



## List of Poster Presentations

60<sup>th</sup> meeting of the Texas Society for Microscopy (TSM)  
UT Austin - Peter O'Donnell building (POB)

Friday, 20th of February 2026 from 11:25 a.m. - 12:30 p.m. and 1:30 p.m. - 3:00 p.m.

Time	POB - VisLab
8:00 a.m. - 10:00 a.m.	Poster Setup
No.	
1	<b>Evolutionary Implications of Slab Photonic Crystal Properties in Diatom Frustules</b> Presenter: <b>Matt P. Ashworth</b> The University of Texas at Austin
2	<b>Fabrication of Guayule-ZnO:Co Fibers Film by Electrospinnig for Greenhouse Applications</b> Presenter: <b>Gabriela Azcárate</b> The University of Texas at San Antonio
3	<b>Calculating Reduced Specific Contact Resistivity of Laboratory-Grown Boron-Doped Diamond Using the Transmission Line Model</b> Presenter: <b>Mahfuz Ahmed Azmain</b> Texas State University, San Marcos
4	<b>Scanning Electron Microscopy of Silver-Coated Copper Nanowire: Refinement Methodologies at Material</b> Presenter: <b>Scott Barrett</b> Texas State University and Material Hybrid Manufacturing, San Marcos
5	<b>Vapor Phase Deposition of Electroactive Polymers on Electrospun Commodity Polymer Nanofibers for Energy Storage</b> Presenter: <b>Shuvo Brahma</b> Texas State University, San Marcos
6	<b>Machine Learning and PhaseT3M to Determine Thickness and Defocus from Focal Series High Resolution Transmission Electron Images</b> Presenter: <b>Carlos Aguilar Brand</b> The University of Texas at San Antonio
7	<b>Powders grain by grain: High-Throughput Structural Analyses Enabled by Automated Electron Diffraction</b> Presenter: <b>Jessica Burch</b> Rigaku Americas Corporation, The Woodlands
8	<b>Microscopic Analysis of Striped Bass (<i>Morone saxatilis</i>) Olfactory System</b> Presenter: <b>Chironjib Singha Samanta Chandan</b> Texas State University, San Marcos
9	<b>Polyelectrolyte Complex Micelles for miRNA Delivery to Neuroblastoma Cells</b> Presenter: <b>Keya Das</b> Texas State University, San Marcos
10	<b>Lysosomal Dynamics and eIF4E Phosphorylation in Chemotherapy-Induced Peripheral Neuropathy</b> Presenter: <b>Kathleen Cate Domalogdog</b> The University of Texas at Dallas

11	<b>Advanced SEM-Cathodoluminescence Reveals Diagenetic Attributes of Natural Outcrop Fractures Suitable for Quantitative Extrapolation to Subsurface Geothermal Reservoirs: A Scanning Electron Microscopy Geologic Case Study</b> Presenter: <b>Sara J. Elliott</b> The University of Texas at Austin
12	<b>Time-resolved Microstructure Evolution Studies using X-ray Computed Tomography</b> Presenter: <b>Tai-Jan Huang</b> Rigaku Americas Corporation, The Woodlands
13	<b>Antibacterial Tellurium Dioxide Nanoparticles</b> Presenter: <b>Tina Hesabizadeh</b> University of Arkansas at Little Rock
14	<b>Synthesis and Characterization of Tin Nanoparticles by Pulsed Laser Ablation in Liquids</b> Presenter: <b>MD Rajib Howlader</b> University of Arkansas at Little Rock
15	<b>Analyzing the Expression of Sigma-2 Receptor (<math>\sigma_2</math>/TMEM97) Transmembrane Protein and <math>\sigma_2</math>/TMEM97's Role in Visceral Bladder Pain</b> Presenter: <b>Bhavya A. Jaiswal</b> ( <i>Small Grant Awardee 2025</i> ) The University of Texas at Dallas
16	<b>Synthesis of Bismuth Nanoparticles via Pulsed Laser Ablation in Acetone</b> Presenter: <b>Min Khadka</b> University of Arkansas at Little Rock
17	<b>In Situ Metrology of Wafer-Vacuum Chuck Interfaces Using Reflection Spectroscopy to Measure Air Gap</b> Presenter: <b>Yeaen Lim</b> Texas A&M University, College Station
18	<b>Interfacial Gelation of Colloidal Silicon Nanocrystal</b> Presenter: <b>Loc Ngo</b> The University of Texas at Austin
19	<b>A CRO Guide to Fluorescence Staining and Imaging using Xiphophorus spp. Brian and Eye Tissue Sections</b> Presenter: <b>Ololade A. Olanipekun</b> Texas State University, San Marcos
20	<b>High-Resolution Mineral Mapping of Geological Materials Using SEM-Based Automated Mineralogy</b> Presenter: <b>Priyanka Periwal</b> The University of Texas at Austin
21	<b>Effects of Thermal Decomposition on the Chemical and Crystal Structure of Teeth</b> Presenter: <b>Aislinn Reyes-Conder</b> The University of Texas at San Antonio
22	<b>Taguchi-Designed Electrospun Polypropylene Nanofibers for Use as a Superhydrophobic Surface</b> Presenter: <b>Amirarsalan Roozbeh</b> The University of Texas at Dallas

23	<b>Broadband Photodetector Based on Te Quantum Dots/TiN</b> Presenter: <b>Rajendra Subedi</b> University of Arkansas at Little Rock
24	<b>Laser-Assisted Co-Doping of Polycrystalline Diamond Films with Boron and Lithium: Towards n-type Conductivity</b> Presenter: <b>Fardeen Md Toushique</b> Texas State University, San Marcos
25	<b>Solar-Active PAN/TiO<sub>2</sub>/Electroactive Polymer Nanofibrous Membranes for Tunable Removal of Cationic and Anionic Dyes via Coupled Ionic Exchange and Photocatalysis</b> Presenter: <b>ur Rehman, Junaid</b> Texas State University, San Marcos
26	<b>Super-Resolution Microscopy Suggests that the Actin Cytoskeleton of 16HBE14o- Human Bronchial Epithelial Cells Under Acidic Extracellular pH Undergo a Gradual Loss in Organization While Still Maintaining Stress Fibers</b> Presenter: <b>Nathan Wood</b> Texas A&M University, College Station

### **Poster Awards for Material and Life Sciences:**

You will find two stickers on the back of your name tag. One is labeled "MS" (=Material Sciences) and the other one is labeled "LS" (=Life Sciences). Please place your stickers on two different posters that fulfill the following criteria in the categories Material and Life Sciences the best:

High quality of micrographs  
Excellent choice of methods/experimental design  
Excellent microscopic work  
High quality of submitted abstract  
High originality of the poster

The poster with the most stickers in each category will be the winner of the poster award