

## Medical Plastics Division “Happy Hour Speaker Series”

Featuring: **Dr. Marziya Hasan**

**Wednesday, April 22, 2026, 6:00p – 7:00p Eastern** (adjust for your time zone)

### Agenda:

6:00 Welcome / Introductions / Review Session Format

6:05 Introduce our featured speaker, **Marziya Hasan**

6:30 Begin Q&A & continue “Happy Hour” discussion

7:00 Wrap up and Thanks to all for participating, especially **Marziya Hasan!**

### Title: “Shape Memory Polyurethane Foams for Embolic Occlusion”

**Abstract:** Shape memory polymers (SMPs) are a versatile class of biomaterials that can be used for biomedical applications, such as minimally-invasive embolic occlusion procedures. Their ability to transition from a compact, catheter-deliverable form to an expanded structure under physiological conditions enables precise deployment within the body.



In relation to vascular embolization and aneurysm sac filling, SMP-based polyurethane foams that are fabricated by the team at Shape Memory Medical Inc., are shown to promote stable clot formation, tissue integration, and progressive healing. These properties position SMPs as a promising solution for improving clinical



outcomes in endovascular therapies.

**Bio:** Dr. Marziya Hasan is a materials engineering leader specializing in polymer chemistry and medical device development. She currently serves as Senior Manager of Chemistry at Shape Memory Medical, Inc., where she leads engineering teams, scales advanced shape memory polymer technologies, and helps drive R&D-to-manufacturing transfer for Class III medical products. She earned her Ph.D. in Biomedical Engineering from Texas A&M University and holds a bachelor’s degree in Chemistry from Texas Lutheran University. She is an inventor on two U.S. patents with numerous peer-reviewed publications. She has also served as a Co-Investigator on multiple grants funded by the National Institutes of Health.

Dr. Hasan is also a part-time lecturer in Chemical and Materials Engineering at San Jose State University and an active professional volunteer, serving on the Board of Directors for various organizations such as the Society of Plastics Engineers - Golden Gate Section and Silicon Valley Engineering Council.

### Speaker info:

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