

## The Laser 1960-2010

F ifty years ago this month, physicist Theodore Maiman and his colleagues succeeded in making the first laser work at Hughes Research Laboratories in Malibu, Calif., U.S.A. And five years before that, Charles Townes and his team laid the groundwork for that breakthrough when they published their pioneering work in *Physical Review* about a new type of microwave amplifier called the maser.

At that time, none of these researchers could have imagined how much lasers would transform science and society over the next half-century. Our features this month seek to acknowledge the laser's rich history, its dynamic present, and its endlessly promising future.

The laser was not produced by a single person or group in an ivory tower. Like its applications, its developers are diverse and manifold. Its story is the story of a Ph.D. student in search of a thesis (p. 34). It is the tale about a time when industrial laboratories were leading innovators in optics research (p. 20). It is an account of a fiery female postdoc (and, later, OSA's 1993 President) who took a break from her research to become a laser artist (p. 42). And it is the unfolding story of how computing, communications and optics are slowly integrating into the single force that could power the next part of the Information Age (p. 28).

The story of the laser is their story—and yours.