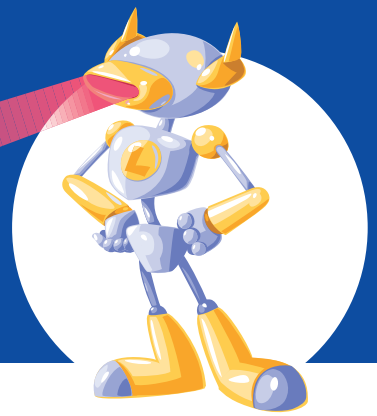


The Laser



The word 'laser' is the acronym for **L**ight **A**mplification by **S**timulated **E**mission of **R**adiation. The basic principle behind their functioning dates back to Einstein, who discovered some important properties of light. In the 1950's, physicists Townes and Schawlow built the first laser.

How does a laser work?

The basic ingredients of a laser are:

- The **active material**, in which the light beam is actually generated. It can be solid, liquid or gas.
- **Two mirrors** placed at each end of the tube in which the active medium is held. One mirror reflects back all light whereas the second is a semireflecting mirror, that is it lets some of the incident light through.
- A **light source**, such as a fluorescent tube, to put the atoms of the active material into an excited state.

