

**Pharmaceutical, Bulk Drugs
and Medicine
Manufacturing Industry**
*(Production, Formulation, Quality
Control: Tablet, Paracetamol,
Antibiotics)*

Introduction

India is already among the top six producers of pharmaceuticals of the world. The Government of India has made tax breaks available to the pharmaceutical sector and a weighted tax deduction of 150 per cent for any R&D expenditure incurred. This is in league with Indian Government's Pharma Vision 2020 which aims at making India a global leader in end-to-end manufacture by 2020. India is home to 10,500 manufacturing units and over 3,000 pharma companies. India exports all forms of pharmaceuticals from APIs to formulations, both in modern medicine and traditional Indian medicines. Globally India ranks among the top exporters of formulations by volumes.

For the majority of firms in this industry, the actual manufacture of drugs is the last stage in a lengthy process that begins with scientific research to discover new products and to improve or modify existing ones. The R&D departments in pharmaceutical and medicine manufacturing firms start this process by seeking and rapidly testing libraries of thousands to millions of new chemical compounds with the potential to prevent, combat, or alleviate symptoms of diseases or other health problems.



Quality control and quality assurance are vital in this industry. Many production workers are assigned full time to quality control and quality assurance functions, whereas other employees may devote part of their time to these functions. For example, although pharmaceutical company sales representatives, often called detailers, work primarily in marketing, they engage in quality control when they assist pharmacists in checking for outdated products.

Advances in manufacturing processes are also impacting the industry. While pharmaceutical manufacturers have long devoted resources to new drug development as a source for future profits, firms are increasingly realizing that improvements throughout the drug pipeline are needed to stay competitive.



Drugs and pharmaceutical industry plays a vital role in the economic development of a nation. It is one of the largest and most advanced sectors in the world, acting as a source for various drugs, medicines and their intermediates as well as other pharmaceutical formulations. India has come a long way in this field, from a country importing more than 95% of its requirement of drugs and pharmaceuticals; India now is exporting it even to developed countries. Being the intense knowledge driven industry, it offers innumerable business opportunities for the investors/ corporate the world over.

The existence of well-defined and strong pharmaceutical industry is important for promoting and sustaining research and developmental efforts and initiatives in an economy as well as making available the quality medicines to all at affordable prices. That is, it is essential to improve the health status of the individuals as well as the society as a whole, so that positive contributions could be made to the economic growth and regional development of a country. On the global platform, India holds fourth position in terms of volume and thirteenth position in terms of value of production in pharmaceuticals.

The pharmaceutical industry has been producing bulk drugs belonging to all major therapeutic groups requiring complicated manufacturing processes as well as a wide range of pharmaceutical machinery and equipments. The modern Indian Pharmaceutical Industry is recent and its foundation was laid in the beginning of the current century. The pharmaceutical industry can be broadly categorised as bulk drugs, formulations, IV fluids and pharmaceutical aids (such as medical equipment, hospital disposables, capsules, etc.). Special feature of the pharmaceutical industry is a large number of manufacturers in the small scale sector.

The government is also encouraging the SSI sector providing some incentives. The recent developments in the technology and R & D work in this field have led to the increased growth rate of industries and have established Indian Pharmaceutical industries in the international market.

The content of the book includes information about properties, general methods of analysis, methods of manufacture, of different types of drugs and pharmaceuticals.

Some of the fundamentals of the book are polymeric materials used in drug delivery systems , theoretical aspects of friction and lubrication , a convenient method for conversion of quinine to quinidine,

formulation and evaluation of bio-available enteric-coated erythromycin and metronidazole tablets, extraction of virginiamycin, antipyretics and analgesics, column chromatographic assay of aspirin tablets, differentiating titration of phenacetin and caffeine, infrared spectra of some compounds of pharmaceutical interest etc.

This book covers an intensive study on manufacturing, production, formulation and quality control of drugs and pharmaceuticals with technology involved in it. This book is an invaluable resource for technologists, professionals and those who want to venture in this field.

Table of Contents

1. INTRODUCTION

Manufacturing

Production

Formulation

Quality Control

2. POLYMERIC MATERIALS USED IN DRUG DELIVERY SYSTEMS

Preparation of polymers

Addition (chain reaction) polymerization

Condensation (step-growth) polymerization

Crosslinked polymers

Copolymerization

More complex co-polymer systems

3. PROPERTIES OF FATTY ALCOHOL MIXED EMULSIFIERS AND EMULSIFYING WAXES

Mixed emulsifier components

Fatty alcohols

Surfactants

Mixed emulsifiers and emulsifying waxes

4. TABLET LUBRICANTS

Theoretical aspects of friction and lubrication

Mechanisms of friction

Boundary lubrication

Applications to tableting

Chemical composition of lubricants

Metallic salts of fatty acids (soaps)

Fatty acids, hydrocarbons and fatty alcohols

Fatty acid esters

Alkyl sulphates

Polymers

Inorganic materials

Miscellaneous materials

Effects of lubricants on the manufacture and properties of tablets

Batch variation of lubricants

Processing

Tablet properties

Magnesium stearate

Commercial materials and batch variation

Pure grade materials

Selection of Lubricants

5. PARACETAMOL-AN ANALYSIS OF TECHNOLOGIES FOR CLEANER PRODUCTION

6. A MODIFIED PROCESS FOR CONVERSION OF - PICOLINE TO NOCOTINIC ACID

Experimental Procedure

Experimental Data

7. A CONVENIENT METHOD FOR CONVERSION OF QUININE TO QUINIDINE

Experimental Procedure

Reduction of quinidinone with alane

8. SUSTAINED RELEASE SALBUTAMOL TABLETS - THEORETICAL CONSIDERATIONS

Theoretical considerations

Calculation of Sustained Release Parameters for Salbutamol Sulphate

9. SUSTAINED RELEASE SALBUTAMOL TABLETS - FOR MULATION ENGINEERING AND EVALUATION USE OF FAT AND WAX MATRIX

Materials and methods

Discussion

10. SUSTAINED RELEASE SALBUTAMOL TABLETS - FORMULATION ENGINEERING AND EVALUATION COMPOSITE WAX MATRIX AND INFLUENCE OF ADDITIVES

Materials and methods

Results and Discussion

11. FEASIBILITY OF PRODUCTION OF CHOLERA VACCINE IN FERMENTOR

Materials and methods

Media

Results and Discussion

12. MODIFICATION OF BEESWAX FOR ITS APPLICATION IN TABLET COATING

Materials and methods

Results and discussion

13. FORMULATION AND EVALUATION OF BIO-AVAILABLE ENTERIC-COATED ERYTHROMYCIN AND METRONIDAZOLE TABLETS

Materials and Methods

Coating formulations

Coating process
Dissolution rate studies
Methods of analysis
Results and discussion
Conclusion

14. REDUCING - SUBSTANCES-FREE ACETIC ANHYDRIDE FOR PHARMACEUTICAL INDUSTRIES

Experimental procedure
Materials
Procedure
Results and discussion

15. ANTHRACYCLINE ANTIBIOTICS (DAUNORUBICIN AND ADRIAMYCIN)

Biosynthesis
A. Origin of the Carbon Skeleton
B. Biosynthetic Interrelationships

Fermentation and Recovery

A. Inoculum Preparation and Production of Daunorubicin

B. Isolation and Purification of Daunorubicin

C. Inoculum Preparation and Production of Adriamycin

D. Isolation and Purification of Adriamycin

16. 6-APA

Production of 6-Apa using Penicillin Acylase

A. Enzymation of Penicillin G

B. Extraction of 6-APA

17. EXTRACTION OF VIRGINIAMYCIN

Extraction

18. SAGAMICIN

Fermentation Process

19. CHEMOTHERAPEUTICS, ANTIVIRAL

Antiviral Agents Effective in Humans

Thiosemicarbazones

Amantadine Hydrochloride

5-Iodo-2'-deoxyuridine

Trifluorothymidine

Arabinosylcytosine

Arabinosyladenine

Ribavirin

Interferon

Immunopotentiating Agents

Future of Antiviral Chemotherapy

20. CHEMOTHERAPEUTICS, ANTIPROTOZOAL

Coccidiosis

Thiamine Competitors

Antifolates

Antibiotics

Nitrobenzamides and Nitrofurans

Toxoplasmosis

Anaplasmosis

Babesiasis

Theileriasis

Trypanosomiasis

African Trypanosomiasis

Chagas' Disease

Leishmaniasis

Pneumocystosis

Trichomoniasis

Hexamitosis

Balantidial Dysentery

Giardiasis

Amebiasis

Intestinal Amebiasis

Primary Amebic Meningo-Encephalitis

The Malarias

Drugs Acting on Asexual Blood Forms
Drugs Affecting Tissue Forms
Drugs Acting on Gametocytes
Action Spectra of Antiprotozoal Drugs
Economic considerations

21. CHEMOTHERAPEUTICS, ANTIMYCOTIC AND ANTIRICKETTSIAL

Mycotic Infections
Superficial Mycoses
Systemic and Generalized Mycoses
Antifungal Agents
The Polyene Antibiotics
Candidin
Pimaricin
Nonpolyene Antifungal Antibiotics
Griseofulvin
Cycloheximide

Other antifungal agents

Synthetic Antifungal Agents

Nonspecific Systemic Medications

5-Fluorocytosine

Imidazole Compounds

Tolnaftate

Haloprogin

Agricultural Use of Antifungal Agents

Rickettsial Infections

Treatment of Rickettsial Infections

22. CHEMOTHERAPEUTICS, ANTIMITOTIC

Drug Classification

Alkylating Agents

Antimetabolites

Antibiotics

Plant alkaloids

Miscellaneous Agents

Hormones

Combination therapy

Multidrug Treatment

Immunology

Drug Toxicity

Radiation Therapy

23. CHEMOTHERAPEUTICS, ANTHELMINTIC

Treatment of Blood Fluke Disease (Schistosomiasis)

Treatment of Fluke (Trematode) Infections in the Lungs, Intestines, and Liver

Treatment of Tapeworm (Cestode) Infections

Treatment of Intestinal Roundworm (Nematode) Infections

Treatment of Tissue Roundworm (Nematode) Infections

24. ANTIPYRETICS AND ANALGESICS

Salicylic Acid and its Derivatives

Methods of Manufacture

Sodium Salicylate

Aspirin

Salicylamide

Salicylic Acid

Sodium salicylate

Aspirin

Salicylamide

Methods of Analysis

Separation and Identification

Extraction into Sodium Bicarbonate Solution

Procedure

Separation by Column Chromatography

Procedures

Preparation of Chromatographic Column

Preparation of Samples
Separation of Components
Separation by Gas Chromatography
Procedures
Preparation of Column
Preparation of Samples
Separation of Components
Identification
Procedures
Test with Ferric Chloride
Percipitation of Salicylic Acid
Assay Methods
Titrimetric Assay of Aspirin Capsules
Procedure
Column Chromatographic Assay of Aspirin Tablets
Procedures

Preparation of Column
Preparation of Samples and Standard
Analysis of Samples
Assay by Gas Chromatography
Procedures
Preparation of Column
Calibration
Assay of sample for aspirin content
Determination of Impurities
Determination of free salicylic acid in aspirin
Chromatographic Method
Procedures
Preparation of Reagent
Preparation of Salicylic Acid Standard
Preparation of Column
Analysis of Aspirin and Aspirin Tablets
APC Tablets and Flavoured Tablets
Spectrophotometric Method

Procedure

Readily Carbonizable Substances in Aspirin

Procedures

Preparation of Reagents

Cobaltous Chloride

Cupric Sulphate

Ferric Chloride

Sulfuric Acid

Testing of Sample

Impurities in Salicylic Acid

Ion Exchange Ultraviolet Method

Procedures

Preparation of Apparatus

Preparation of Column

Analysis of Samples

Procedure

Procedures

Preparation of Plates

Preparation of Reagents & Standards

Preparation of Sample

Qualitative Detection

Quantitative Determination

Determination in mixtures

Determination After Separation by Extraction

Ultraviolet absorption method

Procedures

Calibration

Calculations

Heuermann And Levine Method

Procedures

Preparation of Sample

Preparation of Column

Separation of APC Organic base Combination

APC Barbiturate Combinations

TURI Method

Procedures

Preparation of Column

Preparation of Samples

Separation of Fractions

Spectrophotometric Measurement

Koshy Method

Procedures

Preparation of Column

Preparation of Samples

Separation of Components

Determination of Components

Determination by Gas Chromatography

Hoffman and Mitchell Method

Procedures

Calibration

Analysis of Samples

Crippen & Freinuth Method

Procedure

Preparation of Column

Operating Conditions

Preparation of Methylating Reagent

Preparation of Samples & Standards

Analysis of Samples

Calculations

Direct Spectrophotometric Procedure

Procedure

Preparation of Mixed Solvents

Preparation of Reference Solutions

Analysis of Samples

Development of Equations

Infrared and Ultraviolet Spectrometry

Procedures

Mixtures of Aspirin, Phenacetin and Caffeine

Mixtures of Aspirin, Phenacetin and Caffeine and Cadeine Phosphate

Mixtures of Aspirin, Phenacetin and Caffeine and Thenylpyramine Hydrochloride

Nonaqueous Titrations

Wollish Methods

Procedures

Determination of Aspirin in the Presence of Stearic Acid

Determination of Aspirin in the Absence of Stearic Acid

Determination of Phenacetin

Determination of Caffeine

APC Tablets in Combination with Phenindamine Tartrate

Determination of Phenacetin

Determination of phenindamine Tartrate

Lin and Blake Methods

Procedures

Determination of Aspiring in APC Mixtures

Differentiating Titration of Phenacetin and Caffeine

Differentiating Titration of Aspirin and Phenobarbital

Nuclear Magnetic Resonance Spectrometry

Procedures

Determination of Spectra

Calculations

Derivatives of Aniline and p-Aminophenol

Methods of Manufacture

Commercial Grades and Specifications

Methods of Analysis

Separation and Identification

Separation by Ion Exchange Paper Chromatography

Procedures

Preparation of Iodoplatinate Reagents

Extraction

Chromatography

Separation by Gas-Chromatography

Procedures

Preparation of Column

Operating Conditions

Calibration

Separation of Components

Assay Methods

Gravimetric Methods

Procedure

Titrimetric Methods

Titration with Sodium Nitrite

Procedure

Iodometric Titration

Procedure

Assay Through Ethoxy Content

Procedure

Preparation of Reagent

Analysis of Sample

Calculations

Colorimetric Methods

Hydroxamic Acid Method

Procedure

Diazotation Procedures

Procedures

Preparation of Buffer Solution

Calibration of the Method

Hydrolysis of Phenacetin

Mouton and Masson Method

Procedure

Chromic Acid Method

Procedure

Ultraviolet Spectrophotometry

Procedure

Determination of Impurities

Impurities in Phenacetin

Procedures

Determination of Acetanilide

Determination of P-Chloroacetanilide

Determination of P-Phenetidine

Free P-Amino Phenol in Acetaminophen

Procedures

Aniline Derivatives in Cinchophen
Readily Carbonizable Substances
Cinchophen in Neocinchophen
Determination in Mixtures
Derivatives of Pyrazolone
Methods of Manufacture
Commercial Grades and Specifications
Methods of Analysis
Separation and Identification
Antipyrine
Separation by Gas Chromatography
Aminopyrine
Assay Methods
Antipyrine
Spectrophotometric Methods
Procedure
Preparation of Reagent
Analysis of Sample

Procedures

Preparation of Reagents

Analysis of Samples

Bromate Titration

Procedure

Oxidative-Cleavage Method

Procedure

Colorimetric Methods

Procedure

Preparation of Diazotized P-Nitroaniline

Preparation of Sample Solution

Determination by Ferric Chloride

Determination of Diazotized P-Nitroaniline

Determination of Impurities

Antipyrine in Aminopyrine

Procedure

Determination in Mixtures

Antipyrine

25. ANTI-ASTHMATIC AGENTS

Adrenergic Stimulants

Anticholinergics

Inhibitors of the release of Allergic Mediators

Xanthine Derivatives

Prostaglandins

Other Drugs

26. PENICILLINS AND RELATED COMPOUNDS

Properties

General Method of Analysis

Separation and Identification

Chromatography

Spectroscopy

Other Methods

Assay Methods

Microbiological Methods

Chemical Methods

Iodometric Titration

Procedure

Acid-Base Titration

Hydroxylamine Colorimetric Method

Procedure

Ultraviolet Spectrophotometric Method

Procedure

Determination of Impurities

Benzylpenicillin

Analysis of Benzylpenicillin

Microbiological Assay Methods

Procedure

Procedure

Chemical Assay methods

Procedure

Allylmercaptomethylpenicillin
Analysis of Pencillin O
Microbiological Assay Methods
Chemical Assay Methods
Phenoxymethylpenicillin
Analysis of Phenoxymethylpenicillin
Microbiological Assay Methods
Chemical Assay Methods
Phenethicillin
Analysis of Phenethicillin
Microbiological Assay Methods
Chemical Assay Methods
Methicillin
Analysis of Methicillin
Microbiological Assay Methods
Chemical Assay Methods
Carbenicillin

Microbiological Assay Methods

Procedure

Chemical Methods

Ampicillin

Analysis of Ampicillin

Microbiological Assay Methods

Procedure

Chemical Assay Methods

Isoxazolympenicillins

Analysis of Isoxazolympenicillins

Microbiological Assay Methods

Chemical Assay Methods

Nafcillin

Microbiological Assay Methods

Chemical Assay Methods

Cephalsoporins

Analysis of Cephalosporins

27. SULFONAMIDES

Therapeutic Aspects

Systemic infections

Urinary Tract Infections

Physical and Chemical Properties

Theoretical Aspects

Biological Mechanism of Action

Structure-Activity Relationship

Preparation and Manufacture

N1-Heterocyclic Sulfanilamides

N1-Acylsulfanilamides

N1-Heterocyclic-N4-Acylsulfanilamides

N1-Heterocyclic-N1-Acetylsulfanilamides

Miscellaneous Compounds

General Anesthetics, Volatile and Gaseous

Nitrous Oxide

Cyclopropane

Diethyl Ether

Fluroxene

Methoxyflurane

Halothen

Enflurane

Isoflurane

General Anesthetics, Fixed

Ultrashort-Acting Barbiturates

Propanidid

Ketamine

Innovar

Althesin

Etomidate

Spinal Anesthetics

Metabolism and Toxicity of Volatile Anesthetics

Adjuncts to General Anesthesia

Local Anesthetics

Benzocaine

Dimethisoquin Hydrochloride

Dyclonine Hydrochloride

Lidocaine Hydrochloride Pramoxine Hydrochloride

Procaine Hydrochloride

Tetracaine Hydrochloride

28. INFRARED SPECTRA OF SOME COMPOUNDS OF PHARMACEUTICAL INTEREST

DIRECTORY SECTION

PHARMACEUTICAL / BIOTECHNOLOGY COMPANIES

WORLD WIDE PHARMACY RESOURCES

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Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitability Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

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- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

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