



2001 International Metallographic Contest Winners

Best In Show, Jacquet-Lucas Award

Anatomy of Avalokitesvara - An Ancient Chinese Cast Iron Statue

D.G. Chakrapani, PhD, PE
MEI-Charlton, Inc.
2233 S.W. Canyon Rd.
Portland Oregon 97201-2499

CLASS 1: Light Microscopy - Metals and Metal Alloys

no entries

CLASS 2: Light Microscopy - All Other Engineering Materials

1st Place

none awarded

2nd Place

Interference Contrast Microscopy Study of Step and Edge Characteristics on the Surface of Vapor-Transport-Grown ZnO Crystals

Lynn A. Boatner, Hu Longmire, Allison Baldwin
Oak Ridge National Labs
P.O. Box 2008 MS6056
Oak Ridge, TN 37831-6056

3rd Place

High Bond Strength Coatings Through Polymer Crystallization

Jangsoon Kim, Earle Ryba
304 B Steidle Building
Pennsylvania State University
University Park, PA 16802

CLASS 3: Electron Microscopy - Transmission and Analytical

1st Place

Non Destructive Structural Analysis of Surface Blisters Formed by Gas Ion Irradiation

Sin Igarashi, Shunsuke Muto, Tetsuo Tanabe
Center for Integrated Research in Science and Engineering

Nagoya University Furo-Cho, Chikusa-Ku
Nagoya 464-8603, Japan
and
Tadashi Maruyama
The Wakasa Wan Energy Research Center
Tsuruga 914-0192, Japan

2nd Place

Gold Wires of Single Atom Width

Tokushi Kizuka, Takayoshi Hattori, Takao Sumi, Katsuyoshi Kumazawa
Applied Physics School of Engineering
Nagoya University
Chikusa, Nagoya 464-8603, Japan
and
Shunji Deguchi, Mikio Naruse
Jeol Ltd.
Akishima, Tokyo 196-8558, Japan
and
Satoru Fujisawa, Shinya Sasaki, Akira Yabe, Yuji Enomoto
The National Institute of Advanced Industrial Science and Technology
Naimi, Tsukuba 305-8564, Japan

3rd Place

**Effect of Support Structure for Preparation Process
of Au/TiO₂ Catalyst by Deposition Precipitation**

Tomoki Akita, Ping Lu, Satoshi Ichikawa, Koji Tanaka, Masatake Haruta
National Institute of Advanced Industrial Science and Technology
Midorigaoka 1-8-31, Ikeda, Osaka 563-8577, Japan

3rd Place

Transformation of Nano Diamond to Graphitic Carbon

Sascha Welz, Mike McNallan
University of Illinois at Chicago
Department of Materials Engineering MC246
842 West Taylor Street
Chicago, IL 60607
and
Yuri Gogotsi
Drexel University
Department of Materials Engineering
3141 Chestnut Street
Philadelphia, PA 19104

CLASS 4: Electron Microscopy - Scanning

1st Place

Passive Layer Breakdown During High Temperature Corrosion

Jonathan Regina
Lehigh University
Whitaker Laboratory
5 East Packer Ave.
Bethlehem, PA 18015

2nd Place

Scanning Electron Microscopy of Vostok Accretion Ice

D. Cullen, Ian Baker
Thayer School of Engineering
Dartmouth College
8000 Cummings Hall
Hanover, NH 03755

2nd Place

Single Crystal Interface Morphologies Seeded Polycrystal Conversion of PMN-35PT

Patrick T. King
Materials Research Center
5 East Packer Ave.
Bethlehem, PA 18015

3rd Place

none awarded

Honorable Mention

Monitoring and Controlling a Novel Electroless Copper Plating Process With Electron Microscopy

S. Seal, J. Akesson, S.V. Shukla, R. Oder, Z. Rahman
Advanced Materials Processing and Analysis Center
and
Mechanical, Materials, and Aerospace Engineering Dept.
University of Central Florida
Orlando, FL 32816

Honorable Mention

Abrasion Resistant White Cast Iron - BS4844, Grade 3E

George Braybrook
Dept. of Earth and Atmospheric Sciences
217 Earth Sciences Building
University of Alberta
Edmonton, Alberta, Canada T6G2E3

CLASS 5: Unique, Unusual, and New Techniques in Microscopy

1st Place

Anatomy of Avalokitesvara - An Ancient Chinese Cast Iron

D. G. Chakrapani, PhD, PE
MEI - Charlton Inc.
2233 S.W. Canyon Rd.
Portland, OR 97201-2499

2nd Place

Difference of Elongated Morphology at Generation Position of TiN Ceramic Film

Yukio Inokuti
Research Laboratories
Kawasaki Steel Corp.
1 Kawasaki Chiba 260
Japan

3rd Place

none awarded

Honorable Mention

EBSF Face-Centered-Cubic Delta Phase Pu-Ga Structure

Carl Boehlert, Ass't Professor
School of Ceramic Engineering and Material Science
NYS College of Ceramics at Alfred University
2 Pine Street
Alfred, NY 14802

Honorable Mention

RIMAPS Technique The Fingerprint Detection of Surface Patterns

Nestor O. Fuentes, Dr. Eduardo Favret, Ramon A. Castillo Guerra
Comision Nacional de Energia Atomica
Centro Atomico Constituyentes
Unidad de Actividad Materiales
Av. del Libertador 8250
1429- Buenos Aires
Argentina

CLASS 6: Color Microscopy

1st Place

Impact Induced Annealing in the Gibeon Iron Meteorite

Dr. C. R. Brooks

The University of Tennessee
Materials Science and Engineering
424 Dougherty Engineering Building
Knoxville, TN 37996-2200

and

Chris McCowan
NIST Materials Reliability Division
Bldg. 2, Rm. 1600, Div. 853
325 Broadway
Boulder, CO 80305

2nd Place

Ring Spherulites

Dr. Andrew M. Weinov
Concern Styrol of the Ukraine
Pobeda Ave. 160/122
Gorlovka, 84637
Donetsk Reg.
Ukraine

and

Valerij I. Gorlov
Haris Division, AG
Sladkovicova 1306/11
14200 Prague
Czech Republic

3rd Place

304 Stainless Steel

S.G.K. Pillai, K. Sukumaran, B.C. Pai
Regional Research Laboratory
Industrial Estate, P.O.
Thiruvananthapuram 695 019
Kerala, India

CLASS 7: Artistic Microscopy - Color Only

1st Place

Vanadium Oxide

Ramiro Pereyra
Los Alamos National Laboratory
P.O. Box 1663
Los Alamos, NM 87545

2nd Place

Al-Si Semi-Solid Coating

Jamina M. Radzikowska
Foundry Research Institute
Zakopianska 73
30-418 Krakow, Poland

2nd Place

Microsegregation in AK4FeNiTiCN Casting

Jamina M. Radzikowska
Foundry Research Institute
Zakopianska 73
30-418 Krakow, Poland

3rd Place

Ni Base Superalloy

Dr. Inaki Madariaga
Industria de TurboPropulsores
Materials and Process Department
Parque Tecnológico 300
48170 Zamudio, Spain

Honorable Mention

Birdstrike

Tony Horan
Met-tech
24 LaTouche Park
Greystones
Co Wicklow
Ireland

CLASS 8: Artistic Microscopy - B&W Only

1st Place

Mount Olympus

Jonathan
Regina
Lehigh University
Whitaker Laboratory
5 E. Packer Ave.
Bethlehem, PA 18015

2nd Place

Flying Saucer

S.G.K. Pillai, K. Sukumaran, B.C. Pai

Regional Research Laboratory
Industrial Estates, P.O.
Thiruvananthapuram - 695 019
Kerala, India

3rd Place

Ni Base Superalloy
Dr. Arantza Linaza
Industria de TurboPropulsores
Materials and Process Department
Parque Tecnológico 300
48170 Zamudio, Spain

Honorable Mention

Volcano Eruption
S.G.K. Pillai, K. Sukumaran, B.C. Pai
Regional Research Laboratory
Industrial Estates, P.O.
Thiruvananthapuram - 695 019
Kerala, India

CLASS 9: Undergraduate Student - Metals and Metal Alloys

no entries

CLASS 10: Undergraduate Student - All Other Engineering Materials

no entries

CLASS 11: Digital Microscopy

1st Place

Three Dimensional Imaging and Analysis of AlCu

Roberto Mendoza
Northwestern University
2225 N. Campus Drive MLSB2036
Evanston, IL 60208

2nd Place

LIGA Method
Paul El-Deiry
Lehigh University
Whitaker Laboratory
5 E. Packer Ave.
Bethlehem, PA 18015

3rd Place

none awarded

CLASS 12: DuBose-Crouse Award

Microstructures of Gray and Ductile Cast Irons

George VanderVoort
Buehler Limited
41 Waukegan Road
Lake Bluff, IL 60044