Contents

Part I

General Survey

1. Human Tooth *3*
2. Dentist and His Work *14*
3. History of Dental Materials *19*

Part II

Foundation

4. Matter *31*
5. Physical Properties *45*
6. Mechanical Properties *55*
7. Biocompatibility of Dental Materials *70*
8. Metals *75*
9. Tarnish and Corrosion *97*

Part III

Super-structure

SECTION A: MATERIALS INVOLVED IN MAKING DENTAL AND ALLIED APPLIANCES—PROSTHODONTIC MATERIALS

10. Impression Materials *105*
11. Gypsum Products *132*
12. Synthetic Resins *144*
13. Dental Implants *178*

SECTION B: MATERIALS INVOLVED IN RECONSTRUCTION OF DAMAGED TOOTH—CONSERVATIVE MATERIALS

14. Restorative Materials *182*
15. Restorative Resins *186*
16. Dental Amalgam *202*
17. Direct Filling Gold—Cohesive Gold *216*
18. Dental Cements *221*

SECTION C: MATERIALS FOR INLAYS, CROWNS AND BRIDGES

19. Dental Casting Alloys *245*
20. Dental Waxes *256*
21. Dental Investment Materials for Metal Casting *262*
22. Casting Procedure *268*
23. Ceramics *283*

SECTION D: MATERIALS FOR ORTHODONTICS AND OTHERS

24. Wrought Base Metal Alloys *304*
25. Soldering and Welding *313*
26. Finishing and Polishing Materials: Abrasives and Polishers *319*
27. Tooth Cutting Materials *328*

Appendix 333

Index 335