# NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGY

The National Institute of Standards and Technology (NIST) is a non-regulatory federal agency within the Department of Commerce. NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology in ways that enhance economic security and improve our quality of life. The benefits from NIST research are used in innumerable products and services of our everyday lives from mammograms to semiconductors which power computers as well as LEDs.

The NIST Laboratories conduct world-class research often in close collaboration with industry that advances the nation's technology infrastructure and helps U.S. companies continually improve products and services.

Highlights of NIST research include:

- NIST-developed performance-measurement methods have accelerated the adoption of new manufacturing capabilities, such as accuracy-enhancing software for machine tools, and led to new technology, such as laser tracker measurement systems used increasingly in the aerospace, automotive, and other industries.

- Most of the standards used to specify the properties of optical fiber were developed through a partnership between U.S. industry and NIST.

- NIST measurement services underpin the safety and effectiveness of approximately 10 million medical procedures that use radioactive materials—from prostate and breast cancer treatment to diagnostic imaging.

- The U.S. national standards for determining the properties of lasers and light emitting diodes (LEDs) are located at the NIST Laboratories in Boulder, CO. and Gaithersburg, MD.

**OSA urges Congress to continue to make science research a national priority.**

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## Brought to you by NIST

NIST's world-class labs and industry partnerships have contributed to creating and improving a wide range of technologies including:

- Aircraft radio beacons
- Cryogenics
- Weather balloons
- Synthetic rubber
- Atomic clocks
- Closed Captioning