

■ Types of ASTM Membership

Individual Membership: Your individual membership entitles you to join an unlimited number of committees and subcommittees (with appropriate committee approvals), to vote and to receive all ASTM membership benefits. Technical committee membership is not transferable.

Organizational Membership: Organizational members may designate one official representative to join an unlimited number of committees. Organizational members obtain additional membership benefits as discussed on the ASTM Web site.

Student Membership: Full-time undergraduate and graduate students may obtain membership at no charge.

ASTM regulations require voting members to return all ballots. Every technical committee member, whether voting or nonvoting, receives all ballots and is obligated to respond. Each negative vote received must be given full consideration by the committee regardless of the voting status of the member.

■ What is ASTM International?

Organized in 1898, ASTM International has become a pre-eminent source of international consensus standards. As of 2009, approximately 30,000 members participate in 141 technical committees. The organization currently publishes more than 12,000 standards on materials, products, systems and services ranging from metals and alloys, plastics, paint and construction, to textiles, energy, biotechnology, electronics and robotics. ASTM publishes its standards and procedures annually in several electronic and hard-copy formats. Approximately 50% of all ASTM publications are sold outside the United States, and 23% of ASTM members are from outside the U.S.

ASTM International

100 Barr Harbor Drive
P.O. Box C700
West Conshohocken, PA 19428-2959
USA

PHONE: +1 610-832-9500

FAX: +1 610-832-9555

E-MAIL: service@astm.org

WEB: www.astm.org



March 2010

ASTM International Committee E10 on Nuclear Technology and Applications

If you are involved with the nuclear industry, consider becoming actively engaged in nuclear standards development and join ASTM Committee E10.

www.astm.org



■ ASTM Committee E10 Officers

David Vehar Chairman
Sandia National Laboratories

Ed Walker 1st Vice Chairman
Consultant

John Logar 2nd Vice Chairman
Ethicon

Denise Cleghorn Secretary
Boston Scientific

■ What is Committee E10?

ASTM Committee E10 on Nuclear Technology and Applications is an international group of about 250 members from industry, government and academia. It is responsible for the development of nuclear standards and for the organization of technical symposia and workshops intended to promote the advancement of nuclear science and technology, and the safe application of nuclear energy in all forms. Approximately 25% of the E10 membership is from outside the U.S., demonstrating a high degree of international participation.

Committee E10 has created and maintains published standards covering a large range of nuclear procedures. Publication of standards follows a rigorous consensus approval process unique to ASTM. All standards are required to successfully complete this process, which includes ballots at the subcommittee, main committee and society levels. Any negative votes or comments must be satisfactorily resolved so that all concerned parties have a voice in the process.

Committee E10 sponsors scientific and technical symposia and promotes publication in its fields of expertise. For the past 30 years, one or more symposia and workshops have been conducted each year. Of these, three have attained particular international prominence: the Symposium on the Effects of Radiation on Materials, the International Symposium on Reactor Dosimetry and the International Workshop on Dosimetry for Radiation Processing. Formal papers presented at these symposia may later be published in the *Journal of ASTM International*. All published papers are first subject to a stringent peer review process.

While ASTM provides a forum for effective standards development, the E10 committee work scope is defined and all activities are initiated by the members themselves. Committee E10 activities encompass nearly all civilian applications of nuclear technology except those related to the nuclear fuel cycle, which are the responsibility of ASTM Committee C26 on Nuclear Fuel Cycle.



■ Join Committee E10 Today

- Help develop consensus standards for the nuclear industry.
- Interact with worldwide technical specialists.
- Increase awareness of developments in the field.
- Contribute to international symposia, workshops and conferences.
- Develop interpersonal and writing skills by actively participating in standards development.

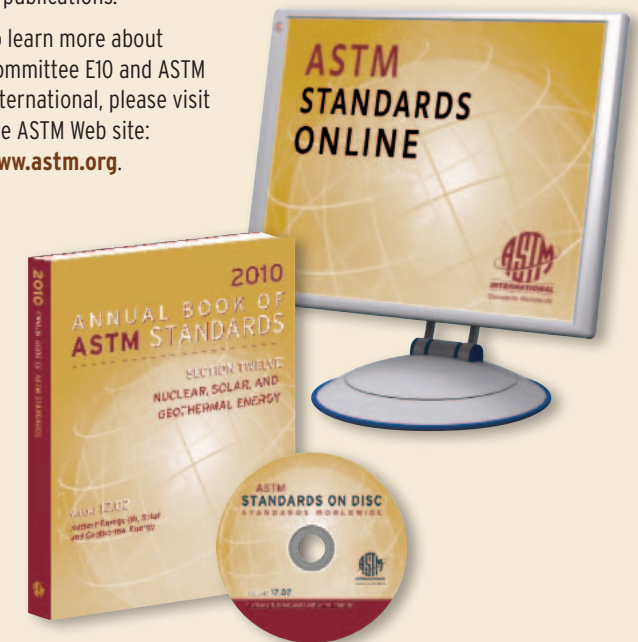
All applications to join E10 require approval by the E10 Executive Subcommittee, with the primary criteria being that an applicant have basic knowledge in an area of the committee's activities.

Membership fees are sent to ASTM International itself; there are no fees to the committee nor are there registration charges at any E10 committee meetings.

■ What are the Membership Benefits?

- The privilege of voting on standards.
- One free volume of the *Annual Book of ASTM Standards*. Volume 12.02 contains all current E10 standards and is available online, in printed format or on CD-ROM. It is published annually in September.
- Free annual subscriptions to *ASTM Standardization News*, ASTM's bimonthly magazine, and to the monthly eNewsletter.
- Reduced member prices on additional volumes of the *Annual Book of ASTM Standards*, the *Journal of ASTM International* and other ASTM publications.

To learn more about Committee E10 and ASTM International, please visit the ASTM Web site:
www.astm.org.



Committee Structure

Subcommittees of Committee E10 meet the specific technical and administrative needs of the committee to enable the development of standards covered by the E10 scope. The Executive Subcommittee consists of the main committee officers and the technical subcommittee chairmen.

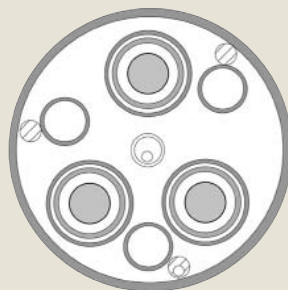
A subcommittee may establish individual task groups to accomplish specific activities. Subcommittees and task groups are typically designated as:

Main Committee: E10

Subcommittee: E10.01

Task Group: E10.01.01

Current E10 technical subcommittees and descriptions of their work scopes are included here.



■ Subcommittee E10.02 on Behavior and Use of Nuclear Structural Materials

Scope: To develop and maintain standards for determining the performance of structural materials during application in nuclear reactors.

To investigate, promote and advise on testing methods and standards for measuring changes in properties and constitution of metallic structural materials during application in a nuclear system.

To identify research and development needs for obtaining the information necessary for meeting the subcommittee's standardization goals.

To maintain liaison within and outside of ASTM to promote knowledge on the use of engineering materials for nuclear applications, with emphasis on coordinated efforts aimed at supplying information needed by the nuclear power industry.



■ E10.03 on Radiological Protection for Decontamination and Decommissioning of Nuclear Facilities and Components

Scope: To develop and revise standards associated with repairing, renovating, dismantling, decommissioning and extending the lifetime of facilities, structures, systems and equipment which have become radioactive.

To provide consultation and assistance in the general area of nuclear facility decontamination, decommissioning and extended life operation applied to other standards developed outside the jurisdiction of the subcommittee.

To identify and assess areas associated with nuclear-facility decontamination, decommissioning and extended life operation that would benefit from the development or revision of ASTM standards.

■ Subcommittee E10.05 on Nuclear Radiation Metrology

Scope: To write voluntary consensus standards in the area of nuclear radiation metrology.

To identify and promote research and development in the area of nuclear radiation metrology for validating methods and data recommended for use in applicable standards.

To provide consultation to other standards committees and subcommittees concerning dosimetry measurement and calculation techniques and their application to the characterization of radiation environments.

To promote liaison for nuclear radiation metrology nationally and internationally.

To define, prepare and update matrix documentation to meet the requirements of standardization for nuclear radiation metrology.

■ Subcommittee E10.07 on Radiation Dosimetry for Radiation Effects on Materials and Devices

Scope: To develop and maintain radiation dosimetry standards useful in research and development, testing and industrial applications of high energy ionizing radiation.

Topics include primary, secondary and working dosimetry; radiation hardness testing of electronics; and effects of radiation on materials for service in ionizing radiation environments.

Basic parameters of interest are absorbed dose, absorbed-dose rate, particle fluence and particle fluence rate. Radiation sources of interest are X- and gamma rays, electrons, protons, neutrons or mixtures of these in either steady-state or pulsed environments.

Liaison is maintained with the community of users and other relevant organizations in order to be responsive to current needs, to avoid duplication of efforts and to promote new measurement technology.

■ Subcommittee E10.08 on Procedures for Neutron Radiation Damage Simulation

Scope: To write recommended practices for conducting charged particle irradiations for the purpose of simulating the effect of neutron irradiation on dimensional, microstructural, mechanical and physical property changes.

To recommend methods for correlating damage produced by charged particle radiation with that caused by neutron radiation.

To write standard recommended practices for conducting neutron irradiations using sources other than reactors for the purpose of measuring dimensional, microstructural, mechanical and physical property changes.

Recent Committee E10 Publications

STP 1505, Zirconium in the Nuclear Industry: Fifteenth International Symposium

The newest in this series includes 44 peer-reviewed papers on the latest international research covering all aspects of zirconium alloy properties and performance relevant to the nuclear industry.

STP 1492, Effects of Radiation on Materials: 23rd International Symposium

Eighteen peer-reviewed papers focus on the irradiation embrittlement of reactor pressure vessel steels on materials ranging from erbium tritide films to oxide dispersion strengthened ferritic steels.

STP 1490, Reactor Dosimetry: 12th International Symposium

The latest in this series provides an extensive overview of the latest advances in reactor dosimetry; it includes 60 peer-reviewed papers.

ASTM Standards on Sterilization of Health Care Products

This new ASTM online collection gives you instant access to 14 ASTM standards related to ISO 11137, Sterilization of Health Care Products – Requirements for Validation and Routine Control-Radiation Sterilization. These standards are updated throughout the year, giving you the latest information available.