

SUBMIT AN ABSTRACT FOR THE FOLLOWING SYMPOSIUM

BIOMATERIALS

Advanced Biomaterials and Implants

This symposium will explore cutting-edge advancements in biomaterials and implants, focusing on their design, functionality, and integration with biological systems. Topics include the development of innovative biomaterials such as advanced 3D materials, porous structures, surface-engineered materials, biodegradable metals, bioactive ceramics, advanced polymers, and nanomaterials, with applications in orthopedics, soft tissue repair, and vascular health. The session will also highlight injectable materials and devices for minimally invasive therapies, including bioresponsive hydrogels and drug delivery systems. Contributions leveraging computational modeling, machine learning, and data-driven approaches to optimize material properties, biocompatibility, and long-term performance are encouraged. By fostering multidisciplinary collaboration, this symposium aims to address critical challenges in healthcare and shape the future of biomaterials and medical implants.

SPONSORED BY:

TMS Functional Materials Division; TMS Structural Materials Division; TMS Biomaterials Committee

ORGANIZED BY:

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