## Volume 1 covers:

- Modeling and Simulation of Biomedical Systems
- Bioheat Transfer
- Physical and Flow Properties of Blood
- Respiratory Mechanics and Gas Exchange
- Biomechanics of the Respiratory Muscles
- Biomechanics of Human Movement
- Biomechanics of the Musculoskeletal System
- Biodynamics
- Bone Mechanics
- Finite Element Analysis
- Vibration, Mechanical Shock, and Impact
- Electromyography
- Biopolymers
- Biomedical Composites
- Bioceramics
- Cardiovascular Biomaterials
- Dental Materials
- Orthopaedic Biomaterials
- Biomaterials to Promote Tissue Regeneration
- Bioelectricity
- Biomedical Signal Analysis
- Biomedical Signal Processing
- Intelligent Systems and Bioengineering
- BioMEMS