

Material Advantage Contest Award Winners 2022

Material Advantage Graduate Student Poster Competition

1st Place - \$250

Sien Liu

The University of Tokyo

Effect of Interfacial Microstructure on Tensile Property and Fracture Behavior of Bicrystal and Polycrystal Fe/Ni Interface

2nd Place - \$150

David Guirguis

Carnegie Mellon University

Quantification of Melt Pool Variability for L-PBF Additive Manufacturing by High-Speed Imaging

3rd Place - \$100

Matthew Julian

Institut d'Electronique et des Technologies du numéRique (IETR)

Structural and Dielectric Properties Relationship in Strontium-Tantalum Based Oxide Ceramics for DRA applications

Material Advantage Undergraduate Student Poster Competition

1st Place - \$250

Jack Beardshear

Carnegie Mellon University

Impact of Itaconic Acid on the Stabilization Reaction of Poly(Acrylonitrile-co-Itaconic Acid) as Examined Using Solid-State NMR Under Air and Vacuum Conditions

2nd Place - \$150

Caitlyn Santiago

Carnegie Mellon University

Fabrication of Three-dimensional Ceramic Architectures with Micro-Scale Resolution and Near Zero Shrinkage Using Aerosol Jet Printing

3rd Place - \$100

Meddelin Setiawan

Pennsylvania State University

A Novel High-energy X-ray Diffraction Microscopy (HEDM) Processing Algorithm for Reconstructing Large 3D Intragranular Orientation Gradients

Material Advantage Undergraduate Student Speaking Contest

1st Place - \$500

Aliya Kaplan

Virginia Polytechnic Institute and State University

New Ceramic Approach to Active Cooling

2nd Place - \$250

Kira Martin

University of Illinois at Urbana-Champaign

Material Characterization of TiN Films Motivated by Time and Energy Resolved Mass Spectroscopy

Material Advantage Undergraduate Student Speaking Contest (*continued*)

3rd Place - \$150

Abigail Stanlick
Iowa State University
Little known Nylon: Nylon 5,9 Synthesis and Scientific Importance

4th Place - \$100

Christopher Barns
West Chester University of Pennsylvania
Structural Phase Patterning of MoS₂

Material Advantage Ceramic Mug Drop Contest

Organized by Keramos

Winner - \$100 and trophy

Mitchell Lensing
Colorado School of Mines

Most Aesthetic Mug - \$50

Mitchell Lensing
Colorado School of Mines

Material Advantage Ceramic Disc Golf Contest

Organized by Keramos

Winner - \$100 and trophy

Victoria Rambo
Virginia Polytechnic Institute and State University

Most Aesthetic Disc - \$100

Makayla Gamiel
Missouri University of Science and Technology

Material Advantage Social Media Contest

\$100

Caitlyn Santiago
Carnegie Mellon University

\$100

Nolan Clark
McMaster University