

# ADVANCES IN **Biopharmaceutical Technology in**

# *India*

Eric S. Langer, Editor



**Society for Industrial Microbiology  
BioPlan Associates, Inc.**

# Advances in Biopharmaceutical Technology in India

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Eric S. Langer  
Managing Editor

## Preface

This study was undertaken, managed and coordinated by BioPlan Associates, Inc., a biopharmaceutical management and marketing research consulting firm in Rockville, MD, based on nearly 20 years experience and knowledge of the market segment. BioPlan surveyed the industry to identify required content, and then selected subject matter experts to author relevant chapters to this study.

The Society for Industrial Microbiology (SIM), in recognizing the importance of applied sciences in biotechnology processes, has lent its name to this endeavor. The Society for Industrial Microbiology is a nonprofit professional association dedicated to the advancement of microbiological sciences, especially as they apply to industrial products, biotechnology, materials, and processes. Founded in 1949, SIM promotes the exchange of scientific information through its meetings and publications, and serves as liaison among the specialized fields of microbiology. Membership in the Society is extended to all scientists in the general field of microbiology.

India is one of the fastest growing economies in the world. The country has invested heavily in advancing its pharmaceutical and biopharmaceutical technologies to improve its healthcare systems, its population's general health, and its overall economy.

Both scientists and entrepreneurs in India have made important contributions to advancing the field at many levels. This study provides a framework from which both those new to India's rapid advancements in biotherapeutics and vaccines, and those with long histories can recognize the potential, and plan for the future. The findings of this study support worldwide public health and economic policy.

Each chapter provides unbiased, peer-reviewed perspectives of the current state of the science and technology associated with biopharmaceuticals in India. While no single work can encompass all the advances being made in the field, this study offers a comprehensive assessment of the technological and economic advancements in India.

The intended audiences include decision-makers at biopharmaceutical research organizations, biotherapeutic manufacturers, contract manufacturing organizations, suppliers to the industry, policy-makers, and international entities evaluating this market. We plan to keep this study current by providing regular updates as technologies, and the industry advance.

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