
FOREWORD

This *Supplement to Appendices* is a continuation of the data collected in the appendices of NIST Special Publication 955, *Responding to National Needs: The National Bureau of Standards Becomes the National Institute of Standards and Technology 1969-1993*, by James F. Schooley, November 2000. It incorporates, and therefore supersedes, the previous Supplement published July 2002. This current Supplement covers the period 1993-2009. The data will be used to support the research and compilation of the fourth volume of the NBS/NIST history series.

Since the publishing of the first Supplement, NIST has had several accomplishments worthy of noting. During this period, NIST had its third Nobel Prize winner in Physics. John L. (Jan) Hall of the NIST Physics Lab and the University of Colorado at Boulder, and Theodor W. Hänsch of the Max-Planck-Institute of Quantum Optics, Garching and Ludwig-Maximilians-Universität, Munich, Germany, were named winners of the 2005 Nobel Prize in Physics, sharing the honor with Roy J. Glauber of Harvard University. Hall shares the Nobel Prize with Hänsch, “for their contributions to the development of laser-based precision spectroscopy, including the optical frequency comb technique.”

In 2004, NIST made big advances in a small area by building the world’s smallest atomic clock. At 1.5 mm long and 4 mm tall, this clock is powered by less than 75 thousandths of a watt and is stable to one part in 10 billion, the equivalent to gaining or losing just one second every 300 years. This minuscule atomic clock with inner workings about the size of a grain of rice, opens the door to atomically precise timekeeping in portable, battery-powered devices for secure wireless communications, more precise navigation, and other applications.

In addition to working on new materials and devices, NIST also helped protect old materials by building a hermetically sealed glass and aluminum encasement to house the Waldseemüller map for the Library of Congress. This map, created in 1507, is known as “America’s birth certificate” since it was the first map to label our continent “America”. The NIST encasement also includes monitoring devices to constantly measure internal environmental conditions.

In 2006, NIST opened the Center for Nanoscale Science and Technology, a combined research lab and user facility, providing researchers from U.S. organizations with state-of-the-art tools and facilities to advance basic research in nanotechnology and nano-scale manufacturing. The Center houses a Nanofabrication Facility—a large “clean room”—equipped with a still-growing array of state-of-the-art tools for making, testing, and characterizing prototype nanoscale devices and materials. These instruments are available to collaborators and to outside users.