



## **2016 International Metallographic Contest Winners**

### **Best in Show – Jacquet Lucas Award**

Quantitative Characterization of Fracture Features in Titanium Alloys (Class 2)

**Vikas Sinha**

UES, Inc.  
Beavercreek, OH

**Sushant Jha**

Universal Technology Corp.  
Dayton, OH

**Adam Pilchak, Reji John, and James Larsen**

Air Force Research Laboratory, Materials and Manufacturing Directorate  
Wright-Patterson Air Force Base, OH

**William Porter, III**

University of Dayton Research Institute  
Dayton, OH

### **The DuBose-Crouse Award**

Heat Tinting Used for Identification of Titanium and Titanium Alloy Phases (Class 1)

Derek Barnes  
Product Evaluation Systems  
Latrobe, PA

### **George L. Kehl Award**

Cooking with Clad (Class 3)

Amanda Ruschel and Daniel Weinstock  
Lehigh University  
Department of Materials Science and Engineering  
Bethlehem, PA

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

### **First Place**

Heat Tinting Used for Identification of Titanium and Titanium Alloy Phases

Derek Barnes

Product Evaluation Systems

Labtrobe, PA

### **Second Place**

Flowforming of Austenitic Stainless Steel

Don Susan, Alice Kilgo, and Shelley Williams

Sandia National Laboratories

Albuquerque, NM

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

### **First Place**

Quantitative Characterization of Fracture Features in Titanium Alloys

#### **Vikas Sinha**

UES, Inc.

Beavercreek, OH

#### **Sushant Jha**

Universal Technology Corp.

Dayton, OH

#### **Adam Pilchak, Reji John, and James Larsen**

Air Force Research Laboratory, Materials and Manufacturing Directorate

Wright-Patterson Air Force Base, OH

#### **William Porter, III**

University of Dayton Research Institute

Dayton, OH

### **Second Place**

Advanced Microstructural Analysis of Additively Manufactured Alloy 718

Giacomo Bertali

The School of Materials, The University of Manchester

Manchester, UK

### **Third Place**

Metallography & Microanalysis Enable Z Testing of High Strength Steel Plate

Eric Lynch, Keith Taylor, and Matthew Werner

SSAB

Muscatine, IA

**Honorable Mention**

Atomic Behavior of the Nano Fuel Cell  
Takeshi Daio  
Osaka University  
Osaka, Japan

**Honorable Mention**

Kinetically Activated Bainite (KAB) Steels  
Peter Kirbiš  
Metal Ravne d.o.o, Darja Jenko  
Laboratory of Applied Surface Science  
Slovenia, Europe

**Class 3 –Student Entries – All Materials (Undergraduate Students Only)****First Place and the George L. Kehl Award**

Cooking with Clad  
Amanda Ruschel and Daniel Weinstock  
Lehigh University  
Bethlehem, PA

**Second Place**

Untapped Potential  
Donny Stires and Conor Smith  
Lehigh University  
Bethlehem, PA

**Third Place**

Chomping at the Bit!  
Ally Fraser and Rachel Weckselblatt  
Lehigh University  
Bethlehem, PA

**Honorable Mention**

How They're Linked  
Michael Pires and Joshua Smeltzer  
Lehigh University  
Bethlehem, PA

**Honorable Mention**

Enhancing the Grain Boundary and Second Phase Strengthening  
Zhangwei Wang  
Dartmouth College  
Hanover, NH

**Honorable Mention**

Recrystallization of Fe<sub>36</sub>Ni<sub>18</sub>Mn<sub>33</sub>Al<sub>13</sub> Alloy  
Margaret Wu  
Dartmouth College  
Hanover, NH

**Class 4 – Artistic Microscopy – Color****First Place**

Micro Tumbleweeds  
Dale Hensley and Bernadeta Srijanto  
Oak Ridge National Laboratory  
Oak Ridge, TN

**Second Place**

Aluminum-Lithium Alloy Friction Stir Weld  
Harold Claytor and Stephen Hales  
NASA Langley Research Center  
Hampton, VA

**Third Place**

Blue Coral Rust  
Dale Hensley and Bernadeta Srijanto  
Oak Ridge National Laboratory  
Oak Ridge, TN

**Honorable Mention**

Tungsten Filament Wire Crystal Growth  
Sheri Neva  
SEAL Laboratories  
El Segundo, CA

**Honorable Mention**

Cotton Candy Last Stage Recrystallized  
Sheri Neva  
SEAL Laboratories  
El Segundo, CA

**Honorable Mention**

New Planet 2K16  
R.Nagalakshmi  
Welding Research Institute  
Tamilnadu, India

**Honorable Mention**

Blue Parrott

Peter Kirbiš

Metal Ravne d.o.o, Darja Jenko - Laboratory of Applied Surface Science

Slovenia, Europe

**Honorable Mention**

Texas Heat Tint

Mitchell Trevino

Stress Engineering Services

Houston, TX

**Class 5 – Artistic Microscopy – Black and White****First Place**

Sponge Coral Rust

Dale Hensley and Bernadeta Srijanto

Oak Ridge National Laboratory

Oak Ridge, TN

**Second Place**

Zebra Stripe Slag Inclusions in Tensile Specimen from Pattern Welded Sample

Adam Haskins

METL

Phoenix, AZ

**Third Place**

Chaos from Order

Michael Deagen

Rensselaer Polytechnic Institute

Troy, NY

**Honorable Mention**

White Cast Iron

Sheri Neva

SEAL Laboratories

El Segundo, CA

**Honorable Mention**

Fruit Fly Eye

Sheri Neva

SEAL Laboratories

El Segundo, CA

**Honorable Mention**

Monolith

Eric Hahn

University of California San Diego - Materials Science and Engineering

La Jolla, CA

**Honorable Mention**

Ferritic Stainless Steel

Michael Morgan

Faurecia Emission Control Technologies

Columbus, IN

**Honorable Mention**

The Rocket

Derek Barnes

Product Evaluation Systems

Latrobe, PA