

4th International Conference on Photonics

Dates and Venue: September 01-03, 2016, Atlanta, USA

(Theme: To Share and Fortify the Accelerating Research and Technologies in Photonics)

Summary

Photonics is the science of light. It is the technology of generating, controlling, and detecting light waves and photons, which are particles of light. The characteristics of the waves and photons can be used to explore the universe, cure diseases, and even to solve crimes. Scientists have been studying light for hundreds of years. The colors of the rainbow are only a small part of the entire light wave range, called the electromagnetic spectrum. Photonics explores a wider variety of wavelengths, from gamma rays to radio, including X-rays, UV and infrared light.

It was only in the 17th century that Sir Isaac Newton showed that white light is made of different colors of light. At the beginning of the 20th century, Max Planck and later Albert Einstein proposed that light was a wave as well as a particle, which was a very controversial theory at the time. How can light be two completely different things at the same time? Experimentation later confirmed this duality in the nature of light. The word *Photonics* appeared around 1960, when the laser was invented by Theodore Maiman.

Photonics is everywhere; in consumer electronics (barcode scanners, DVD players, remote TV control), telecommunications (internet), health (eye surgery, medical instruments), manufacturing industry (laser cutting and machining), defense and security (infrared camera, remote sensing), entertainment (holography, laser shows), etc.

The organizing committee is gearing up for an 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 Photonics 2016, where you will be sure to have a meaningful experience with scholars from around the world. All the members organizing committee look forward to meeting you in Atlanta, USA.

For more details: <http://photonics.conferenceseries.com/>

Importance & Scope

Photonics is the science of light (photon) generation, detection, and manipulation through emission, transmission, modulation, signal processing, switching, amplification, and detection/sensing. Though covering all light's technical applications over the whole spectrum, most photonic applications are in the range of visible and near-infrared light.

Why Valencia?

Atlanta is the capital of and the most populous city in the U.S. state of Georgia, with an estimated 2013 population of 447,841. Atlanta is the cultural and economic center of the Atlanta metropolitan area, home to 5,522,942 people and the ninth largest metropolitan area in the United States. Atlanta is the county seat of Fulton County, and a small portion of the city extends eastward into DeKalb County.

Atlanta was established in 1837 at the intersection of two railroad lines, and the city rose from the ashes of the Civil War to become a national center of commerce. In the decades following the Civil Rights Movement, during which the city earned a reputation as "too busy to hate" for the progressive views of its citizens and leaders, Atlanta attained international prominence. Atlanta is the primary transportation hub of the Southeastern United States, via highway, railroad, and air, with Hartsfield–Jackson Atlanta International Airport being the world's busiest airport since 1998.

Atlanta is considered an "alpha-" or "world city", ranking 36th among world cities and 8th in the nation with a gross domestic product of \$270 billion. Atlanta's economy is considered diverse, with dominant sectors including logistics, professional and business services, media operations, and information technology. Topographically, Atlanta is marked by rolling hills and dense tree coverage. Revitalization of Atlanta's neighborhoods, initially spurred by the 1996 Olympics, has intensified in the 21st century, altering the city's demographics, politics, and culture.

Why to attend???

4th International Conference on Photonics is an international conference encompassing clinical, translational, and fundamental research and its involvement for the development in the field of Photonics. It provides a premier technical forum for reporting and learning about the latest research and development, along with launching new applications and technologies. Events include hot topics presentations from all over the world and professional networking with industries, leading working groups and panels.

A Unique Opportunity for Advertisers and Sponsors at this International event:

<http://photonics.conferenceseries.com/sponsors.php>

Major Photonics Associations in Europe

American Institute of Physics (AIP)
American Physical Society (APS)
Optical Society of America (OSA)

Target Audience

Researchers, Engineers, academicians who work with photonics to solve problems in medicine and biomedicine, Design engineers, Nanoscience Engineers, Organic Photonical researchers, Electronic and Optical Engineers and talented student community from leading Universities.

Top Universities in Spain

American Intercontinental University
Clark Atlanta University
DeVry University
Emory University
Georgia Institute of Technology

Top Photonics Companies in Atlanta

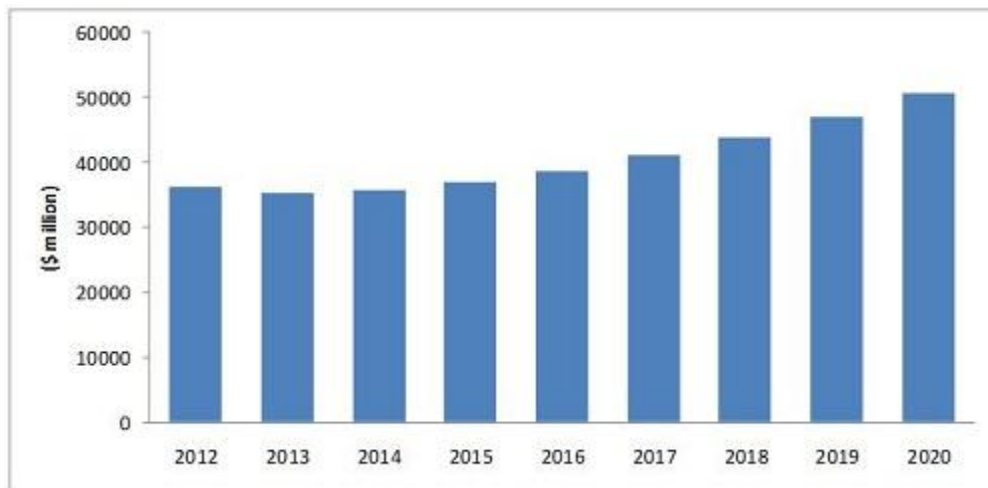
IPG Photonics

American Photonics

Glance at Market of Photonics

Photonics is an emerging technology, which focuses on the ultimate goal of providing the microelectronics world with the ultra-large-scale integration of components at a low cost and without any significant changes in their performance. This can be achieved by producing the all-silicon based components and products. Hence, silicon photonics has become an interesting proposition across the globe as it focuses on high speed transmission, low cost, and high integration of various products together such as optical waveguides, modulators, and photo-detectors. Based on the product, the silicon photonics market is segmented into silicon photonic waveguides, silicon optical modulators, silicon optical interconnects, wavelength division multiplexer filters, silicon led, silicon photo-detectors, and others. The wavelength division multiplexer filters occupy the highest share in this market in 2014; however, the silicon optical modulators are expected to grow by 2020. Several of the leading photonics companies in the world views on different technologies, and opinions about future challenges and opportunities for manufacturers and integrators of lasers and photonics products. The silicon photonics market is expected to grow to \$497.53 million by 2020, growing at a CAGR of 27.74% from 2014 to 2020.

Market Statistics of Photonics



World Market growth rates for Photonics in Millions