

Sixty Years of Lasers

It was Einstein's theoretical understanding of the interactions between light and matter that paved the way for the first laser. However, it was not until 1960 that Theodore Maiman built the first working optical ruby laser. Since he first fired that laser on 16 May that year, society has benefited in countless ways. The impact of his creation can be seen in science, medicine, communications, industrial technology, and space, among other fields.



"It's fine to celebrate success but it is more important to heed the lessons of failure."

—Theodore Harold "Ted" Maiman

Theodore Harold MAIMAN

1927–2007

AMERICAN ENGINEER AND PHYSICIST

Theodore Harold "Ted" Maiman received a PhD from Stanford University, USA, in 1955 and went on to work at the Hughes Research Laboratories in California. It was there he became interested in a maser built by Charles H. Townes and began to conceptualize the solid-state laser design that led to his eventual achievement. Townes, Nikolay Basov, and Alexander Prokhorov received the Nobel Prize in Physics for their early work in optical maser principles, and other researchers working with lasers would go on to win the award thanks to Maiman's historic discovery. For his part, Maiman received a patent for his invention, the Japan Prize, and the Wolf Prize in Physics. In recent tribute, the International Day of Light, proclaimed by UNESCO in 2017, is held annually on 16 May to commemorate the day that Maiman demonstrated the world's first working laser.

