

*From the Greek word meaning "dwarf" . . .*

As defined by the National Nanotechnology Initiative, nanotechnology is the understanding and control of matter at dimensions of roughly 1 to 100 nanometers (one-billionth of a meter), where unique phenomena enable novel applications.

Encompassing nanoscale science, engineering and technology, nanotechnology involves imaging, measuring, modeling, and manipulating matter at this scale.

For more information on ANSI's nanotechnology standardization activities, please visit [www.ansi.org/nsp](http://www.ansi.org/nsp)



Throughout its history, the American National Standards Institute (ANSI) has maintained as its primary goal the enhancement of global competitiveness of U.S. business and the American quality of life by facilitating voluntary consensus standards and conformity assessment systems and promoting their integrity. The Institute provides a forum for hundreds of ANSI-accredited standards developers that work cooperatively to develop American National Standards (ANS).

ANSI is a member of the International Accreditation Forum, the official U.S. member of the International Organization for Standardization (ISO) and, via the U.S. National Committee, of the International Electrotechnical Commission (IEC).

Comprised of businesses, professional societies and trade associations, standards developers, government agencies, and consumer and labor organizations, the ANSI Federation represents the diverse interests of more than 125,000 entities and 3.5 million professionals worldwide.

**FOR MORE INFORMATION**

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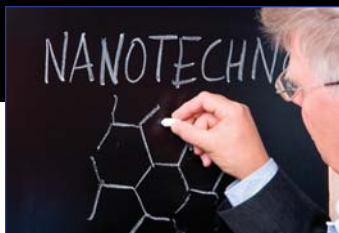
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## NANOTECHNOLOGY ACTIVITIES



ANSI NANOTECHNOLOGY STANDARDS PANEL  
and the ANSI-ACCREDITED U.S. TAG TO ISO TC 229





## ANSI Nanotechnology Standards Panel

ANSI formed its Nanotechnology Standards Panel (ANSI-NSP) in August 2004 in direct response to a request from the Office of Science and Technology Policy in the Executive Office of the President of the United States.

From the definition of the term “nano,” to particle size and shape, to environmental impact, the panel provides a broad framework from which standardization work in the emerging nanotechnology field can be approached. One of its key roles is to provide the neutral venue in which interested parties can come together to define needs, determine work plans and establish priorities for updating standards or creating new standards. Where standards do not exist, the panel will work with relevant standards developers to initiate the timely development of the needed documents. It is not the panel’s role to itself develop standards. It will, however, work with other national, regional and international standards bodies to harmonize efforts and mitigate duplication or overlap.

Participation on the ANSI-NSP is open to all interested parties. For more information, visit [www.ansi.org/nsp](http://www.ansi.org/nsp).



## ANSI-accredited U.S. TAG to ISO/TC 229



In June 2005, the International Organization for Standardization (ISO) formally established a new Technical Committee (ISO/TC 229) to progress standardization in the field of nanotechnology. Specific tasks to be undertaken by ISO/TC 229 include developing standards for terminology and nomenclature; measurement and instrumentation, including specifications for reference materials; test methodologies; modelling and simulation; and science-based health, safety, and environmental practices. The TC’s working group on health, safety, and the environment is led by the United States.

ANSI administers the U.S. Technical Advisory Group (TAG) for ISO/TC 229. A TAG formulates all U.S. positions and proposals with respect to a particular ISO committee’s activities; the TAG also provides the delegates who represent the U.S. at meetings of the ISO committee and its subgroups.

Participation on the U.S. TAG to ISO/TC 229 is open to all materially affected U.S. national interested parties. For more information, please contact the TAG administrator ([hbenko@ansi.org](mailto:hbenko@ansi.org)).

Every day, nanotechnology becomes more commercially viable across an expanding range of industry sectors. The properties and functions of novel new structures, devices and systems are directly tied to their atomic, molecular or macromolecular size.

As progress in the manufacture and characterization of nanoscale materials continues to accelerate, a growing list of stakeholder needs has arisen. At the top of that list is the fundamental building block for any emerging industry—consistent and globally-accepted nomenclature and terminology. Following closely are specifications and tests needed to support nanoscale measurement and characterization; as well as how this new technology will impact health, safety and the environment.

The American National Standards Institute supports two nanotechnology activities. Each is an open forum in which academics, researchers, manufacturers, regulators, consumers and other stakeholders come together to cooperate and support the timely development and promotion of voluntary consensus standards related to nanotechnology commercialization, research and development.