

# International Conference and Exhibition on Mesoscopic & Condensed Matter Physics

Dates and Venue: June 22-24, 2015 Boston, USA

(Theme: Highlighting and Focusing on Future Prospects in Condensed Matter Physics)

## Summary:

Condensed matter physics is a branch of physics that deals with the physical properties of condensed phases of matter. Condensed matter physicists seek to understand the behavior of these phases by using physical laws. In particular, these include the laws of quantum mechanics, electromagnetism and statistical mechanics. The most familiar condensed phases are solids and liquids, while more exotic condensed phases include the superconducting phase exhibited by certain materials at low temperature, the ferromagnetic and antiferromagnetic phases of spins on atomic lattices, and the Bose–Einstein condensate found in cold atomic systems. The study of condensed matter physics involves measuring various material properties via experimental probes along with using techniques of theoretical physics to develop mathematical models that help in understanding physical behavior.

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 the Condensed Matter Physics-2015, where you will be sure to have a meaningful experience with scholars from around the world. All members of the Condensed Matter Physics-2015 organizing committee look forward to meeting you in Boston, USA.

For more details please visit- <http://condensedmatterphysics.conferenceseries.com/>

## Importance & Scope:

Condensed Matter Physics is an international platform for presenting research about marketing, exchanging ideas about it and thus, contributes to the dissemination of knowledge in marketing for the benefit of both the academia and business. It covers a broad area of physics- Nanophysics, quantum physics, semiconductors and others. It will help to gain knowledge about the recent advancements and it is of course a good opportunity to discuss various aspects of mesoscopic physics

## Why Boston?

Boston is the capital and largest city of the state of Massachusetts (officially the Commonwealth of Massachusetts), in the United States. Boston also serves as county seat of Suffolk County. The largest city in New England, the city proper, covering 48 square miles (124 km<sup>2</sup>), had an estimated population of 636,000 in 2012, making it the 21st largest city in the United States. The city is the anchor of a substantially larger metropolitan area called Greater Boston, home to 4.5 million people and the tenth-largest metropolitan area in the country. Greater Boston as a commuting region is home to 7.6 million people, making it the sixth-largest Combined Statistical Area in the United States.

One of the oldest cities in the United States, Boston was founded on the Shawmut Peninsula in 1630 by Puritan colonists from England. It was the scene of several key events of the American Revolution, such as the Boston Massacre, the Boston Tea Party, the Battle of Bunker Hill and the Siege of Boston. Upon American independence from Great Britain, the city continued to be an important port and manufacturing hub, as well as a center for education and culture. Through land reclamation and municipal annexation, Boston has expanded beyond the original peninsula. Its rich history helps attract many tourists, with Faneuil Hall alone attracting over 20 million visitors. Boston's many "firsts" include the United States' first public school (1635), and first subway system (1897).

The area's many colleges and universities make Boston an international center of higher education and medicine, and the city is considered to be a world leader in innovation for a variety of reasons. Boston's economic base also includes finance, professional and business services, and government activities. The city has one of the highest costs of living in the United States, though it remains high on world livability rankings.

## Why to attend???

Condensed Matter Physics-2015 is an exciting opportunity to showcase the new technology, the new products of your company, and/or the service your industry may offer to a broad international audience. It covers a lot of topics and it will be a nice platform to showcase their recent researches on condensed matter physics, nanotechnology and other interesting topics.

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

[http://www.omicsgroup.com/conferences/ACS/conference/pdfs/condensedmatterphysics2015\\_Sponsorship.pdf](http://www.omicsgroup.com/conferences/ACS/conference/pdfs/condensedmatterphysics2015_Sponsorship.pdf)

## Major Physics Associations around the Globe

- The International Association of Mathematical Physics (IAMP)
- International Astronomical Union
- The International Liquid Crystal Society
- The international society for optics and photonics (IUPAB)
- International Union of Crystallography
- The International Union of Pure and Applied Physics
- International Organization of Chinese Physicists and Astronomers
- Society of Non-Linear and Dynamics Econometrics

## Major Physics Associations in USA

- The American Association of Physicists in Medicine AAPT

Materials Research Society  
 The American Ceramic Society  
 International Centre for Theoretical Physics  
 International Union of Materials Research societies  
 Statistical Analysis of Associations

Massachusetts Institute of Technology (MIT)  
 Boston University

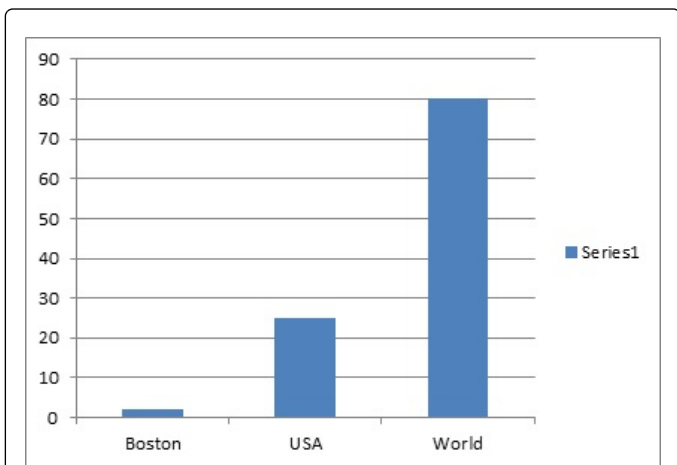


Figure 1: Statistical Analysis

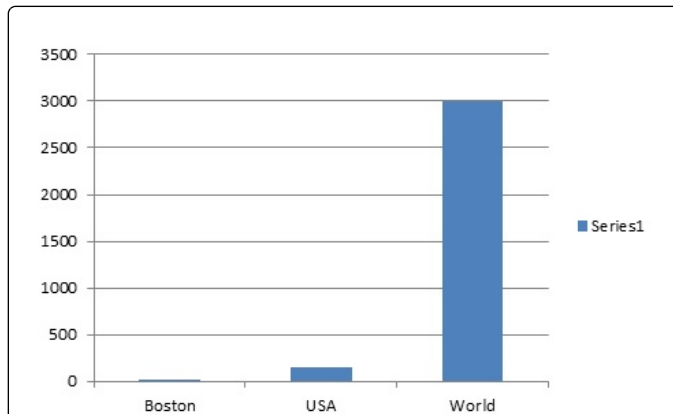


Figure 3: Top Universities in USA

**Companies Associated with Condensed Matter Physics (Semiconductor Companies, Graphene Production Companies and Others)**

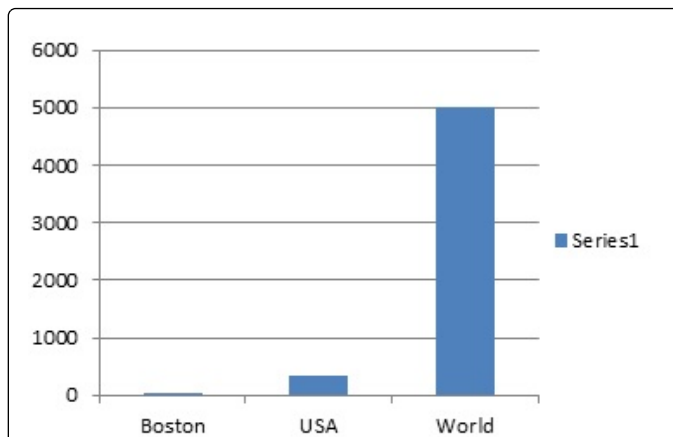


Figure 4: Companies Associated with Condensed Matter Physics

**Glance at Market of Condensed Matter Physics:**

These semiconductor industry is the aggregate collection of companies engaged in the design and fabrication of semiconductor devices. It formed around 1960, once the fabrication of semiconductors became a viable business. It has since grown to be the \$249 billion industry it is today. The global semiconductor industry is dominated by USA, South Korea, Japan, Taiwan, Singapore, and European Union. The U.S. industry faces challenges to development by some forms of government regulation. The U.S. government regulates exports and certain uses of some types of semiconductors due to their potential dual use in military applications. The popularity of Condensed Matter Physics is concentrated mainly in USA followed by Japan and China. USA and Japan are the leading producers of semiconductors, average approximate turn over- \$20,000 million.

Source: Reference 3

**Target Audience:**

Eminent Scientists/ Research Professors, Junior/Senior research fellows, Students, Directors of companies, Engineers, Members of different physics associations.

**Target Audience:**

- Industry 50%
- Academia 40%
- Others 10%

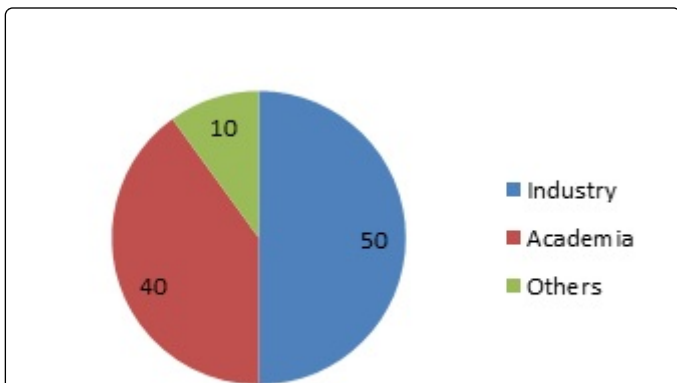


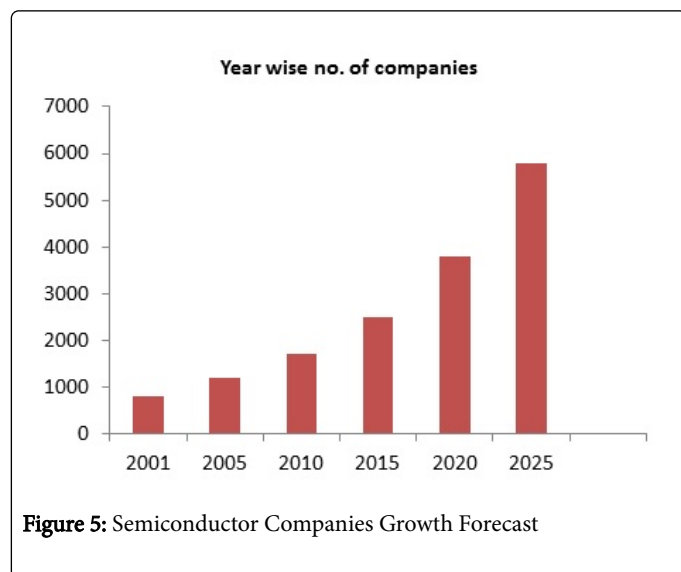
Figure 2: Target Audience

**Top Universities in USA:**

- University of Massachusetts Amherst
- Tufts University
- Northeastern University
- Stanford University

## Market Growth of Semiconductor Industries

Statistics which shows growth in importance of Condensed Matter Physics



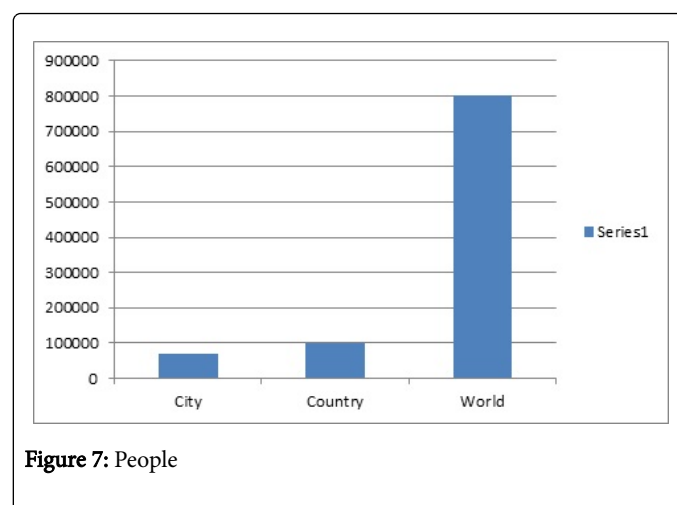
Source: Reference 2

Rank 2013	Rank 2012	Company	Country of origin	Revenue (million \$ USD)	2013/2012 changes	Market share
1	1	Intel Corporation	USA	46 960	-1.0%	14.8%
2	2	Samsung Electronics	South Korea	33 456	+7.0%	10.5%
3	3	Qualcomm	USA	17 341	+31.6%	5.5%
4	10	Micron Technology	USA	14 168	+109.2%	4.5%
5	7	SK Hynix	South Korea	13 335	+48.7%	4.2%
6	5	Toshiba Semiconductor	Japan	12 459	+11.9%	3.9%
7	4	Texas Instruments	USA	11 379	-5.5%	3.6%
8	9	Broadcom	USA	8 121	+3.5%	2.6%

**Figure 6:** Share of Semiconductor Companies

Source: Reference 1

Statistics of Marketers, Researchers and Academicians working on Condensed Matter Physics:



Source: Reference 4

### References:

1. <http://www.statista.com/statistics/270590/global-revenue-generated-by-semiconductor-vendors-since-2009>
2. <http://www.shanghai ranking.com/ARWU2013.html>
3. <http://www.conference-service.com/conferences/condensed-matter-physics.html>
4. <http://www.infoplease.com/ipa/A0908742.html>