Mission:
To excite young people in materials, science, and engineering careers.
“I really was not sure what to expect from the camp but it far exceeded my expectations and I was glad I came. The faculty and presenters were awesome. They taught this ‘old dog’ many ‘new tricks’ that will directly improve the instruction I give my students. Thank you for coming to Meridian.”

Faye Kinard
West Lauderdale High School
Collinsville, Miss.

“I had never taken a materials science course and could not have defined materials science to save my life. However, I found that materials science is very interesting and gives a new twist to science like chemistry and physics. I was fascinated by many of the principles shared and displayed. But I think I am very interested in the creative aspect of composite materials. I would certainly like to look into this. Additionally, I was quite impressed with ASM for posing such great camps free to teachers and the institution as a whole seems to have some very noble goals and ideals, which I truly appreciate.”

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$1,029,940 100%

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Through planned 2013

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Daniel Kaplin, College of Staten Island, N.Y.

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Jessica Noffsinger, STEM Magnet Lab School, Colo.

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Design Team from Northwestern University

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Abstracts of the winning projects are posted on the ASM Foundation website www.asmfoundation.org

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2012 GEORGE A. ROBERTS AWARD

Frauke Hogue is a consultant metallographer in failure analysis. She has provided decades of service to ASM International, the ASM Materials Education Foundation, and the International Metallographic Society (IMS), especially in support of training and education programs.

She was born in Germany and received her education in metallography and testing of materials at the Lette Verein in Berlin, Germany. In 1967 she moved to Los Angeles with the goal of learning technical English. She worked for Voi-Shan, a manufacturer of aerospace fasteners, in the Quality Control laboratory for ten years. At Voi-Shan she wrote training manuals, trained new technicians, and interfaced with customers and suppliers. In 1981 Frauke became an independent consultant in metallography, working mainly in the greater Los Angeles area, providing metallographic services and training programs to failure analysis companies, including those in the electronics industry.

Since 1985 she has been teaching intensive courses at ASM International and at companies throughout the United States. The first course was Metallographic Techniques. Realizing there was a gap in the market, Frauke developed Practical Interpretation of Microstructures which consists of a collection of about 300 prepared specimens and a notebook of annotated images of various materials and conditions. This class was followed by Metallography for Failure Analysis and Metallography of Fasteners. Both Practical Interpretation of Microstructures and Metallography for Failure Analysis have been converted into one-day, lecture-only courses which have been presented to international audiences at conferences such as MS&T, AeroMat, and Microscopy & Microanalysis. She received the ASM Distinguished Educator Award in 1996 and the ASM Instructor of Merit Award in 1997.

Frauke has always been interested in exposing young people to the field of materials science, in general, and metallurgy and metallography, specifically. She was a Boy Scout merit badge counselor for Metals Engineering for many years. When the ASM Materials Education Foundation started thinking about Materials Camp, she was very much involved in developing the program and served several years as curriculum leader. She has been a mentor at each of the Eisenman Materials Camps since 2000 and also at camps in Chicago, Los Angeles, and in France.

As a member of IMS for over twenty years, she has presented several papers at conferences including Metallography of Fasteners, Metallography of Meteorites, and Metallography in Failure Analysis. In 2000 she was elected to the board of directors. Currently she is serving as IMS Past President (2011–2013).

Frauke’s other technical affiliation is with Independent Metallurgical Engineering Consultants of California (IMECA). She has been an active member, planning meetings and presenting papers, and has served as president. She lives with her husband Harlan in Pacific Palisades and Yucca Valley, California, and they enjoy traveling, hiking, exploring back roads of the desert, and classical music together.

2012 NATIONAL MERIT SCHOLAR

“Anna is very driven by her love of math and science and aspires to be an engineer in the future. She is currently enrolled in an internship at Arizona State University in the materials, science and engineering program—taking advantage of every opportunity to help her grow and learn in her field of interest. Her participation in several organizations on campus reflects her passion for helping others to achieve. She is a member of the cross country team, a member of the chamber orchestra and active in National Spanish Honor Society and still manages to maintain a 4.00 GPA.”

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“Some teachers are recognized for their education; some are recognized for their successes. Mrs. Boucvalt has both. She has everything that the best teacher should have. She has care, devotion, and a helping spirit. She shows interest and excitement when she teaches. She is very inspirational and kindhearted, yet she stretches us to be the best of what we can be. Mrs. Boucvalt’s successes are reflected through her students. I am what I am today because of her hard work and devotion.”

Caleb Gestes, Student

“Cathy Boucvalt has been a teacher at John Curtis Christian School since 1992 and holds many titles and honors both inside the school organization and outside the New Orleans community. As Science Department Chair, she has produced teaching methods that have inspired her students to achieve not only good grades but science fair honors and a vision for their future. Awards include the New Orleans Science Fair Outstanding Teachers and Mentor award. Her students have won recognition not only in New Orleans but in international science fairs. Cathy has inspired students to recognize the world of materials. In addition, ASM, NACE, and ASNT have recognized her students with top science fair awards.”

Charlie Speed, ASM Teachers Camp-New Orleans Chair, 2009-2010

Cathy Boucvalt

Chevy Energy Technology Co.