ANNOUNCING THE BEST POSTER RECIPIENTS FROM TMS2022

Megan Enright
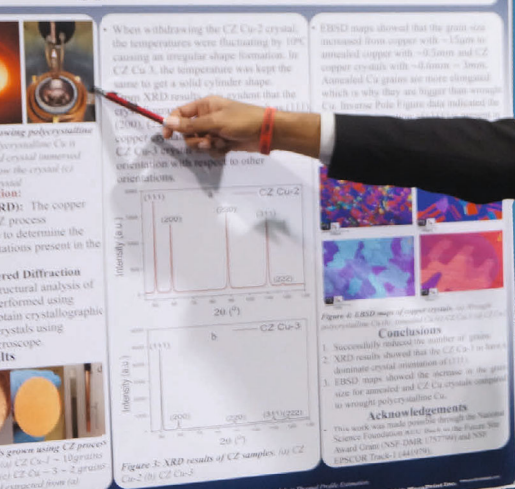
The TMS 2022 Annual Meeting & Exhibition (TMS2022), held from February 27–March 3, 2022, in Anaheim, California, featured several poster competitions. The 2022 Technical Division Student Poster Competition had 33 entries from undergraduate and graduate students and nine were awarded for their excellence with first prize ribbons by the five TMS Technical Divisions. Various other TMS2022 symposia recognized quality work through poster competitions. Congratulations to all the award recipients highlighted on the following pages.


REWAS 2022 Best Poster

"Recovery of Lithium from Black Cathode Active Materials of Discarded Lithium-ion Batteries (LIBs)," by Pankaj Kumar Choubey, CSIR-National Metallurgical Laboratory

Technical Division Student Poster Competition Winners

Extraction & Processing Division (EPD) Award

Graduate: "Sustainable Process Flowsheet for Recovery of Value-added Products from Bauxite Residue," Himanshu Tanvar, Worcester Polytechnic Institute
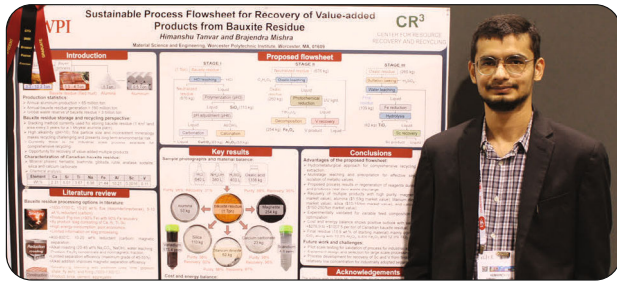


Himanshu Tanvar, Worcester Polytechnic Institute

Functional Materials Division (FMD) Awards

Graduate: "Crumpled MoS_2 Flexoelectric Energy Harvester," Yeageun Lee, University of Illinois at Urbana-Champaign
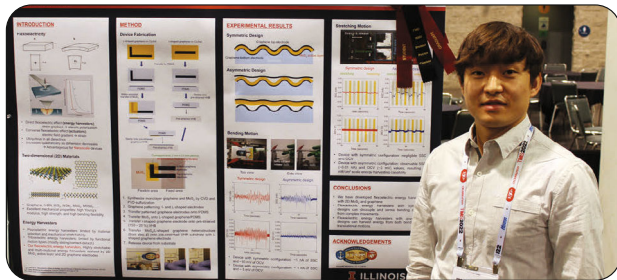


Yeageun Lee, University of Illinois at Urbana-Champaign

Undergraduate: "Thermomechanical Clamp for Curing Low-k Dielectric Dry Film," Ethan Shackelford, Georgia Institute of Technology
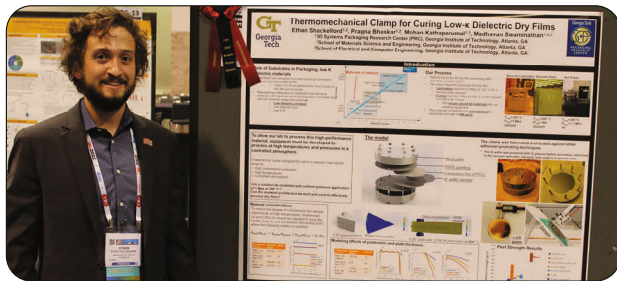
Ethan Shackelford, Georgia Institute of Technology

Light Metals Division (LMD) Awards

Graduate: "Microstructural Evolution during Post Processing of Additively Manufactured 7050 Aluminum Alloy and Its Effect on Corrosion Behavior," Rupesh Rajendran, Georgia Institute of Technology
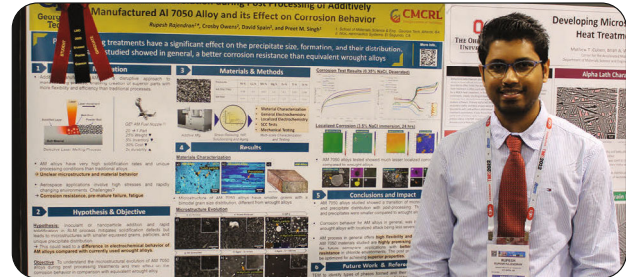

Rupesh Rajendran, Georgia Institute of Technology

Undergraduate: "Investigate the Effect of Crystallographic Orientation on the Mechanical and Corrosion Properties of Copper Single Crystals," Devin Davis, University of North Texas

Not Pictured

Materials Processing & Manufacturing Division (MPMD) Awards

Graduate: "Production via Machining and Rolling of High Resistivity Electrical Steel," B. Stiven Puentes, Purdue University
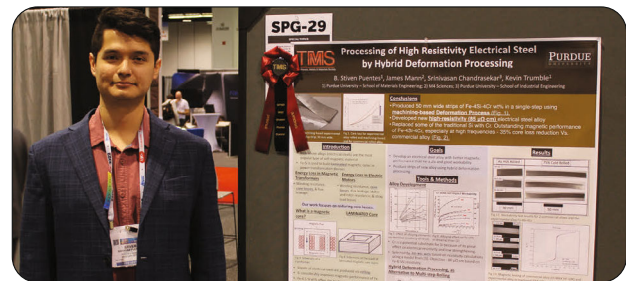
**B. Stiven Puentes, Purdue University**

Undergraduate: "COMSOL-generated Weld Heat Transfer Models for Automation of Infrared Thermography Non-destructive Testing (IR-TNDT) Image Analysis," Savannah Horowitz, University of Florida
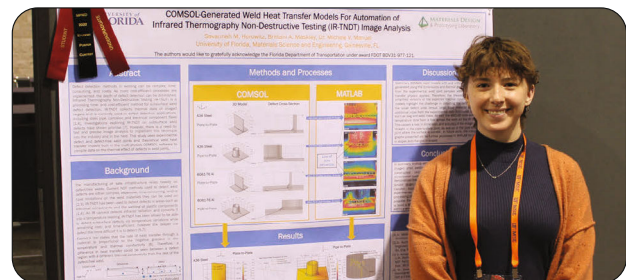
**Savannah Horowitz, University of Florida**

Structural Materials Division (SMD) Awards

Graduate: "Discovering the Corrosion Mechanism of Chromium in High-Temperature LiF-NaF-KF Molten Salts for Gen-IV Molten Salts Reactor Applications," Ho Lun Chan, University of Virginia
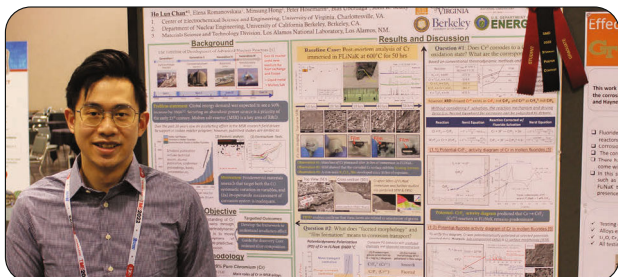

Ho Lun Chan, University of Virginia

Undergraduate: "Quantitative Analysis of Microstructure in the Ti-6Al-4V Alloy Using Scanning Electron Microscopy," Sydney Fields, University of Nevada, Reno
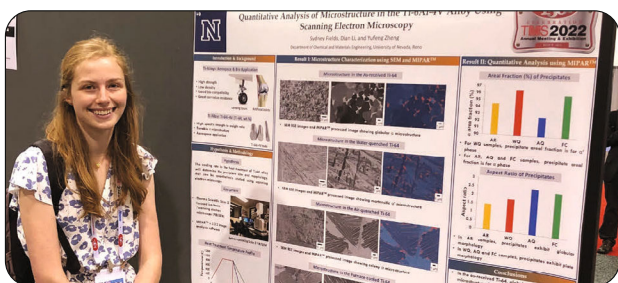

Sydney Fields, University of Nevada, Reno

Dynamic Behavior of Materials IX Best Posters

First Place Poster: "Shock-driven Foamed Metals for Studying Shallow Bubble Collapse," *Eric Stallcup*, Garry Maskaly, and Fady Najjar, Lawrence Livermore National Laboratory; and Gerald Stevens, William Turley, Brandon La Lone, and Matthew Staska, MSTS Special Technologies Laboratory
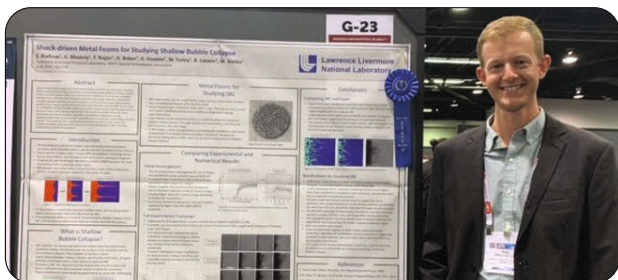

Eric Stallcup, Lawrence Livermore National Laboratory

Second Place Poster: "Dynamic Compressive Response of Hot-pressed Boron Carbide: Understanding the Role of Microstructural Heterogeneities," *Arezoo Zare*, Amartya Bhattacharjee, Lori Graham-Brady, Matt Shaeffer, and K.T. Ramesh, Johns Hopkins University; and Qi Rong Yang, Kent Christian, and Richard Haber, Rutgers University
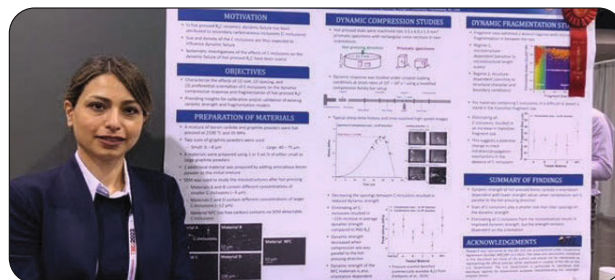
Arezoo Zare, Johns Hopkins University

Third Place Poster: "Mechanical and Structural Transformation of Titanium Containing Helium Bubbles," *Sarah Stevenson* and Peter Hosemann, University of California, Berkeley; and Saryu Jindal Fensin, Los Alamos National Laboratory
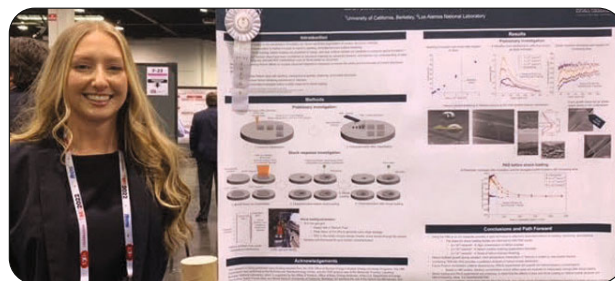
Sarah Stevenson, University of California, Berkeley

Other TMS2022 Symposia Best Posters

First Place Poster: "Gingerol – Curcumin Loaded Magnesium – Zinc Doped Calcium Phosphate Based Scaffolds and Coatings for Bone Tissue Engineering Applications," *Arjak Bhattacharjee* and Susmita Bose, W.M. Keck Biomedical Materials Research Laboratory, Washington State University
Symposium: Advances in Biomaterials for 3D Printing of Scaffolds and Tissues

Second Place Poster: "Reinforced Freeze-cast Structures Using Uniform Magnetic Fields," *Josh Fernquist*, Henry Fu, and Steven Naleway, University of Utah
Symposium: Biological Materials Science

Third Place Poster: "Alternative Method for Diagnosing Cystic Fibrosis Using Fluoresce," *Cassidy Holdeman*, University of Utah
Symposium: Biological Materials Science