Photocatalysts: Technologies and Global Markets

Description: This report provides:

- An overview of the global markets and technologies relating to photocatalysts.
- A detailed review of photocatalysts, including a description of materials, types, and production technologies.
- Highlights of new technological developments in photocatalyst manufacturing, while outlining technical issues.
- Information about current fields of application for photocatalysts as well as emerging applications.
- Breakdowns by material type, application, and region.
- Profiles of major players in the industry.

Highlights

- The global market for photocatalyst products increased from $1.4 billion in 2013 to nearly $1.5 billion in 2014, and is estimated to be valued at nearly $1.6 billion in 2015. The total market for photocatalyst products is forecast to grow at a CAGR of 12.6% during the next five years, reaching nearly $2.9 billion by 2020.
- The construction sector is projected to grow from nearly $1.4 billion in 2015 to $2.6 billion in 2020 at a CAGR of 13.2% from 2015-2020.
- The consumer product sector is projected to grow from $155.6 million in 2015 to $220.3 million in 2020 at a CAGR of 7.2% from 2015-2020.

Intended Audience

This study will be of primary interest to all organizations that:

- Manufacture, sell, and distribute photocatalyst materials and photocatalyst-based products.
- Fabricate paints, coatings, films, solutions, glass, and other products for the industries indicated below.
- Offer coating services for the glass industry.
- Manufacture advanced glass products.
- Offer technical and/or marketing services for architectural, residential, and commercial window installation.
- Offer design and architectural services for “green building” manufacturing.
- Manufacture sterilization and deodorizing articles.
- Provide exterior and interior design services for the automobile industry.
- Offer consulting services for the solar and renewable energy market.
- Offer environmental engineering services.

Are planning to enter the coating industry as a supplier, manufacturer, or end user. Overall, this report applies to industry sectors such as construction, consumer products, automotive, medical/dental, environmental, energy, and mechanical/chemical.

The study is directed mainly towards executives, directors, operations managers, sales and marketing managers, and strategic planners working within the above-mentioned industries. Universities and research facilities might also find this report to be a good source of technical information with regard to photocatalyst technology, materials, and applications that can be used as a baseline for new or expanded R&D activities.

Librarians of technical information and research centers can also use this report to provide critical data to product managers, market analysts, researchers, and other professionals needing detailed and updated insights into the photocatalyst industry.

Scope Of Report

This study provides an updated review of photocatalyst technology, including materials and production
processes, and identifies current and emerging applications for this technology. The author determines the current market status of photocatalyst products, defines trends, and presents growth forecasts for the next five years. The photocatalyst market is evaluated based on the following segments: material type, application, and region. In addition, technological issues, including key events and the latest process developments, are discussed.

More specifically, the market analysis conducted for this report is divided into five sections. In the first section, an introduction to the topic and a historical review of photocatalysts is provided, including an outline of recent events. In this section, current and emerging applications for these materials are also identified and described by sector (i.e., automotive, construction, consumer products, environmental, energy, medical/dental, and mechanical/chemical). The second section provides a technological review of photocatalyst materials, types, and their fabrication processes. This section concludes with an analysis of the most important technological developments since 2013, including examples of significant patents recently issued or applied for, as well as highlights of the most active research organizations operating in this field.

The third section entails a global market analysis of photocatalyst-based products. Global revenues (sales data in millions of dollars) for photocatalyst products are presented for each segment (material type, application, and region) with actual data for the years 2013 and 2014, and estimated revenues for 2015.

The analysis of past and current revenues for photocatalyst-based products is followed by a detailed presentation of market growth trends based on industry growth, technological trends, and regional trends. The third section concludes by providing projected revenues for photocatalyst products within each segment, together with forecast compound annual growth rates (CAGRs) for 2015 through 2020.

In the fourth section of the study, which covers global industry structure, the report offers a list of the leading manufacturers of photocatalysts and a description of their products. The analysis includes a description of the regional distribution of these suppliers and an evaluation of other key industry players. Detailed company profiles of the top players are also provided.

The fifth and final section includes an extensive U.S. patent analysis, with a summary of patents related to photocatalyst materials, fabrication methods, and applications. The patents examined in this study were issued during the period 2013 through 2015. Patent analysis is performed by region, country, assignee, patent category, application, and material type.
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  - Niobium Nitride Photocatalyst For Water Splitting Other Relevant R&D Activities

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