

Material Advantage Contest Award Winners 2024

Material Advantage Graduate Student Poster Competition

1st Place - \$250

Casey Zhang

Pennsylvania State University

Development of Textured Lead Zirconate Titanate (PZT) Ceramics for Passive Acoustic Sensing Applications

2nd Place - \$150

Prapassorn Numkiatsakul

University of Illinois at Urbana-Champaign

Sintering Aid Migration in Si₃N₄-Based, Ceramic Glow Plugs: Impact of Temperature and Electric Fields

3rd Place - \$100

Fumiya Kimura

Yokohama National University

In Situ Observation of Dewaxing Behavior of Alumina Green Body by a Combined OCT-TG-FTIR-MS System

Material Advantage Undergraduate Student Poster Competition

1st Place - \$250

Dylan Burke

UNC Charlotte

3D Printing of Fully Integrated Flexible Humidity Sensor for Long-Term Health Monitoring

2nd Place - \$150

Sarah Cole

Boise State University

Investigating Thermophysical Properties of Uranium Nitride Nuclear Fuel

3rd Place - \$100

Hanyu Pan

Carnegie Mellon University

Modeling the Force-Extension Response of Binary Copolymers With Molecular Dynamics Simulations

Material Advantage Undergraduate Student Speaking Contest

1st Place - \$500

David Flores

The Pennsylvania State University

Machine Learning Model Explainability for the Development of High Entropy Alloys

2nd Place - \$250 (Tie)

Julianne Chen

The Pennsylvania State University

Growing and Doping of Highly Conductive Alpha Gallium Oxide Films with Suboxide Molecular Beam Epitaxy (S-MBE)

Material Advantage Undergraduate Student Speaking Contest (continued)

2nd Place - \$250 (Tie)

Ray Tsai

University of Illinois Urbana-Champaign

Sustainable Quench Oil Replacements for Austempering Salt Quenchants

3rd Place - \$150

Anthony Conte

Rutgers, The State University of New Jersey

Dispersion of SiC Fibers Using PEI, EG, and EtOH

Material Advantage Ceramic Mug Drop Contest

Organized by Keramos

Winner - \$100 and trophy

Laura Klusendorf

University of Illinois Urbana-Champaign

Most Aesthetic Mug - \$50

Kaylyn Courtney

Colorado School of Mines

Material Advantage Ceramic Disc Golf Contest

Organized by Keramos

Winner - \$100 and trophy (Tie)

Josiah Gifaldi

Virginia Tech University

Cole Harsha

Virginia Tech University

Most Aesthetic Disc - \$100 (Tie)

Elena Granzeier

University of Illinois Urbana-Champaign

Ray Tsai

University Of Illinois Urbana Champaign