew in importance a more formal group was organized to serve the needs of those scientists and engineers whose primary activity is in the field of nuclear engineering. The Nuclear Engineering Division took over the sponsorship of the First International Congress on Nuclear Engineering held in Ann Arbor, Michigan, in 1954, and has played an active part in all the Nuclear Congress programs since that time.

The objectives of the Division are: (1) to provide an opportunity for engineers and scientists interested in the field of nuclear engineering to meet and discuss problems of mutual interest; (2) to promote publication and dissemination of information in this field; and (3) to promote and coordinate educational activities in nuclear engineering between governmental agencies, industry, and academic institutions.

Activities of the Nuclear Engineering Division include (1) programs and symposia, (2) publication of papers and other information pertaining to the nuclear engineering field, and (3) liaison work with other committees, including cosponsorship of symposia.

### **AMERICAN NUCLEAR SOCIETY**

The American Nuclear Society Incorporated is a non-profit organization of individual scientists and engineers founded by a group of men active in nuclear science and technology who had perceived the coming need for an organization to unify the professional activities within their diverse fields.

The main objectives of the Society are the advancement of science and engineering relating to the atomic nucleus, and of allied sciences and arts, and the integration of the several disciplines constituting nuclear science and technology. Other purposes include: the encouragement of research, the establishment of scholarships, the dissemination of information, the holding of meetings devoted to scientific and technical papers, and cooperation with Government agencies, educational institutions and other organizations having similar purposes.

### **ATOMIC INDUSTRIAL FORUM, INC.**

The Atomic Industrial Forum, Inc., is a non-profit membership organization incorporated for the following purposes: (1) to foster and

encourage the development and utilization of atomic energy in accordance with the best traditions of American democracy and free competitive enterprise; (2) to provide a forum in which individuals and organizations may consult and cooperate in the resolution of problems relating to atomic energy which are of concern either to the nation, to industry, or to the public generally; (3) to promote the dissemination, to the extent consistent with national security, of knowledge and understanding relating to the development and utilization of atomic energy, and (4) to foster and encourage research and development relating to atomic energy.

Membership includes manufacturing concerns, utilities, architect-engineers, legal firms, financial institutions, labor unions, universities, consultants, research institutions, insurance companies, and government agencies.

Much of the Forum's work is done through specialized committees. In addition, the Forum takes an active part in the American Standards Association Nuclear Standards Board program.

### **SOCIETY FOR NONDESTRUCTIVE TESTING, INC.**

The Society for Nondestructive Testing came about as a natural function designed to make available an increasing flow of services and technical information to those in this field of endeavor.

Nondestructive testing is a field of science and engineering devoted to management's use as a tool to lower production and operating costs, to improve product quality, and to increase industrial productivity.

Its work is carried on through meetings both national and local and through its regularly published Journal.

### **THE AMERICAN SOCIETY FOR TESTING MATERIALS**

The American Society for Testing Materials is a non-profit, technical Society organized in 1898 and incorporated in 1902 with the chartered purpose of "promotion of the knowledge of the materials of engineering, and the standardization of specifications and methods of testing." Its technical work is accomplished through an organization of about 80 autonomous technical committees. That part of the Society's work which has to do with the knowledge of materials is effected through investigation and research by the committees and individual members of the Society and by joint researches with other groups. Standardization of specifications and methods of testing is carried out chiefly by the technical committees, each of which has under its jurisdiction engineering materials in a definitely prescribed field or some phase of materials testing.

Being ever alert to the changing needs of American industry and engineering, the Society in recent years has given considerable attention to the field of nuclear energy and as one of its activities has cosponsored this symposium with four other groups.

A Special Administrative Committee on Nuclear Problems gives general supervision to the Society's activities in the nuclear field. It has the responsibility of stimulating and coordinating the work of the many committees as they relate to this field. One of the technical committees, E-10, on Radioisotopes and Radiation Effects, was organized in 1951 to promote the knowledge of the use of radioisotopes in materials testing and to investigate the changes in properties and constitution of materials when exposed to radiation.

The Society is cooperating also with the Atomic Industrial Forum, Inc., in a series of symposiums on the Radiation Effects of Materials. The first symposium was presented at the Second Pacific Area National Meeting in Los Angeles in September, 1956, and was published in July of 1957. A second symposium was presented at the 60th Annual Meeting in Atlantic City, June, 1957, and was published in March of 1958. The third symposium is scheduled for presentation at the 61st Annual Meeting in Boston, June, 1958.

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NOTE.—The Society is not responsible, as a body, for the statements  
and opinions advanced in this publication.

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