



2024 BIOINTERFACE WORKSHOP & SYMPOSIUM Surfaces in Biomaterials Foundation

McNamara Alumni Center | Minneapolis, MN

10/02/24 - 10/04/24

SESSIONS

Biomaterials in Vascular Devices and Applications

Translational Challenges to Surface Modification

Next Frontiers in Medical Fabrics, Fibers, and Films

Surface Modification Technologies

Alternative Sterilization Technologies

Anti-Microbial / Anti-Biofouling Technologies

Functional Surface Modifications and
Characterizations





Abstract Guidelines

ELECTRONIC ABSTRACT SUBMISSION

Authors are encouraged to submit the online submission form by May 31, 2024.

Unlike most Academic symposia, full disclosure of materials, methods, and funding sources is encouraged but NOT required so that presenters may speak about their latest work before it is published in full detail elsewhere.

Accepted abstracts will subsequently be showcased on the BioInterface 2024 website. Access to this website is exclusive to registered attendees. Please ensure that you submit a separate form for each abstract submission.

Please submit one abstract for each presentation; avoid submitting multiple copies of the same abstract, refrain from submitting in a blinded format, and ensure that your name, address, and email address are included in the submitted abstract. Additionally, indicate whether you are submitting for an oral or poster presentation.

FAILURE TO PRESENT

The presenting author is expected to present the paper. Should an emergency situation occur at the time of your presentation at BioInterface 2024, please notify the Chair of your session as well as the Overall Program Committee Chair (Tim Bloomquist) as soon as possible. It is the presenting author's obligation to ensure that the abstract is presented.

PRESENTER REGISTRATION

Presenting authors **MUST** register and pay to attend the event. If registration is not received by August 1, 2024, the presentation will be removed from the program. Online registration is available on the Surfaces in Biomaterials Foundation website.

NOTIFICATION

Notification of acceptance or rejection will be e-mailed in early March. The final selection of abstracts for presentation and placement of accepted abstracts in the program format will be made by the Program Committee.

TITLE

Type the abstract title in upper and lower case letters. Use a concise and descriptive title.

ABSTRACT BODY

The abstract needs to address how the work described relates to the biointerface.

Abstracts accepted for podium presentation will be provided 15 minutes for didactic presentation, followed by 5 minutes for discussion. The nature of the multiple session format makes it imperative that these time limits be strictly observed by all participants. Audio-visual includes a single LCD projector, screen, podium and laptop. Your presentation must not include animation or sub-links to other programs.

ALL ABSTRACTS ARE DUE BY May 31, 2024

2024 Program Committee

Valerie Binetti, W.L. Gore & Associates
vbinetti@wlgore.com

Joe Chinn, J Chinn LLC
jchinn@q.com

Aylvin Dias, DSM Biomedical
aylvn.dias@dsm.com

Andrew Robinson, University of Texas - Austin
ajrobinson@utexas.edu

Sinduja Thinamany, Medtronic
sinduja.thinamany@medtronic.com

Tim Bloomquist, ISurTec
tbloomquist@isurtec.com

Marziya Hasan, Shape Memory Medical
marziya@shapemem.com

Chander Chawla, Evonik Corporation
chander.chawla@evonik.com

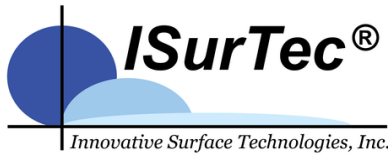
Aaron Strickland, iFyber
astrick@ifyber.com

Tyler Boone, Innovotech Inc
tyler.boone@innovotech.ca

Bill Theilacker, Medtronic
bill.theilacker@medtronic.com

Thomas H. Jozefiak, Glycologix, Inc.
tom@glycologix.com

2024 Supporting Members



Example Abstract

Novel Fermentation based recombinant Collagen promising for medical sponges.

C. Chawla , T. Smolnik , M. Jannasch , A. Karau

Evonik, Essen, Germany

chander.chawla@evonik.com

Evonik provides a new biomaterial derived from a fermentation synthesis, that mimics the structure of natural collagen by forming a triple helix. Thus, the fermentation-based process ensures a completely animal-free product with a high batch-to-batch reproducibility. Moreover, triple helical structure is crucial to resemble closely missing extracellular matrix structures, important for tissue support, replacement, and regeneration. Vecollan® consists of an amino acid sequence that includes negatively and positively charged side chains allowing functionalization and cross-linking of Vecollan® into different forms. One versatile form of Vecollan® are sponges. Vecollan® sponges can be generated by dehydrothermal treatment of a lyophilized scaffold. The dehydration reaction results in amide bonds linking several molecules to a stabilized 3D scaffold. Those Vecollan® sponges have been used for cell seeding and in vivo implantation studies with promising cell infiltration and growth. The latest study on seeding human mesenchymal stem cells and differentiation to bone cells within Vecollan® sponges indicate a high potential for bone applications. Natural collagen mimetic Vecollan® is now available ready to replace animal-derived collagen in medical applications.