

Lecture 1

Photonics

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First lecture

What is Photonics

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Fourth Stage

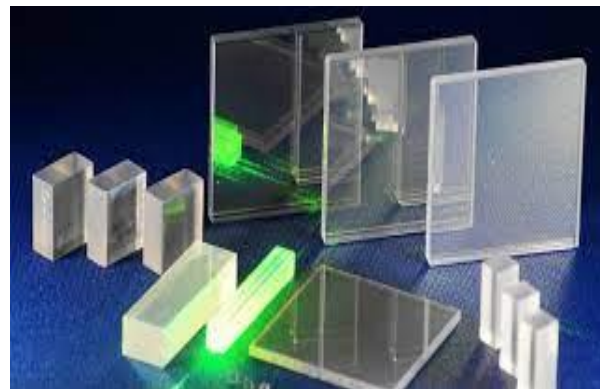
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What is Photonics

Photonics is the science and technology of generating, controlling, and detecting photons, which are particles of light. Photonics underpins technologies of daily life from smartphones to laptops to the Internet to medical instruments to lighting technology. The 21st century will depend as much on photonics as the 20th century depended on electronics. This page will contain links and resources to let you learn about photonics and understand its impact on the world.



Introduction:

- Light is electromagnetic radiation. The word light is used to denote radiation that may be visible to the human eye or invisible. In fact, as we will see later, only a very small portion of the electromagnetic spectrum lies in the visible range.
- Photonics is the science and technology of generating, controlling, and detecting photons, which are particles of light. Photonics underpins technologies of daily life from smartphones to laptops to the Internet to medical instruments to lighting technology. The 21st century will depend as much on photonics as the 20th century depended on electronics. This page will contain links and resources to let you learn about photonics and understand its impact on the world.

Waves

- The concept of the wave is used to express the transmission of energy. A wave is a loosening of a medium in which energy travels through this medium without moving matter. In a wave, the particles of the medium are temporarily displaced and then return to their original position.

