

## SECTION 2.5

# Applications of Biomaterials

## OUTLINE

[Introduction to Applications of Biomaterials](#)

[Cardiovascular Medical Devices: Heart Valves, Pacemakers and Defibrillators, Mechanical Circulatory Support, and Other Intracardiac Devices](#)

[Cardiovascular Medical Devices: Stents, Grafts, Stent-Grafts and Other Endovascular Devices](#)

[Extracorporeal Artificial Organs and Therapeutic Devices](#)

[Orthopedic Applications](#)

[Dental Applications](#)

[Ophthalmologic Applications: Introduction](#)

[Bioelectronic Neural Implants](#)

[Burn Dressings and Skin Substitutes](#)

[Description and Definition of Adhesives, and Related Terminology](#)

[Biomaterials for Immunoengineering](#)

[Biomaterials-Based Model Systems to Study Tumor–Microenvironment Interactions](#)

[Drug Delivery Systems](#)

[Responsive Polymers in the Fabrication of Enzyme-Based Biosensors](#)