

Be Part of the World's Preeminent Standards Forum

Join together with the best and brightest minds in your field in the world-class ASTM International standards development forum. The doors of ASTM are open to all stakeholders interested in the standardization process. Participate in the activities of Subcommittee F40.04 and gain the wealth of opportunities that come with ASTM membership.

Membership in ASTM International and Committee F40

ASTM International welcomes all industrial and technical professionals with a desire to work toward further development of standards for rare earth materials. Membership and participation in the activities of Committee F40 provide the opportunity to:

- Have direct input into the development of new and revised standards;
- Interface with leading industry professionals;
- Participate in informational webinars;
- Remain current on new and emerging technologies;
- Enhance efficiency and interoperability through the development of consensus standards; and
- Access valuable member benefits

ASTM International technical committee membership comes with a host of valuable benefits including the receipt of all committee information; MyASTM personalized committee pages with free access to ASTM's online Terminology Dictionary; 10% discount on all ASTM publications; free subscription to ASTM's bimonthly magazine *Standardization News* and monthly *eNews*; reduced symposia registration fees; participation in ASTM awards programs; and a free volume of your choice of the *Annual Book of ASTM Standards*.

The annual fee to be an informational or participating member of ASTM International is \$75 USD. Individuals with knowledge and interest in rare earth materials are welcome to participate in the work of **F40.04**. For membership information, please visit www.astm.org/JOIN. Annual membership provides access to multiple ASTM technical committees at no additional cost.

About ASTM International

ASTM International is one of the largest standards development and delivery systems in the world. ASTM standards are voluntary consensus documents that guide in research, design, manufacturing, marketing and trade. For over a century, ASTM has met the technical needs of commerce by providing standards that are accepted and used around the world. ASTM's market relevance is evident in more than 90 industrial and management sectors, ranging from construction materials and environmental assessment to medical devices and consumer products. There are 150 nations represented in ASTM International.

ASTM International Offices
Headquarters
100 Barr Harbor Drive
P.O. Box C700
West Conshohocken, PA
19428-2959 USA
Phone: +1-610-832-9500
Fax: +1-610-832-9555
Email: service@astm.org

Washington D.C. Office
Jeffrey Grove
1850 M Street NW, Suite 1030
Washington, DC 20036 USA
Phone: +1-202-223-8505
Fax: +1-202-223-8509
Email: jgrove@astm.org

Brussels Office
Sara Gobbi
35 Square de Meus
1000 Brussels, Belgium
Phone: +32-(0)-28939724
Fax: +32-(0)-28939790
Email: sgobbi@astm.org

Canada Office
Diane C. Thompson
171 Nepean Street, Suite 400
Ottawa, Ontario K2P 0B4
Canada
Phone: +1-613-751-3409
Fax: +1-613-247-2228
Email: dthompson@astm.org

China Office
Liu Fei
Suite EF-09, Twin Towers East
B-12 Jianguomenwai Avenue
Chaoyang District
Beijing, P.R. China 100022
Phone: +86-10-5109-6033
Fax: +86-10-5109-6039
Email: fliu@astm.org

Mexico Office
c/o Eferterm SA de CV
Polanco
Calderon de la Barca,
#358-302
Mexico CP 11550 Mexico
Phone: +52-55-8589-9832
Email: astmmexico@astm.org

ASTM International

Committee F40.04 on Rare Earth Materials

*Developing real time solutions
for a healthier supply chain*

ASTM International Subcommittee **F40.04** brings together global stakeholders in a new standards initiative that will address major challenges across the life cycle of rare earth materials.



www.astm.org

Boosting Competitiveness across Global Industries

To achieve a long-term competitive edge, many companies around the world rely on access to rare earths and other critical materials that are at the heart of product innovation. Rare earth materials — alloys and compounds that include one or more of a set of 17 chemical elements — drive the manufacturing of many of today's modern technologies. From smart phones and LCD televisions, to night vision goggles and energy-efficient light bulbs, rare earths make these and many other dynamic products smaller, lighter and more affordable. With their unique magnetic, catalytic, and luminescent properties rare earth elements also make a vital impact in the advancement of clean energy technologies such as wind turbines, solar panels, and hybrid/electric vehicle batteries.

F40.04: Aiding the Long-Term Supply of Rare Earth Materials

Increased demand for rare earth materials has converged with supply bottlenecks, resulting in a looming shortage of these resources throughout major global manufacturing sectors. To stimulate the worldwide supply chain, public and private sector stakeholders are focusing on ways to diversify supplies by improving existing mining activities and tapping into new global sources throughout Asia, Australia, Canada, Europe, the United States, and other regions. Other critical strategies aimed at easing rare earth demand include more efficient manufacturing techniques and increased recycling and reuse.

ASTM F40.04, which is part of ASTM International Committee F40 on Declarable Substances in Materials, is at the forefront of change in this dynamic field. **F40.04** will address the evolving challenges across the life cycle of rare earth materials through consensus standards that facilitate the safe procurement of resources, drive manufacturing efficiencies, and streamline recycling processes.

Setting the Course for Rare Earth Materials Standards

The activities of **ASTM Subcommittee F40.04** on Rare Earth Materials will concentrate on the promotion of knowledge, stimulation of research, and implementation of technology through the development of standards. The committee's standards agenda is targeted at driving greater efficiency and sustainability in the production, utilization, and recycling of rare earths materials. Specific focus areas include:

- Chemical and Physical Identification, Characterization, and Testing
- Classification and Terminology
- Recycle, Reuse, and Recapture of Materials
- Material Standards to Assist in Efficient Use of Available Resources
- Environmental Considerations for Selection and Use
- Material Selection Standards and Guides
- Alternative Material Selection and Effectiveness Testing
- Labeling and End-of-Life Considerations
- Guides for Supply Chain Management and Risk Management

“The pragmatic and inclusive ASTM process provides the speed and collaboration to enable diverse international stakeholders to swiftly and effectively offer relevant, high quality solutions to the real time issues confronting the rare earth materials market.”

*— Taco van der Maten
Chairman, ASTM Committee F40
on Declarable Substances in Materials*



An Opportunity to Lead

ASTM Subcommittee F40.04 welcomes participation from all interested parties, particularly industry material researchers and innovators using rare earth materials as well as those involved in electronics, clean energy, and recycling. Working together in the open and collaborative ASTM International process, **F40.04** members will be given a unique opportunity to influence the future direction of standards for rare earth materials.

F40.04 on Rare Earth Materials: Upcoming Meetings

F40.04 meets twice annually, typically in November and April, in conjunction with ASTM Committee Week meetings. In addition to face-to-face meetings, **F40.04** members also take advantage of ASTM's advanced standards development infrastructure, including robust electronic tools such as virtual meetings, work item registration system, and electronic balloting. Leveraging these technologies, standards development activities can take place throughout the year.

For additional information:

ASTM Staff Manager for Subcommittee F40.04:
Alyson Fick
Phone: 610-832-9710
afick@astm.org

ASTM International Committee F40 on Declarable Substances in Materials
www.astm.org/COMMITTEE/F40.htm

