

Market Analysis on Materials Physics and Materials Science

Dr. Deeb Abu Fara

Associate Professor, Chemical Engineering Department, University of Jordan, Amman, Jordan, Email: abufara@ju.edu.jo

The global industrial market for development based on material physics is expected to rise from USD 1.19 Billion in 2016 to USD 2.25 Billion by 2025, at a CAGR of 9.77% from 2017 to 2024.

The Global Semiconductor Market is going through an interesting phase, offering immense opportunities for firms involved in the business. Although the market faced a drop in revenue due to the global economic downturn, it is expected to sustain high growth momentum in coming years with increase in demand for electronics devices and requirements in new application areas. In their latest research study, "Global Semiconductor Market Outlook to 2017", RNCOS' analysts identified and deciphered the market dynamics in important segments to clearly highlight the areas offering promising possibilities for companies to boost their growth. The market, estimated US\$ 289.9 Billion in 2012, is slated to grow at a CAGR of 7.6% during 2013-2017. The robust growth in revenue is being driven by the growing demand for mobile devices, specially smartphones and tablets. In the report, the Global Semiconductor market is studied thoroughly on three main grounds such as players, regions and applications. The global semiconductor market will be \$655.6 billion in 2025 compared to \$342.7 billion in 2015 with CAGR of 6.7%.

At the conference you can gain new information and will be very useful for expanding the knowledge in the field of Materials physics and Materials Science, and emerging new ideas to improve yourself and your professional career. The Committee is looking forward to organize a unique meeting with interesting sessions, discussions, and going to meet new people who share with you the same subject and passion.

Market Value on Materials Science Research:

Rise in demand from the end user industries drives the composites market. Improved properties such as high fatigue life, high strength and modulus, reduced weight, acoustic insulation, and corrosion resistance have led to an increase in the demand. Volatility in the raw material prices and non-recyclable nature of composites pose a great threat in the growth of the market.

The report segments the composites market on the basis of fiber type, resin type, manufacturing process, and application. On the basis of fiber, the market is divided into carbon fiber composites, glass fiber composites, and others. Based on the resin type, market is classified into thermosetting composites and thermoplastic composites. On the basis of type of manufacturing process, the market is categorized into layup, filament, injection molding, pultrusion, compression molding, RTM, and others. On the basis of application, the market is divided into transportation, aerospace & defense, electrical & electronics, construction, wind

energy, pipes and tanks, marines, and others. Geographic breakdown and deep analysis of each of the aforesaid segments is included for North America, Europe, Asia-Pacific, and LAMEA. Growth of the electrical & electronics, construction & infrastructure, and improved transportation facilities has led Asia-Pacific to be the largest market of composites.

Comprehensive competitive analysis and profiles of major market players such as Hexcel Corporation, Huntsman Corporation, Toray Industries, Teijin Limited, and Owens Corning are also provided in this report. The target end users for these companies can be categorized as automotive, aerospace, construction, and wind energy related companies such as BMW, Ford, Bell Helicopter, Boeing, Mercedes-Benz, and Vestas.

Materials Industry:

The global market for carbon fiber reached \$1.8 billion in 2014, and further the market is expected to grow at a five-year CAGR (2015 to 2020) of 11.4%, to reach \$3.5 billion in 2020. Carbon fiber reinforced plastic market reached \$17.3 billion in 2014, and further the market is expected to grow at a five-year CAGR (2015 to 2020) of 12.3%, to reach \$34.2 billion in 2020. The competition in the global carbon fiber and carbon fiber reinforced plastic market is intense within a few large players, such as Toray Toho, Mitsubishi, Hexcel, Formosa, SGL carbon, Cytec, Aksa, Hyosung, Sabic, etc.

Benefits for stake holders on Materials:

This report entails the detailed quantitative analysis of the current market and estimations through 2014-2022, which assists to identify the prevailing opportunities.

Exhaustive analysis of the global composites market by type helps understand the types of composites that are currently being used along with the variants that would gain prominence in the future.

An in-depth analysis of the current research and clinical developments within the composites market is provided with key dynamic factors that predict the behavior of the market.

Extensive analysis is conducted by following key product positioning and monitoring the top competitors within the market framework.

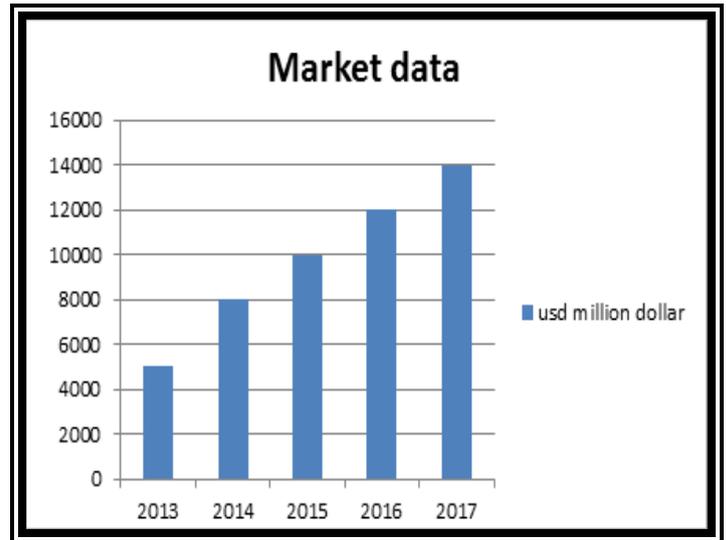
Key market players within the composites market are profiled in this report and their strategies are analyzed thoroughly, which interprets the competitive outlook of the

Market Analysis

global composites market. This report provides an extensive analysis of the current and emerging trends and dynamics in the global composites market. In-depth analysis has been done in this report by constructing market estimations for the key market segments between 2014 and 2022.

The global industrial market for development based on material physics is expected to rise from USD 1.19 Billion in 2016 to USD 2.25 Billion by 2025, at a CAGR of 9.77% from 2017 to 2024. The contribution of fundamental materials in wind energy, aerospace, marine, transportation, construction and other industries are drastically improved in all aspects. The leading producers of core materials such as Hispano-Suiza (Spain), Evonik Industries AG (Germany), Plascore Incorporated (U.S.), Euro-Composites S.A (Luxembourg), Diab Group (Sweden), 3A Composites (Switzerland), Gurit Holding AG (Switzerland), Hexcel Corporation (U.S), and The Gill Corporation (U.S.) are in huge reputation in this field of development.

The market value for metamaterials is estimated to reach almost USD 4,634.8 Million by 2025, at a CAGR of 63.1% from 2017 to 2025. The increasing problem for variety in design functionalities, anti-glare coating applications, and invisibility cloak for stealth aircraft are the important aspects to enhance the growth of metamaterial market. The novel materials and technologies in electronics points out the modification to the current materials and technologies to attain superior performance. In this digitalized world, the market for the new innovations will keeps on rising due to the rising end-use applications and the high demand of these advancements from both the industrialized and the developing regions.



This section shares the ideas to companies in designing their business strategies and provides them with key insights to boost their growth rate towards success. This will clearly help to identify and highlight the market section which offers numerous growth opportunities.