



FEBRUARY 23-27, 2020 SAN DIEGO, CALIFORNIA, USA www.tms.org/TMS2020



Join Us for: Frontiers of Materials Award Symposium: Leveraging Materials in Topology Optimization

Date: Tuesday, February 25, 2020 **Time:** 8:30 a.m. to 5:00 p.m.

Location: San Diego Convention Center, Room 4 **Organized by**: Natasha Vermaak, Lehigh University

Topology optimization is pushing the frontiers of materials design by decoupling and independently optimizing material properties and functionality. Join us for a special, one-day session exploring this emerging topic area.

FEATURED PRESENTATIONS



8:30 a.m. to 8:50 a.m. **"Leveraging Materials in Topology Optimization"**Natasha Vermaak, Lehigh University



11:10 a.m. to 11:50 a.m.

"Materials, Design and Emerging
Objects"

Virginia San Fratello, San Jose
State University



8:50 a.m. to 9:30 a.m.
"Multiscale/Level Design of
Materials and Structures"
H. Alicia Kim, University of
California San Diego



2:00 p.m. to 2:40 p.m.
"Topology Optimization for Architected Materials"
James Guest, Johns Hopkins University



9:30 a.m. to 10:10 a.m. **"Topology Optimization for Additive Manufacturing"**Albert To, University of Pittsburgh



2:40 p.m. to 3:20 p.m.
"Sustainable Fashion Design, 3D and 4D Printing, and The New Age Lab"

Julia Daviy, The New Age Lab



10:30 a.m. to 11:10 a.m.
"Nonlinear Composite Materials
Design through Multi-material
Topology Optimization
Frameworks"
X. Shelly Zhang, University of
Illinois at Urbana Champaign

SPEAKER PANEL DISCUSSION AND POSTER PREVIEWS

3:20 p.m. to 3:40 p.m.

Panel Discussion: "Leveraging Materials in Topology Optimization"

4:00 p.m. to 4:20

Speaker Poster Previews

4:20 to 5:00

Speaker Poster Session