US chemical catalyst demand to grow 3.3% through 2009

US demand for chemical catalysts will expand 3.3 percent annually to $1.2 billion in 2009. Growth will be relatively broad-based with most markets achieving moderate gains, a reflection of the mature nature of the chemical industry as a whole. The largest chemical catalyst market will continue to be fine chemicals, led by pharmaceuticals and pesticides. Demand for fine chemical catalysts will be above average, spurred on by the growing use of chiral catalysts in fine chemicals as companies seek to market single enantiomer products that offer improved performance and/or help extend profitable franchises.

Despite continued strong gains, the pace of pharmaceutical catalyst demand growth will ease as increased FDA scrutiny slows the pace of new drug approvals, and a tougher pricing environment limits value gains. Pesticide catalyst demand will be weak due to the mature nature of the market, though a shift in product mix toward higher-priced chiral catalysts will help offset sluggish volume growth.

Ethanol mandates to benefit alcohol catalyst market

Alcohols will offer the fastest growth as the ethanol industry continues to expand rapidly to meet the renewable fuel requirement of the Energy Policy Act of 2005, offsetting the impact of high natural gas prices on methanol production. Fermentation-based production (which uses less catalyst per gallon of ethanol produced) will continue to replace synthetic ethanol in the high-end industrial ethanol market, boosting average ethanol catalyst prices. Petrochemicals will experience near average growth due to continued strong demand for olefin-based materials such as polyethylene and polypropylene, and ethylene glycol-based polyesters. In contrast, inorganic chemical catalyst demand will decline due to the impact of high natural gas prices on ammonia, and consequently nitric acid production.

Organic synthesis catalysts to remain largest segment

Organic synthesis catalysts will continue to account for the majority of catalyst demand, reflecting their heavy use in both basic organic chemical and fine chemical processes. The fastest growth will be in other catalyst types such as biopolymer hydrolysis catalysts used in fuel ethanol production. Oxidation and hydrogenation catalysts will see slow to moderate growth, while growth in synthesis gas catalysts will be flat as increased hydrogen demand will offset declines in ammonia and methanol production.

Enzyme biocatalysts to grow the fastest

Catalyst materials will continue to be dominated by base and precious metals, accounting for over half of catalyst demand, but growth in market value will be below average due to an expected moderation in prices from the high levels of 2004. The strongest growth will be experienced by enzyme biocatalysts, benefitting from increased ethanol production, and growing demand for biocatalysts in fine chemical synthesis. Organometallic catalysts will see average growth in the basic organic and fine chemical markets.

Study coverage

This new 210-page Freedonia industry study, Chemical Catalysts, is available for $4100. It presents historical US historical demand data (1994, 1999, 2004) and forecasts to 2009 and 2014 by catalyst market, type and material. The study also considers market environment indicators, evaluates company market share and profiles 30 industry competitors.
#1985 - Chemical Catalysts

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### SAMPLE PAGE

**MARKETS**

**Pharmaceuticals** — Demand for pharmaceutical catalysts will continue to grow at a healthy 4.6 percent annual rate through 2009. Volume will rise robustly to $250 million, though this will be a slight slowdown from recent high-profile gains. Growth will remain strong, especially in the area of complex drug syntheses. The pharmaceutical catalyst market will see double-digit gains, reflecting both the industry's increased focus on high-value-added drugs and the continued shift toward more expensive chiral catalysts. Continued gains will lag real pharmaceutical production due primarily to the greater regulatory scrutiny and a slowdown in new drug approvals. Volume gains will help keep price measures stable, at least for most of the catalyst industry. Precious metals will continue to grow in importance, outpacing gains advancing, despite tough 2004 comparisons for most of the catalyst industry. Precious metals will continue to grow in importance, outpacing gains.

### SAMPLE TABLE

**TABLE III-11**

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Almatis GmbH
Olof-Palme-Strasse 37
60439 Frankfurt
Germany
49-69-957-3410
http://www.almatis.com

Annual Sales: $1 billion

Employment: 900 (as reported by company, 6/05)

Includes profiles for 30 players in the US industry

The company exited the chemical catalyst industry through the September 2005 divestiture of the Adsorbents and Catalysts business, or Adcats, to Engelhard Corporation (Iselin, New Jersey) in order to focus on core business. Adcats produces activated and high-purity boehmite aluminas, including Claus catalysts, catalyst raw materials, desiccants, adsorbents and bed supports, for hydrocarbon processing and dehydration applications. These products mainly serve the natural gas, petrochemical, compressed air and hydrogen peroxide markets. In the US, the Adcats business operated as Almatis AC Incorporated (Vidalia, Louisiana). Also in the transaction were manufacturing and product development facilities in Vidalia and Port Allen, Louisiana. (See Engelhard Corporation.)
Pharmaceuticals in China
This study presents historical demand data (1995, 2000, 2005) and forecasts to 2010 and 2015 for ethical and over-the-counter drugs in China by type (e.g., anti-infective, central nervous system, cardiovascular, dermatological, gastrointestinal, hormone and related, respiratory, traditional and alternative medicines); and by market (e.g., retail, hospital, outpatient). The study also discusses regulatory reforms and foreign direct investment, profiles leading Chinese drug companies and evaluates market share.
#2024 02/2006 $4800

Polymerization Catalysts
US demand for polymerization catalysts will grow 5.5% annually through 2009 based on increased polymer production, especially polypropylene and linear low density polyethylene — and the expanding use of higher-value catalysts. Ziegler/Natta catalysts will remain dominant while metallocenes and other single-site catalysts grow the fastest. This study analyzes the $8.4 billion US polymerization catalyst industry to 2009 and 2014 by type and resin. It also evaluates market share and profiles major producers.
#1932 05/2005 $4100

Fermentation Chemicals
The US market for fermentation chemicals will grow 4.9% annually through 2009 as companies seek out chemicals derived from renewable resources. Ethanol will remain dominant while other alcohols, vitamins and enzymes grow the fastest. Best market opportunities will be in plastics and fibers, especially biodegradable plastics and the new polyester, PTT. This study analyzes the US fermentation chemicals industry to 2009 and 2014 by product and market. It also evaluates market share and profiles major firms.
#1921 05/2005 $4200

Gasoline & Other Fuel Additives
The US fuel additives market will reach $8.4 billion in 2008, driven by government mandates and the fuel performance needs of more complex engines. Volume will decline slightly as ethanol continues to replace MTBE at lower concentrations. Ethanol, biodiesel and cetane improvers will lead gains, with the diesel fuel market outpacing gasoline. This study analyzes the US gasoline and other fuel additive industry to 2008 and 2013 by type and market. It also details market share and profiles major producers.
#1858 11/2004 $4100

World Catalysts
Global value demand for catalysts will grow 5.1% yearly through 2008 based on increased production of end-use products and a shift toward higher-value catalyst materials. Polymerization catalysts will grow the fastest while chemical synthesis catalysts surpass petroleum refining types as the largest segment. This study analyzes the US $8.8 billion world catalyst industry to 2008 and 2013 by product, market, material, world region, and for 26 countries. The study also details market share and profiles major firms.
#1837 09/2004 $5200