

## **2022 International Metallographic Contest Winners**

### **Class 1 – Light Microscopy – All Materials**

#### **First Place**

Controlling Melt Pool Geometry Towards Embedding Sensors with Laser Powder Bed Fusion  
Holden Hyer  
Oak Ridge National Laboratory  
Oakridge, TN

#### **Second Place Dubose-Crouse Award**

Development of a Versatile Etchant to Reveal Grain Boundaries in Aluminum Alloys  
Wayne Papageorge  
The Ohio State University  
Columbus, OH

#### **Third Place**

Discovering the deformation mechanism of HCP metals additively manufactured using polarized (POL) and differential interference contrast (DIC) techniques  
Blanca Palacio  
Florida International University  
Miami, FL

#### **Honorable Mention**

Heat Tinting to Enhance Meteorite Microstructure  
Derek Barnes  
Product Evaluation Systems  
Latrobe, PA

### **Class 2 – Electron Microscopy, All Materials**

#### **First Place**

Metallographic Evaluation of Damaged Secondary Fuel Nozzle  
Girish Shejale and Vishal Suryawanshi,  
Masood John Brown Lab  
Dubai, UAE

#### **Second Place**

Effect of vanadium micro-alloying on microstructural evolution and mechanical properties of A354.0 squeeze-cast alloy  
Mr. Yogendra Mahton, Mr. Mahesh Pandiripalli, and Prof. Partha Saha  
Department of Ceramic Engineering, National Institute of Technology Rourkela  
Sundargarh, Odisha, India

## **2022 International Metallographic Contest Winners**

### **Class 2 – Electron Microscopy, All Materials**

#### **Third Place**

Microstructural Damages of Engine Run Turbine Buckets  
Girish Shejale, and Darshan Ahire  
Masood John Brown Lab  
Dubai, UAE

### **Class 3 – Student Entries – All Materials (Undergraduate Students Only)**

#### **First Place**

Chick Magnet - Sounds from a Chevy Subwoofer  
Henry Price, Eric Tkach, and Dr. Laura Moyer  
Lehigh University  
Bethlehem, PA

#### **Second Place**

The MicroAngelos: The Art and Science of Microstructures  
Gabriella Moreno, Elias Roll, Hunter Johnson, and Gerald R. Bourne  
Colorado School of Mines  
Golden, CO

#### **Third Place**

An Investigation of Acoustic Guitar String Processing  
Andrew Planitz  
The Ohio State University  
Columbus, OH

### **Class 4 – Artistic Microscopy – Color**

#### **First Place**

Hollow sphere of FeO and its dendritic structure  
Demmys Kelsen Florentino de Sousa  
SENAI/CTGAS-ER - Centro De Tecnologias Do Gás E Energias Renováveis  
Laoa Nova, Natal – RN – Brazil

#### **Second Place**

Just Before Sunrise  
Monika Trąbka  
Laboratoria BadaŃ i Batory / Research Laboratories i Batory  
Poland

## 2022 International Metallographic Contest Winners

### Class 4 – Artistic Microscopy – Color

#### Third Place

Peony  
Xueni Huang  
University of Connecticut  
Storrs, CT

#### Honorable Mention

The Coppery Night (Detail)  
Tobia Romano  
Politecnico di Milano  
Milan, Italy

#### Honorable Mention

Cast Zircaloy  
Mauricio Mendes Costa  
Centro Tecnológico da Marinha - DDNM – LACAM  
Brazil

#### Honorable Mention

Cast Iron Graphite  
Brian Tiell  
The Ohio State University  
Columbus, OH

### Class 5 – Artistic Microscopy – Black and White

#### First Place

Moth Fly  
Sheri Neva, Eurofins – EAG Los Angeles  
El Segundo, CA

#### Second Place

Zinc Iceberg  
Monika Trąbska  
Laboratoria BadaŃ i Batory / Research Laboratories iBatory  
Poland

## 2022 International Metallographic Contest Winners

### Class 5 – Artistic Microscopy – Black and White

#### Third Place

At the mountains of madness  
Xueni Huang  
University of Connecticut  
Storrs, CT

#### Honorable Mention

$\delta$ -ferrite solidification during welding of stainless steel  
Amina Sriba  
Research Centre in Industrial Technologies (CRTI)  
Algeria

#### Honorable Mention

Molten Salt Corrosion Revealing Crystallographic Texture of Ni5Cr Alloys  
Ho Lun Chan  
University of Virginia  
Charlottesville, VA

#### Honorable Mention

Gray cast iron edge  
Demmys Kelsen Florentino de Sousa  
SENAI/CTGAS-ER - Centro De Tecnologias Do Gás E Energias Renováveis  
Brazil