



1st Edition

Synthetic Biology:

Changing the Face of Personal Care

A Joint Study by Kline and Promotum

To Be Published 1st Quarter 2017

Base Year: 2016

Forecasts to 2021

Regional Coverage: ■ Europe ■ North America

With the increased importance of sustainability, synthetic biology is becoming one of the most important strategic drivers in the specialty chemical industries and, more notably, in personal care. Current advances impact everything from “natural” and renewable marketing claims to the availability of new high performance ingredients and extreme cuts in production costs. This is already creating new market entrants, allowing competitors to move into adjacencies, and driving mergers and acquisitions. This report has been designed to allow a deep understanding of this new and fast-moving area and its key stakeholders.

This Report Will Help Subscribers to Address Questions Such as:

- Why should I believe the business will change significantly? Convince me.
- What is synthetic biology, and what do I need to know about it?
- What are the definitions and enabling technologies?
- Who are the leading technology providers, and who are they working with?
- What are the synthetic biology process economics?
- Which companies are seeking investment and/or most likely acquisition targets?
- What segments are most likely to be affected and when?
- What new products have entered the marketplace, and from whom will they take market share?
- What regulations are currently affecting the market, and what regulations are pending?
- What new fermented ingredients are likely to create new markets?



Tentative Report Contents*

Introduction and Definitions

Executive Summary

The Evolving Chemicals Industry

- Driving the change – Regulations, environment, renewables, customers’ awareness, and bio-based production alternatives (synthetic biology)
- What is changing?
- Rebirth of the chemicals industry – Morphed chemical synthesis with biology; use of CO2 as feedstock

Synthetic Biology

- Technology overview - How does it work? What are the benefits? Where is it being practiced?
- Key players
- Indicative Economic Comparisons: Synbio vs established manufacturing.

The Impact on Personal Care

- Overview of the personal care ingredients industry - Products, current and forecast demand in the United States and Europe, pricing, and supplier profiles.
- Regulatory and consumer issues
 - “Natural,” non-GMO labeling, perception, conflict, and trends
 - Existing and pending regulations
 - Techno-economic comparison of potential targeted materials

Opportunities for Synthetic Biology in Personal Care

- Lower production costs in identified products
- Possible ventures with established suppliers
- Introduction of new materials to this sector

Conclusions



Scope

Synthetic biology encompasses a tool kit of technologies which transform the biological sciences into engineered solutions. These may include enzyme design, construction and optimization of biosynthetic pathways and host metabolism, tools for rapid computational design, as well as automated construction and high throughput strain evaluation and screening. This report will provide a detailed independent appraisal of this fast-moving industry and analyze the opportunities offered by the personal care ingredients market and the threat it represents to traditional synthetic chemistries.

- Overview of currently available technologies
- Analysis of the synthetic biology supply chain and profiles of key stakeholders
- Current market for synthetic biology-derived ingredients
- Identification of the most suitable segments for synthetic biology within personal care ingredients
- Analysis of the market potential for synthetic biology and the threat it represents for synthetic chemistries

Key Benefits

The coming global impact of synthetic biology cannot be understated, creating opportunities to expand current markets and create new ones. Those not taking advantage will be under consistently greater threats. At the same time, issues around GMOs and the definition of “natural” may be exacerbated by third-world economic disruption and backlash among consumer advocates as traditionally labor-intensive ingredient cultivation and extraction processes are replaced by fermentation. This report will untangle the opportunities and threats created by synthetic biology from the perspective of personal care business and R&D executives.

Methodology & Qualifications

Kline’s approach places principal emphasis on primary research techniques to ensure that the foundation of business intelligence and insight is accurate, current, and reliable. Building on our 50-plus years in the business and leveraging our worldwide network of offices, our teams of seasoned professionals draw upon pragmatic industrial and commercial experience to understand and interpret global impacts and local perspectives.

Synthetic Biology: Changing the Face of Personal Care, is a collaboration between Kline, an expert in personal care ingredients markets and Promotum, which brings expertise in synthetic biology, sustainability, and renewable chemicals. Like Kline, Promotum has decades of relevant specialty chemical market research experience with added capabilities in technology assessment and process economic analysis. Promotum provides consulting services to startups, corporations, and investors interested in capitalizing on change in petrochemical and bio-based industries.

Primary Research

We Know Who to Talk to. We Know How to Listen.



A high number of in-depth discussions are conducted by each analyst. All interviews are done with true industry insiders.

Kline’s analysts draw upon pragmatic experience to understand global impacts and local perspectives. Our interviews engage experts across all pertinent fields and sectors including:

- Marketers/manufacturers
- Distributors
- Government agencies
- Retailers
- Suppliers
- Trade organizations

Secondary Research

We Know Where to Look – Mining the Details.



Analysis is further supplemented by secondary research, consisting of constant tracking of annual company reports, national statistics bureaus, trade/ industrial/professional associations, and the like.

Relevant developments are diligently followed and their impact closely monitored. Reports also draw upon non-confidential data from Kline’s internal database, consisting of over half a century’s syndicated research.

Comprehensive Market Intelligence

We Know How to Verify.



Data are rigorously analyzed, cross-checked, distilled, and validated. Kline’s proven methodology allows exceptionally effective, precise, and reliable market

intelligence, giving subscribers a solid foundation on which to grow, refine, and expand their business with confidence.

Credentials

Kline

Kline is a leading global management consulting and market research firm offering the complete spectrum of services. The firm has served the management consulting and market research needs of organizations in the chemicals, materials, energy, life sciences, and consumer products industries for over 50 years. It covers extensively the personal care market for decades, both from a finished products and an ingredients perspective.

Promotum

Promotum is a technology-based management consulting firm working at the convergence of fuels, chemicals, and biologics. We are a team of standout engineers, scientists, and accomplished MBAs who are passionate about science and technology as we are about business. By focusing on the convergence of energy, materials, and biology, we deal daily with complex issues and disciplines. Promotum is focused on growth and helping clients enter new markets, evaluate, or create them. Our expertise allows us to maximize results for our clients around the world. Promotum is headquartered in Cambridge, MA.

A FULL SPECTRUM OF SERVICES

CUSTOM RESEARCH

MARKET RESEARCH REPORTS

MANAGEMENT CONSULTING

North America
+1-973-435-3407

Latin America
+55-11-3079-0792

Europe
+32-2-770-4740

China
+86-21-6012-6500

India
+91-124-4546-100

Japan
+81-3-3242-6277