

EWI Technical Seminar: Surface Engineering

DATE AND VENUE

March 28-29, 2012

EWI

1250 Arthur E. Adams Drive

Columbus, Ohio 43221

614.688.5000

ABOUT THE SEMINAR

Surface engineering is a vast and growing field characterized by a wide array of processes, materials, markets, applications, and service environments (wear, corrosion, combinations thereof, etc.) for which cost-effective solutions are required. EWI's core services are "from microchips to battleships." A surface engineering analog in terms of size and deposition rate may be from ion implantation to explosive cladding. Based on the very wide array of possibilities, the market tends to be quite fragmented and daunting, particularly to anyone new to the field. The need to independently assess the ever growing array of existing and new materials joining solutions is now greater than ever.

Within EWI's core competency lie a full array of arc, laser, thermal spray, and solid-state process solutions that are also being expanded, backed by strong knowledge of materials, engineering, and nondestructive evaluation. Testing for mechanical wear, corrosion, tribology, etc. are generally well characterized and embodied in a wide array of specifications including those of ASTM, NACE, and similar bodies.

This seminar is intended to explore the realms of the possible, and highlight some new and novel directions for surface engineering.

AGENDA (TENTATIVE)

March 28, 2012

8:30-9:00	Registration/Continental Breakfast
9:00-9:30	Opening Remarks
9:30-10:00	Overview of Industry Trends and Needs for Surface Engineering (I. Harris, EWI)
10:00-10:30	Cladding Materials and Corrosion Testing (M. Gallagher, EWI)
10:30-10:45	Break
10:45-11:15	Inorganic Coatings (G. Ritter, EWI)
11:15-11:45	Tribological Testing: How Do We Know Whether We Are Winning the Battle? (K. Cooper, EWI)
11:45-12:15	Thermal Spray Processes (E. Herderick, EWI)
12:15-1:00	Lunch
1:00-1:30	Resistance Seam Cladding (J. Gould, EWI)



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1:30-2:00	CVD/PVD (TBD, UES Technologies)
2:00-2:30	Current Overview of Cold spray, its Applications, and Trends (J. Villafuerte, CenterLine)
2:30-2:45	Break
2:45-3:45	Panel Q&A
3:45-5:00	EWI Tour
5:00-7:00	Reception

March 29, 2012

8:30-9:00	Registration/Continental Breakfast
9:00-9:30	EWI Membership Overview (B. Bishop, EWI)
9:30-10:00	Arc Welding Processes for Weld Cladding and Hardfacing (M. Purslow, EWI)
10:00-10:30	Nitriding, Carburizing, and Diamond-Like Coatings (TBD, IBC Coating Technologies)
10:30-10:45	Break
10:45-11:15	Laser Processing for Cladding, Surface Transformation Hardening, and Laser Stripping (B. McAllister), EWI
11:15-11:45	HMI Oxidation-Resistant Coatings (Dr. E. Herderick, EWI)
11:45-12:15	Application of Electro-Spark Deposition for Surfacing (Dr. J. Gould, EWI)
12:15-1:00	Lunch
1:00-1:30	Surface Enhancement Techniques to Improve Fatigue Performance and Control Residual Stress (R. Tenaglia, EWI)
1:30-2:00	Surface Modification and Texturing Using RSP (Dr. K. McHugh, INL)
2:00-2:30	NDE of Coatings and Weld Overlays (Dr. J. Na, EWI)
2:30-3:00	Panel Q&A
3:00-3:30	Adjourn

REGISTRATION AND FEES

Preregistration is required. To register online, visit
<http://www.regonline.com/register/checkin.aspx?eventid=1045200>.

EWI members \$399
 Non-members \$649

*If you have questions or need help registering, please contact EWI's **Wanda Newman** at **614.688.5186** or **wnewman@ewi.org**.*

SPONSORSHIP OPPORTUNITIES

Several sponsorship opportunities are available for this event. For details, please visit -
 > www.ewi.org/sponsorship_surfaceeng .

LODGING

Attendees are responsible for making their own hotel reservations. EWI has negotiated special rates with area hotels. Learn more at www.ewi.org/hotels.

Space is limited. Register now
 (<http://www.regonline.com/register/checkin.aspx?eventid=1045200>) to
 reserve your spot!