

List of Contents

- 1 THE SKIN**
Introduction; Epidermis and Dermis; Cell Types; Appendages. Blood Vessels; Innervation; Common Disorders; Changes during Ageing; pH and the 'Acid Mantle'.
- 2 IRRITATION AND SENSITIZATION IN THE SKIN** 21
Introduction; Irritants and Sensitizers—Definition, Symptoms, Mechanism, Photosensitizers, Photo-irritants; Evaluation of the Damaging Effects of Products; Treatment of Skin Irritation and Sensitization.
- 3 NUTRITION AND CONTROL OF SKIN FUNCTION** 28
Nutrition of the Skin—Proteins, Lipids, Melanin, Energy Supply; Specific Skin Conditions Related to Nutritional Insufficiency; Percutaneous Absorption; Hormones—Protein Hormones, Steroid Hormones, Androgens, Oestrogens; Corticosteroids; Locally Active Hormones.
- 4 CLASSIFICATION OF SKIN CREAMS** 38
Introduction; Definition; Method of Correlation; Classification.
- 5 CLEANSING AND COLD CREAMS** 47
*Cleansing Creams: Historical; User Requirements and Attributes; Types of **Formula—Oil** Continuous Solid Creams with High Oil Content, Water Continuous Solid Creams with High Oil Content. Water Continuous Solid Creams with Medium Oil Content, Water Continuous Liquid Creams with Low or Medium Oil Content, Oil Continuous Liquid Creams with Medium Oil Content; Function of Cleansing Creams.
Other Facial Cleansing Preparations: Non-aqueous Creams; Cleansing Milks and Liquid Creams; Non-emulsified Creams; Wash-off Creams; Impregnated Tissues; Rolling Preparations.*

6	NUTRITIVE, MASSAGE AND EMOLLIENT CREAMS	64
	<i>Introduction; Emollience and Moisturizing; Humectants; Vitamins; Hormones; Natural Oil-soluble Emollients—Lanolin, Artificial Preen Gland Oil, Branched Chain Compounds; Formulation—Anionic Emulsifiers, Cationic Emulsifiers, Nonionic Emulsifiers, Anionic/Cationic Emulsifiers.</i>	
7	VANISHING AND FOUNDATION CREAMS	77
	<i>Introduction; Vanishing Creams; Foundation Creams; Liquid Foundation Creams; Pigmented Foundation Creams.</i>	
8	HAND CREAMS AND HAND AND BODY CREAMS	86
	<i>Introduction; Liquid Creams; Solid Creams; Lotions, Mucilages and Jellies; Non-aqueous Preparations.</i>	
9	ALL-PURPOSE CREAMS	93
	<i>Introduction; Classification; Formulation.</i>	
10	ASTRINGENT LOTIONS AND SKIN TONICS	97
	<i>Astringent Lotions; Astringent Creams; Skin Tonics.</i>	
11	FACE PACKS AND MASKS	103
	<i>Introduction; Face Packs: Wax-based Systems; Rubber-based Systems; Hydrocolloid-based Systems; Earth-based Systems. Anti-wrinkle Preparations.</i>	
12	FACE POWDERS AND MAKE-UP	111
	<i>Face Powders: Function and Properties; Covering power—Titanium dioxide. Zinc oxide; Absorbency—Kaolin, Starch, Cellulose, Calcium carbonate, Magnesium carbonate, Plastics; Slip—Talc; Adhesion—Metallic stearates, Silica; Bloom—Powdered silk; Colouring; Perfuming; Formulation; Manufacture. Compact Powders. Cake Make-up: Application. Make-up Cream. Liquid Powders. Wet white, Cosmetic stockings. Liquid Make-up.</i>	
13	COLOURED MAKE-UP PREPARATIONS	140
	<i>Lipsticks: Characteristics; Ingredients—Colours, Base, Perfumes; Formulae; Manufacture; Transparent Lipsticks. Lip Salves. Liquid Lipsticks.</i> <i>Rouge: Dry Rouge; Wax Based Rouge; Cream Rouge; Liquid Rouge. Eye Make-up: Mascara--Cake Mascara, Cream Mascara, Liquid Mascara; Eye Shadow--Cream Eyeshadow, Stick and Cake Eyeshadow, Liquid Eyeshadow; Eyeliner; Eyebrow Pencils.</i>	

- 14 THE APPLTCATTON OF COSMETICS** 176
Introduction; The Cure and Cleansing of the Skin. Cosmetic Application: Foundation; Rouge; Powder; Eye Make-up; Lipstick.
- 15 THE NAILS** 184
Histology—Composition, Rate of Nail Growth; Nail Disorders—Leukonychia, Koilonychia, Effects of Disease, Brittleness, Disorders of Fungal or Bacterial Origin; Effect of Vitamins on Nail Growth.
- 16 MANTCURE PREPARATIONS** 190
Cuticle Removers. Nail Bleaches. Nail Creams. Nail Strengtheners. Nail White. Nail Polishes. Nail Lacquers—Requirements; Ingredients; Formulation; Base Coats and Top Coats. Enamel Removers—Cream Type Removers. Nail Driers. Plastic Finger Nails and Elongators.
- 17 PROTECTIVE CREAMS AND HAND CLEANSERS** 216
Protective Creams: Against Dry Dust; Against Aqueous Solutions; Against Solvents, Oils and Fats; Against Physical Hazards; Testing Protective Preparations. Antiseptic Creams. Hand Cleansers; Sulphonated Oils; Waterless Hand Cleansers.
- 18 BATH PREPARATIONS** 235
Bath Salts: Requirements; Ingredients. Bath Cubes and Tablets. Bath Oils and Emulsions: Bath Oils; Foam Baths; Foaming Bath Oils. Body or Dusting Powder.
- 19 DEODORANTS AND ANTPERSPIRANTS** 251
Introduction; Perspiration and its Control—Secretory Glands, Racial differences, Composition, Secretion, Disorders, Body Odour and its Control, Antibacterial Compounds, Antiperspirant Mechanism, Antiperspirant Materials, Assessment of Deodorants, Assessment of Antiperspirants; Product Formulation—Deodorants, Liquid Antiperspirants, Liquid Cream Antiperspirants, Stick Antiperspirants, Cream Antiperspirants, Aerosol Antiperspirants, Deodorant Antiperspirant Compact Powders; Effect of Antiperspirants on Fabrics.
- 20 DEPILATORIES** 277
Introduction; Epilation; Electrolysis; Chemical Depilation—Sulphides, Stannites, Substituted Mercaptans, Thioglycollates, Enzymes; The Ideal Depilatory.

- 21 FOOT PREPARATIONS** **287**
Introduction; Foot Powders; Foot Bath Salts; Foot Creams; Corn and Callous Preparations; Chilblain Preparations; Athlete's Foot Preparations.
- 22 INSECT REPELLENTS** **298**
Introduction; Repellent Materials—Dimethyl phthalate, 2-Ethyl hexanediol, Indalone, Anabasine Sulphate, Other Repellents; Formulation—Lotion, Sprays, Gel, Creams, Sticks.
- 23 SUNSCREEN, SUNTAN AND SUNBURN PREPARATIONS** **306**
Sunlight and the Human Body: Beneficial Effects; Adverse Effects—Sunburn, Chronic Exposure; Solar Radiation and its Effect on Skin; The E-viton Concept and the Minimal Erythema Dose; The Protective Mechanism of the Skin. Sunscreen and Suntan Preparations: Sunscreens—Evaluation, Film Thickness, Formulation, Heavy Sunscreens; Palliative Preparations; Artificial Suntan—Stains, Systemic Materials, Dihydroxy-acetone, Erythulose.
- 24 THE HAIR** **338**
Introduction; Morphology—Shaft, Root; Growth—Hair Cycle, Alopecia; Diet; Endocrine Glands—Gonads, Progesterone, Adrenal Cortex, Pituitary; Chemistry—Mineral Constituents, Chemical Properties; Pigmentation—Melanin. Conversion of Tyrosine, Other Colouring Matter, Greying; Sebum; Dandruff—Definition, Aetiology, Scalp Malfunction, Microbial Attack, Combination; Therapy—Dry Scalp, Greasy Scalp.
- 25 SHAMPOOS** **378**
Introduction. Detergency. Evaluation of Shampoo Bases. Raw Materials: Principal Surfactants; Secondary Surfactants; Additives. Formulation: Clear Liquids; Liquid Creams; Solid Creams and Gels; Antidandruff; Oil Shampoos; Powders; Aerosols; Dry Shampoos; Miscellaneous Shampoo Compositions, Safety.
- 26 HAIR SETTING LOTIONS. SPRAYS AND DRESSINGS** **408**
Use and Purpose. Women's Hairdressings: Mucilage Lotions; Resin Lotions; Heated Curlers; Hair Sprays—Resins, Evaluation, Toxicity. Men's Hairdressings: Brilliantines—Non-aqueous, Liquid, Alcoholic, Separable; Non-oily Fixatives—Aerosol Sprays for Men; Emulsions—Water-in-Oil creams, Oil-in-Water Creams; Gels.

27	HAIR TONICS	426
	<i>Introduction. Therapeutic Products: Phenols and Alcohols; Natural Extracts; Sulphur Derivatives; Vitamins and Unsaturated Acids; Miscellaneous Materials. Lotions and Women's Hairdressings. Conditioners.</i>	
28	HAIR COLORANTS	437
	<i>Characteristics; Vegetable Dyes; Metallic Dyes; Synthetic Organic Dyes — Temporary. Semi-permanent, Permanent, Non-Para Oxidation Dyes. Reactive Dyes; Removers; Bleaching.</i>	
29	PERMANENT WAVING	464
	<i>Introduction; Chemistry of Hair Waving; Evaluation; Hot Waving — Solutions, Chemical Heating; Cold Waving — Chemical Neutralization. Atmospheric Oxidation; Tepid Waves; Roller and Pin Perms; Instant Perms; Perfuming; Toxicity; Hair Strengthening Preparations.</i>	
30	THE TOOTH AND ORAL HEALTH	486
	<i>Introduction. The Tooth and Its Surroundings: Structure of the Tooth — Dentine, Enamel; Saliva; The Acquired Integuments — Pellicle, Plaque, Calculus. Major Oral Health Problems: The Magnitude of the Problem; Dental Caries — Theories, Control; Periodontal Disease. The Use of Therapeutic Toothpastes: Active Ingredients.</i>	
31	DENTIFRICES	509
	<i>The Basic Requirements. Toothpastes: Basic Structure; Ingredients; Formulation; Manufacture. Tooth Powders: Manufacture. Solid Dentifrice. Performance Tests: Abrasive Action; Lustre. Toothbrush and Toothbrushing. Denture Cleansers.</i>	
32	MOUTHWASHES	534
	<i>Introduction; Choice of Antiseptics; Flavouring; Mouth Fresheners.</i>	
33	BABY PREPARATIONS	540
	<i>Introduction. Infantile Disorders: Napkin Dermatitis; Infantile Eczema; Dandruff and Seborrhoea. Product Formulation. Baby Powders. Baby Oil. Baby Lotions and Creams. Nappy Rinses. Baby Shampoos.</i>	
34	FUNCTIONAL PRODUCTS FOR TEENAGERS	553
	<i>Introduction. Hair Problems. Skin Problems.</i>	

- 35 SHAVING PREPARATIONS** **562**
Men's Toiletry Ranges. Pre-shave Preparations: Preparations for Use before Wet Shaving—Beard Softening Preparations, Lotions; Pre-electric Shave Preparations—Lotions, Astringent Types, Lubricant Types, Powder, Sticks, Aerosols, Powder Aerosols. Wet Shave Preparations: Shaving Soap Cream—Criteria, Formulations, Free Alkali, Rottling; Liquid Shaving Cream; Brushless Cream; Brushless Sticks; Novel Compositions; Aerosol Shaving Cream; Heated Shaving Lather; Corrosion of Razor Blades. After-Shave Preparations: Lotions; Gels; Creams; Powders.
- 36 HAIR STRAIGHTENERS AND SKIN BLEACHES** **589**
Hair Straightening: The Hot Comb Method; Caustic Preparations; Chemical Hair Reducing Agents. Skin Bleaches: Mercurial Preparations; Hydroquinone; Hydroquinone Monobenzyl Ether; Hydroquinone Monomethyl Ether; Sulphydrylamines, Catechol and Catechol Derivatives.
- 37 COSMETICS FOR EXTREME CLIMATES** **599**
Temperature Effects: Humidity Effects; Actinic Energy Effects.
- 38 SURFACE-ACTIVE AGENTS** **609**
Introduction; Classification—Anionic, Cationic, Nonionic, Ampholytics; Selection and Use—Anionic, Cationic, Nonionic, Ampholytics; Properties—Surface Tension, Interfacial Tension, Wetting, Dispersion and Detergency, Foam; Toxicity.
- 39 HUMECTANTS** **624**
Introduction; Drying Out; Properties; Types—Inorganic, Metal-organic, Organic; Hygroscopicity—Oil-in-water Emulsions, Water-in-oil Emulsions; Stability; Safety; Skin Moisturizing.
- 40 ANTISEPTICS** **636**
Introduction; Germicides Commonly Used in Soaps; Quaternary Ammonium Compounds; Miscellaneous Antiseptic Materials.
- 41 PRESERVATIVES AND ANTIOXIDANTS** **655**
Preservatives: Microbial metabolism; Origins of Contamination; Microbial growth in Products; Preservative Requirements; Factors Influencing the Effectiveness of Preservatives; Susceptibility of Organisms to Preservatives; Interaction between Ingredients and Preservatives; Selection of a Preservative; Tests for

Effectiveness; Safety Aspects. Antioxidants: Use of Antioxidants; Choice of Antioxidants; Phenolic Antioxidants; Non-phenolic Antioxidants; Testing; Photodeterioration.

'42 EMULSIONS AND EMULSIFIERS	691
<i>Introduction. Emulsions and Related Systems. Transparent Dispersions. General Theories: Emulsifying Agents—Hydrocolloids, Finely Divided Solids, Surface Active Agents, Anionic, Cationic, Ampholytic, Nonionic. Properties of Cosmetic Emulsions—Stability, Stability in Use, Rheology; Selection of Emulsion Type; General User Properties; Selection of Emulsifiers; H.L.B. Values—Method of Use, Limitations; Determination of Emulsion Stability; Determination of Emulsion Type.</i>	
43 MANUFACTURE AND MIXING	727
<i>Production by Batches; Processes—Mixing, Pumping, Heat Transfer, Filtration, Filling; Manufacturing Methods—Liquids, Gels, Microemulsions, Emulsions, Pastes, Sticks, Powders, Pomades and Solid Brilliantines.</i>	
44 PRESSURIZED PACKS	742
<i>Introduction. The Pressurized Dispenser: Containers; Valves; Propellants; Filling. Types of Pressurized Packs: Two Phase Systems; Three Phase Systems; New Systems; Corrosion.</i>	
45 PACKAGING	785
<i>Packaging Materials—Glass, Plastics, Metals; Package Design; Closures.</i>	
APPENDIX	797
INDEX	805