ASTM Signs Agreement With China Standards Organization

For the first time, a standards development organization based in the U.S. has signed a memorandum of understanding (MOU) with the national standards body of China. The historic event occurred on August 20, 2004, in Beijing, when senior officials from ASTM International and the Standardization Administration of the People's Republic of China (SAC) signed the MOU to strengthen the relationship between the two organizations.

ASTM and SAC agreed to explore cooperation opportunities for standards development areas of mutual interest; promote communication and knowledge between the two organizations; and promote greater Chinese participation into the ASTM standards development process.

European Congress For Surface Technology Set For April

The 2005 European Congress for Surface Technology will be held April 13–14 at the Convention Center in Hanover, Germany.

The event is being held in conjunction with the trade fair "SURFACE TECHNOLOGY," plus, Powder coating Europe 2005.

The official Call for Papers is published online at www.coatings.de/icc/papersub.cfm. Papers are solicited for the following areas:

- Surface Technology: State-of-the-Art and Latest Developments.
- Technical Innovations.
- Current Problems and Cutting-edge Solutions.
- Trends.

Closing date for submissions is November 1, 2005.

Hexavalent Chrome Event Draws Crowd in Japan

More than 200 people turned out for the "Hexavalent Chromium-free Surface Treatment Technologies" lecture on May 28, 2004, at the Tokyo Ryutu Center in Tokyo, Japan. The lecturer was Noriaki Yoshitake of GM, the head of the Central Research Institute of Nihon Perkerizing Co., Ltd.

Test Your Plating I.Q. #399

By Dr. James H. Lindsay, AESF Fellow

Emerging Technologies (*True or False*)

1. MEMS is the acronym for micro-mechanical systems.
2. MEMS has made possible electrically-driven motors smaller than the diameter of a human hair .
3. Nanomaterials are only applicable on very small scales.
4. Nanomaterials (nanocrystalline materials) are materials possessing grain sizes no smaller than a ten-millionth of a meter, 0.1 μm (0.000 000 1m).
5. Conventional materials have grain sizes ranging from microns to several millimeters and contain several billion atoms each. Nanometer sized grains contain only about 900 atoms each.

Answers on page 54

SME Awards Grants To Three Universities

The Education Foundation of the society of Manufacturing Engineers (SME) has awarded education grants to Arizona State University, Alexandria Technical College of Alexandria, MN, and Farmingdale State University of New York.

Arizona State University received $47,435 to help local industry fill entry level positions with immediately productive manufacturing engineers. The grant provides new "Curriculum Integration for Manufacturing Technology," Students will work on a product made by a local manufacturer from start to finish over four semesters to experience all demands and challenges faced in typical engineering environments.

Alexandria Technical College received $207,536 to teach basic manufacturing automation principles to 160 high school students, plus advanced automation and remote management principles to 120 post-secondary students and 180 incumbent technicians.

Farmingdale State University received $157,000 for the Long Island Manufacturing Project, to address competency gaps in bio and nano technology advanced manufacturing. The program will train technicians and shop floor personnel.

Company News

❑ Finishing Publications, Ltd., of the U.K. and Verlag Eugene G Leuze of Germany have joined forces to publish the *Surface Finishing* Newsletter, an on-line resource for finishers worldwide. The agreement will give finishers in both countries access to each others market, and provide a forum for an exchange of ideas and technology.

The two companies are among the oldest established specialist metal finishing publishers in the world.

The newsletter will be published at irregular intervals, the announcement said.

For information, contact Finishing Publications, Ltd., (phone: 01438-745115; fax: 01438-364536) or Verlag Eugen G Leuze (www.leuze-verlag.de or www.galvanotechnik.de).

❑ Kolene Corporation, Detroit, MI, has selected Hetworth Corporation,

Cambridge, Ontario, Canada, to sell and distribute Kolene's thermochemical processes for removing paint, e-coat and other coatings. Kolene recently developed a proprietary low-temperature product that will be included in the marketing plan.

❏ Rohm and Haas Electronic Materials, Marlborough, MA, and UP Chemical company, Pyeongtaek, Korea, have joined forces to offer the commercial availability of a proprietary grade aluminum and hafnium precursors for the production of high-k dielectric films. Rohm and Hass will use UP Chemical Company's proprietary technology to manufacture the products.

Answers to I.Q. Quiz #399

1. True

2. True

3. False: One of the first applications of nanotechnology was the electrodeposition of a ultra-strength metal matrix/nanocomposite coating to repair and strengthen cooling tubes in a nuclear power plant.

4. False: Grain sizes go down to an order of a billionth of a meter, or a **nano**meter (0.000 000 **00**1m).

5. True

In Memoriam

Lawrence J. Durney, CEF, AESF Fellow, FIMF, passed away on April 7, 2004. He was a highly respected expert in surface finishing technology, a leader in the AESF, and a prominent member of the AESF Garden State Branch.

Durney was a former member of the AESF Education Committee, and he served six years on the AESF Research Board, two of those years as chair.

In 1966, he was a recipient of the Carl Heusner Award, and in 1977 he received the AESF Charles Henry Proctor Leadership Award.

A Graduate of Manhattan College, Durney spent 12 years in production at various plants early in his career, including Sargent Company, New Haven, CT, where he rose to the position of chief finishing engineer for all manufacturing divisions.

He also worked for Enthone, Inc., where he became supervisor of product development. He joined Frederick Gumm Chemical Company as assistant technical director in 1967. He was promoted to technical director in 1971, and became vice president in 1976.

For eight years, Durney was an instructor in electroplating engineering at New Haven College where he developed a curriculum that consisted of 67 two hour lectures.

He was also an instruction for AESF's Intensive Training Course, and he taught a one-day course in trouble shooting based on his book, *Trouble in Your Tank?*.

Durney developed and taught a seminar on "Engineering for Electroplating—How to engineer a new or improved metal finishing installation."

For 22 years, he was the author of the monthly column "Finishing Clinic" for *Products Finishing*. He also wrote a number of other publications on surface finishing technology, and held a various patents.

Durney was highly respected internationally. He was a Fellow of Institute of Metal Finishing (FIMF) in England, and was also active in ASTM International and the American Society for Metals.

Harley Bricker, 87, of Bryan, OH, passed away September 6, 2004. Affiliated withe the AESF Toledo Branch, he was best known as the founder and operator of Bricker Plating, Inc., Defiance, OH. He started the plating shop in 1950 and, although it was destroyed by fire in 1957, he moved the shop to Bryan, OH, where is still operates today.

A chemical engineering graduate of Michigan State University, he worked as a research chemist for McGean Chemical Co. early in his career. He later became head of the metallurgical department of Ryerson Noyes, Jackson, MI, in 1942, and moved to the metallurgical department of Willys Overland, Toledo, OH, in 1945. During this time, he developed metallurgical processes improving production capabilities for the was effort, such as softening metals for machining speed and hardening metals after machining.

He joined Napoleon Plating Company in 1947 and a year later opened his own laboratory in Napoleon, OH, to do special research for plating. This led to a connection with the Nameplate & Monogram Company, Spencerville, OH, where he served as head of plating operations in 1949. He also provided consultation services for a number of firms, including Ohio Decorative, Airway Corp. and Lectrolite.

Paul Varland, 62, president of Varland Metal Service, Cincinnati, OH, died on August 13. He was a member of the AESF Cincinnati Branch, and his company was a long-time AESF Research Sponsor and a staunch supporter of AESF and NAMF.

Bernard (Bernie) Kumko, Sr., 83, passed away on September 1, 2004. A member of AESF for more than 25 years, he was a lifetime honorary member and past president of the AESF Grand Rapids Branch. He spent most of his career in finishing with the M&T Chemical Company.