

THE WORLD COMES HERE.
TMS 2025
154th Annual Meeting & Exhibition



March 23–27, 2025
MGM Grand Las Vegas
Hotel & Casino
Las Vegas, Nevada, USA
#TMSAnnualMeeting



SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2025 SYMPOSIUM:

BIOMATERIALS

Advanced Biomaterials for Biomedical Implants

This is certainly an exciting time for the field of advanced biomaterials. With a record number of implant device surgeries, medical devices, and returning function back to those who lost it due to disease or trauma, the biomedical implant field is growing at an alarming rate — so fast, it is hard for many of us to keep up. This symposium brings a new concept to the TMS Annual Meeting as it covers recent biomaterials and their properties that are used in the body as implants to regain the function back to damaged or diseased tissues and organs. It highlights how researchers and clinicians are pushing the envelope in tissue regeneration as well as disease prevention, detection, and treatment. It covers more traditional areas such as hip, craniofacial, and spinal implants but also pushes us in new directions such as nanomedicine and implantable nanomaterials and covers implants used for regaining functions in different organs in the body. It covers biomaterial implants that can potentially determine changes in tissue health and then respond to those changes to ensure strong healthy tissues and organs. It also emphasizes novel solutions to traditionally difficult tissue repair, such as meniscus repair and other organ tissue regeneration strategies. Most importantly, highlights the dynamic field of nanomedicine and nanobiomaterials as it introduces new chemistries to tissue regeneration, such as nanobiomaterials, biodegradable metals and new polymers. In every aspect of tissue regeneration and nanomedicine, it critically evaluates where we are and where we need to be.

The abstracts submitted to this symposium could include any of the topics below:

- Biomaterials for Nanostructured Implants
- Biomaterials for Antimicrobial Implants
- Biomaterials for Drug-Delivery Implants
- Biomaterials for Sensor Implants
- Biomaterials for Injectable Implants
- Biomaterials for Soft Tissue Implants
- Biomaterials for Total Joint Replacement Implants (Hip, Knee, Spine, Shoulder, Elbow)
- Biomaterials for Dental Implants
- Biomaterials for Oral and Maxillofacial Implants
- Biomaterials for Exoskeletal Implants
- Biomaterials for Cardiovascular Implants
- Biomaterials for Pulmonary Implants
- Biomaterials for Cochlear Implants
- Biomaterials for Ocular Implants
- Biomaterials for Liver and Kidney Implants
- Biomaterials for Brain Implants
- Biomaterials for Bionic Implants
- Biomaterials for Skin Implants
- Biomaterials for Bladder Implants
- Biomaterials for GI Implants

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SYMPOSIUM SPONSORS

TMS Functional Materials Division, TMS Biomaterials Committee

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QUESTIONS?

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