

Market Analysis - Optics 2020

P Boolchand

Professor, Department of Electrical Engineering and Computing Systems, University of Cincinnati, USA, E-mail: boolchp@ucmail.uc.edu

Optics, Photonics and Lasers Strategy (2015-2025):

The global photonics market was valued at over USD 600 billion in 2015. The industry is anticipated to witness a significant growth over the forecast period owing to photonics' wide range of applications in the domains of medical sciences, jewelry, security, automotive, lighting, manufacturing, and information technology.

The improvement of optics has arrived at its apex with profoundly propelled contemporary lasers step by step supplanting customary electric bulbs and crude lights.

Advancements in optics have made rapid strides in the photonic-based field in the past few years and are further broadening the technological horizons.

The development of optics has reached its zenith with highly advanced contemporary lasers gradually replacing traditional electric bulbs and primitive lamps.

Advancements in optics have made rapid strides in the photonic-based field in the past few years and are further broadening the technological horizons.

Innovative photonic-enabled connected services and products are expected to be introduced and are expected to have positive impacts on organizational as well as consumer activities. The emergence of flat screen displays and the increasing use of the photonic-enabled high-speed internet have considerably changed the dynamics of the market. Photonics is a Key Enabling Technology (KET) within the Information and Communications and Technology (ICT) vertical owing to its advantages and high economic growth across various industries.

According to the new market research report on the "Laser Technology Market by Type (Solid, Liquid, & Gas), Application (Optical communication & laser processing), Vertical (Commercial, Telecom, Research, Defense, Medical, Automotive, Electronics, & Industrial), & Geography - Global Forecast to 2022", this market is expected to be valued at USD 15.38 Billion by 2022, at a CAGR of 5.2% between 2017 and 2022. The major factors driving the growth of the laser technology market include increasing demand from the healthcare sector and shift towards production of nano and micro devices, and enhanced performance over the traditional material processing techniques.

North America to Record the Fastest Growth Rate:

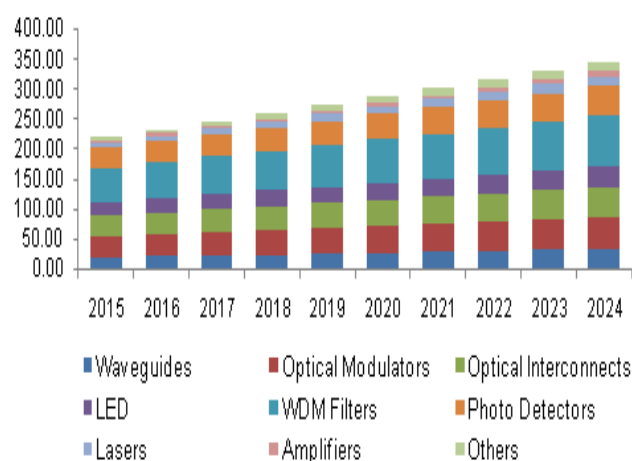
North America is envisioned to emerge as a predominant region over the forecast period owing to the increasing adoption of advanced next-generation technologies in the region. The growth in the U.S. can be attributed to

increasing government funding in the R&D and applications of laser optics and photonic-enabled technology. Substantial investments from the U.S. government to work on the development of advanced lasers for military applications are presumed to drive the industry growth over the forecast period.

Europe is expected to grow at a considerable rate over the forecast period. Member states across the region have formed a long-term commitment to Public Private Partnership (PPP) to lead to a competitive photonics industry in the region. The region is increasingly establishing pilot production facilities for research institutes and industries to work on the development of innovative photonic-based component production processes.

Projected to grow at a significant rate over the forecast period, the Asia Pacific market incorporates considerable opportunities for growth over the forecast period.

Advancements in photonics technology across emerging economies, such as China, Japan, Singapore, and Taiwan, are expected to drive the regional market over the forecast period. Moreover, low labor cost, high infrastructure quality, and growing industrialization are anticipated to contribute substantially to the regional industry growth.



Regional Insights:

North America is envisioned to emerge as a predominant region over the forecast period owing to the increasing adoption of advanced next-generation technologies in the region. The growth in the U.S. can be attributed to increasing government funding in the R&D and

applications of laser optics and [photonic-enabled technology](#). Substantial investments from the U.S. government to work on the development of advanced lasers for military applications are presumed to drive the industry growth over the forecast period.

Europe is expected to grow at a considerable rate over the forecast period. Member states across the region have formed a long-term commitment to Public Private Partnership (PPP) to lead to a competitive photonics industry in the region. The region is increasingly establishing pilot production facilities for research institutes and industries to work on the development of innovative photonic-based component production processes.

Projected to grow at a significant rate over the forecast period, the Asia Pacific market incorporates considerable opportunities for growth over the forecast period.

Advancements in photonics technology across emerging economies, such as China, Japan, Singapore, and Taiwan, are expected to drive the regional market over the forecast period. Moreover, low labor cost, high infrastructure quality, and growing industrialization are anticipated to contribute substantially to the regional industry growth.

[Optics and Photonics 2020](#) welcomes attendees, presenters, and exhibitors from all over the world to New York, USA. We are delighted to invite you all to attend and register for the "2nd Annual Meet on [Optics](#), Photonics & [Laser's](#)" which is going to be held during November 9-10, 2020 | New York, USA.

The organizing committee is gearing up for an exciting and informative conference program including plenary lectures, symposia, workshops on a variety of topics, poster presentations and various programs for participants from all over the world. We invite you to join us at [Optics and Photonics 2020](#), where you will be sure to have a meaningful experience with scholars from around the world.

[Photonics](#) is the physical science of light (photon) generation, detection, and manipulation through emission, transmission, modulation, signal processing, switching, amplification, and detection/sensing. Photonics is closely related to optics. Classical optics long preceded the discovery that light is quantized, when Albert Einstein famously explained the photoelectric effect in 1905. Optics tools include the refracting lens, the reflecting mirror, and various optical components and instruments developed throughout the 15th to 19th centuries.

One of the greatest cities in the world, New York is always a whirlwind of activity, with famous sites at every turn and never enough time to see them all. Some people come here to enjoy the Broadway shows; others come specifically to shop and dine; and many come simply to see the sites: the Statue of Liberty, Empire State Building, Brooklyn Bridge, Central Park, historic neighborhoods, and

numerous world famous museums. Many of the best places to visit in New York are within walking distance of each other, or just a short ride away, making this city a delight for sightseeing.

Some of the newer tourist attractions that have opened in New York in recent years, like the High Line and One World Observatory, offer unique perspectives of the city. Any time of year and any time of day or night there are an endless array of things to see and do in New York.

P Boolchand

Professor,
Department of Electrical Engineering and Computing Systems,
University of Cincinnati,
USA,
E-mail: boolchp@ucmail.uc.edu