Spray Finishing Workshop Set for February 22–24

Owens Community, DeVilbiss and Binks have teamed up to present a Spray Finishing Technology Workshop in Toledo, OH, on February 22–24, 2006. Classes will meet from 8;30 a.m. to 4 p.m. daily for classroom and hands-on sessions.

Two continuing educations units (CEUs) will be awarded to attendees. The workshop is for professionals involved with industrial, contractor or maintenance spray finishing applications, or spray equipment sales and distribution. Topics will include:

- Equipment types and selection
- Equipment set-up, operation and maintenance
- Surface preparation and defect analysis
- Material selection
- Safety and regulatory concerns

For information and registration, contact Jaime Hollabaugh, Owens Community College, Workforce and Community Services (800-466-9367, ext. 732; e-mail: sprayworkshop@netscape.net; or visit www.owens.edu/workforce_cs/seminars.html).

Anodizing Council Debuts New Promotional Logo

The Aluminum Anodizers Council (AAC) has developed a special logo that can be used in the promotion of aluminum anodized products. The logo says: "Anodizing: Protection, Beauty, Durability, Confidence … from Within"

AAC President Greg Rajsky says: "AAC supports the marketing efforts of its members through a wide variety of materials and mechanisms to encourage the use of anodized aluminum products worldwide. The Anodizing mark is the perfect marketing tool intended for just that purpose."

The AAC has a licensing program that allows members and non-members to use the logo to promote anodized produces. The image appears prominently on the home pages of AAC—www.anodizing.org. For more information about the program, contact AAC (847/526-2010; fax: 847/526-3993; e-mail: mail@anodizing.org).

Test Your Plating I.Q. #412

By Dr. James H. Lindsay, AESF Fellow

The Watts nickel bath

1. What is the function of nickel sulfate? Why is the sulfate salt, and not others, used for this purpose?
2. Why is the sulfate salt, and not others, used for the purpose in Question #1?
3. What is the function of nickel chloride?
4. Why nickel chloride, and not sodium or potassium chloride?
5. What is the function of boric acid?

Answers on page 31

WQA and NOWRA Hold Joint Seminar & Pledge Cooperation

The Water Quality Association (WQA), Lisle, IL, and the National Onsite Wastewater Recycling Association (NOWRA) held a joint seminar in October for the first time. The historic event was held at the annual conference and exhibition of NOWRA.

NOWRA called the symposium a first step in identifying what both associations know and don't know about the possible effects of water softener use on on-site, particularly aerobic treatment unit (ATU), systems. The event marked the starting point of what both associations pledged would be an ongoing joint effort to address an issue that had become controversial to both associations.

The two organizations also agreed to:

- Establish a joint task force to plan and oversee joint activities and together assess future findings.
- Issue a symposium white paper.
- Engage in practical field studies of selected on-site systems failures.

Company News

Aldoa Company, Detroit, MI, a supplier of chemicals for the plating industry, has developed a new, proprietary additive formulation especially for high-speed, continuous electroplating operations of zinc or zinc/iron alloy, such as steel strip, coil or wire materials. The additive, called Nova Speed 2005, is said to provide a bright high gloss finish. The company says that in most cases it eliminates the need for time consuming and expensive secondary surface treatments prior to final finish, as in cases of painting or powder coating.

` More on the new additive is available at www.aldoaco.com.

Acknowledgements

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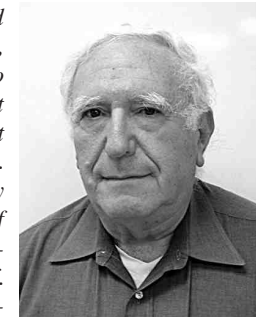
About the Author



Dr. Leonard Nanis is founder and President of his own consulting firm, Electrochemical Engineering. He is also Consulting Professor in the Department of Materials Science and Engineering at Stanford University. Dr. Nanis holds B.S. and M.S. degrees in physical metallurgy from MIT. He received his Doctorate of Engineering Science in extractive metallurgy at Columbia University with Prof. H.H. Kellogg. Post-doctoral work followed at the University of Pennsylvania where he served as Assistant Director of the Electrochemistry Group headed by Prof. John O'M. Bockris.

Dr. Nanis was Professor of Chemical Engineering at the University of Pennsylvania where he taught courses in heat and mass transfer, fluid mechanics, applied mathematics and electrochemical engineering and directed research in battery technology, molten salt chemistry, electrode kinetics, corrosion, hydrogen embrittlement and current distribution. After several years at Penn, Dr. Nanis went on to direct research on advanced batteries, fuel cells and low-cost extractive metallurgy of silicon for solar cells at SRI International, Menlo Park CA.

Dr. Nanis was Chairman of the Industrial Electrolytics Division of the Electrochemical Society from 1980 to 1982. He received the ASTM Templin Award in 1970 and, in 1998, an award from Hyomen Gijutsu (J. Surf. Fin. Soc. Japan).

Answers to I.Q. Quiz #412

1. Nickel sulfate provides the bulk of the nickel ion content.

2. The sulfate is used because it is stable, *i.e.*, neither reduced at the cathode nor oxidized at the anode. And, it is cheap.

3. Though it provides a minority of nickel ion, the chloride serves to prevent the nickel anode surface from passivating, promoting proper anode corrosion.

4. The properties of the nickel deposits would be sensitive to the presence of the "non-nickel" cations such as sodium or potassium.

5. Boric acid serves as a weak buffer to maintain the pH of the cathode film and stabilize the plating environment.