

Contents

Color plates follow page xiv.

- 1 *Performance Standards for Dental Materials* 1
- 2 *Structure of Matter and Principles of Adhesion* 13
- 3 *Physical Properties of Dental Materials* 33
- 4 *Mechanical Properties of Dental Materials* 49
- 5 *Biocompatibility of Dental Materials* 75
- 6 *Hydrocolloid Impression Materials* 111
- 7 *Nonaqueous Elastomeric Impression Materials* 139
- 8 *Inelastic Impression Materials* 177
- 9 *Gypsum Products*
 Chemistry of Setting, Basic Principles, and Technical
 Considerations 185
- 10 *Chemistry of Synthetic Resins* 211
- 11 *Denture Base Resins*
 Technical Considerations and Processing Techniques 237
- 12 *Restorative Resins* 273
- 13 *Bonding* 301
- 14 *Solidification and Microstructure of Metals* 315
- 15 *Constitution of Alloys* 327

| | |
|----|--|
| 16 | |
| 17 | Structures and Properties 361 |
| 18 | <i>Dental Amalgam</i> Technical Considerations 387 |
| 19 | <i>Direct Filling Gold and Its Manipulation</i> 411 |
| 20 | <i>Dental Casting Alloys</i> 423 |
| 21 | <i>Inlay Casting Wax</i> 461 |
| 22 | <i>Investments for Small Castings</i> 471 |
| 23 | <i>Casting Procedures for Dental Alloys</i> 491 |
| 24 | <i>Dental Cements for Restorations and Pulp Protection</i> 525 |
| 25 | <i>Dental Cements for Bonding Applications</i> 555 |
| 26 | <i>Dental Ceramics</i> 583 |
| 27 | <i>Soldering</i> 619 |
| 28 | <i>Wrought Base Metal and Gold Alloys</i> 631 |
| 29 | <i>Dental Implants</i> 655 |
| 30 | <i>Finishing and Polishing Materials</i> 663 |
| | <i>Index</i> 681 |