BIOMATERIALS

BIODEGRADABLE MATERIALS FOR MEDICAL APPLICATIONS

To mitigate the long-term side effects associated with current corrosion-resistant implants, a new generation of bioabsorbable medical devices is currently being developed. Implants made of biodegradable materials are absorbed and excreted by the body after completing their temporary mechanical, scaffolding, and biointegration functioning. Biochemical and mechanical attributes of all classes of materials, including metals, ceramics, and polymers, are broadly explored by the scientific and industrial research and development laboratories for various clinical applications over the last two decades.

The symposium will address this emerging multi-disciplinary field involving materials scientists and engineers working with biologists and medical personnel. Papers will be presented on all aspects relating to biodegradable-based implants including vascular, orthopedic, dental, tissue engineering, wound closure, and other applications. This covers—but is not limited to—materials selection/development and their processing, surface treatments, and modifications, in-vitro/in-vivo performance assessment and evaluation, and product design and certification.

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