

2012 Winners

Best in Show - Jacquet-Lucas Award

Novel Shape Memory Alloy Nanowires
(research was conducted at Microscopy and Imaging Center, Texas A&M University, College Station, TX)

Dr. Zhiping Luo
Fayetteville State University
Fayetteville, NC 28301
USA

Class 1 Light Microscopy - Metal and Metal Alloys Only - sponsored by Struers, Inc.

First Place

Metallographic Analysis of an Explosive Valve
Lisa Diebler
Sandia National Laboratories
PO Box 5800
Mail Stop 0886
Albuquerque, NM 87185-0886
USA

Second Place

None awarded

Third Place

None awarded

Honorable Mention

None awarded

Class 2 - All Other Materials - sponsored by Allied High Tech Products

No entries

Class 3 Electron Microscopy - Transmission and Analytical

First Place

Novel Shape Memory Alloy Nanowires
(research was conducted at Microscopy and Imaging Center, Texas A&M University, College Station, TX)
Dr. Zhiping Luo
Fayetteville State University
Fayetteville, NC 28301
USA

Second Place

Forensic Analysis of Lead-Bearing Paint Chips
Steven Claves
Bechtel Marine Propulsion Corporation
814 Pittsburgh-McKeesport Rd
West Mifflin, PA 15122
USA

Third Place

Atomic Resolution STEM-XEDS Chemical Mapping of Substitutional Dy Atoms in High Coercivity Nd-Fe-B Magnet
M. Itakura, S. Matsumura, N. Watanabe, M. Nishida, T. Daio
Kyushu University
Kasuga
Fakuoka, 816-8580
Japan

Honorable Mention

None awarded

Class 4 Electron Microscopy Scanning

First Place

Kinking Deformation of a Ternary Carbide in High Temperature Creep in Air
Babak Anasori
Darin Tallman

Michael Naguib
Michel W. Barsoum
Drexel University
3141 Chestnut Street
Philadelphia, PA 19104
USA

Second Place

Fabrication of High Aspect Ratio GaAs Pores and Pillars Using Anisotropic Chemical Etching
Kotaka Shunsuke, Hidetaka Asoh, Sachiko Ono
Kogakuin University
2665-1 Nakano
Hachioji, Tokyo 192-0015
Japan

Third Place

None awarded

Honorable Mention

None awarded

Class 5 Color Microscopy

No entries

**Class 6 The Dubose-Crouse Award for Unique, Unusual, and New Techniques in
Microscopy - sponsored by Metallurgical Supply Company**

No entries

**Class 7 Undergraduate Student Entries - Metal and Metal Alloys Only - sponsored by
Precision Surfaces International**

First Place

Metallographic Analysis of a Canister of Buck Shot

Ross Cunningham, Thomas Pallotti, Anna Robertson
Lehigh University
5 E. Packer Avenue
Bethlehem, PA 18016
USA

Second Place

Metallographic Investigation of a TiCN Coated Cemented Carbide End Mill
James Hart
Lehigh University
15 Treetop Circle
Northborough, MA 01532
USA
and
Anthony Ng
Lehigh University
5 E. Packer Avenue
Bethlehem, PA 18016
USA

Third Place

A Metallographic Analysis of a Brass Tumbler Plug
Sabrina Moreira
Lehigh University
39 University Dr.
Box K444
Bethlehem, PA 18015
and
Dan Enoch
Lehigh University
39 University Dr.
Box K240
Bethlehem, PA 18015
and
Taylor McManus
Lehigh University
39 University Dr.
Box E416
Bethlehem, PA 18015
USA

Honorable Mention

None awarded

Class 8 Undergraduate Student Entries - All Other Materials

No entries

Class 9 Artistic Microscopy - Black and White Only

First Place

Moth Antennae
Sheri Neva
SEAL Laboratories
109 Rees St.
Playa Del Rey, CA 90293
USA

Second Place

Giant Cave Within a Jungle of Nickel-Copper Dendrites
Shaahin Amini, Reza Abbaschian
University of California Riverside
Department of Mechanical Engineering
A342, Bourns Hall
Riverside CA 92507
USA

Third Place

Moth Plume Scales
Sheri Neva
SEAL Laboratories
109 Rees St.
Playa Del Rey, CA 90293
USA

Honorable Mention

None awarded

Class 10 Artistic Microscopy - Color Only - sponsored by

ESI - Engineering and Scientific Investigation

First Place

Carbonic Orchid Formed by Graphite Crystals
Shaahin Amini, Reza Abbaschian
University of California Riverside
Department of Mechanical Engineering
A342, Bourns Hall
Riverside CA 92507
USA

Second Place

Aluminum Bronze BA1044 (CuAl10Fe4Ni4) Etched with Klemm III
Lukasz Boron
Foundry Research Institute
ul. Torfowa 3/5
Krakow 30-384
Poland

Third Place

None awarded

Honorable Mention

Miniature World of Anodic Titanium
Bo Chen
Virginia Tech
213 Holden Hall
Department of Materials Science and Engineering
Blacksburg, VA 24061
USA

Class 11 Digital Microscopy Artistic

First Place

Metallic Giraffe Found Grazing on Microscopic Land of Ni-Al-C
Shaahin Amini
University of California Riverside
Department of Mechanical Engineering
A342, Bourns Hall
Riverside CA 92507
USA

Second Place

Owlet Moth
Sheri Neva
SEAL Laboratories
109 Rees St.
Playa Del Rey, CA 90293
USA

Third Place

Mg Lava
Babak Anasori, Michel W. Barsoum
Drexel University
Department of Materials Science and Engineering
3141 Chestnut Street, Lebow 344
Philadelphia, PA 19104
USA

Honorable Mention

Kaleidoscope of Dendrites
Frauke Hogue
Hogue Metallography
15201 De Pauw St.
Pacific Palisades, CA 90272
USA