

Wednesday, November 13

**Surface Engineering: The Interactions Between Thermal Spray
Processes, Materials and Industrial Applications**

Andrew R. Nicoll, FASM
Sulzer Metco

Please remember to indicate a meal selection when you sign up!

5:30 pm Social/Networking.....6:15 pm Dinner.....7:30 pm Speaker

Meeting Location:
WYNDHAM GARDEN HOTEL
1300 Chesapeake Terrace
Sunnyvale
(408)747-0999

Dinner Cost: ASM Members \$18, Students \$8, Guests \$20
Meal Choices: London Broil, Meat Lasagna, or Vegetarian Stuffed Shells

RESERVATIONS REQUIRED:
Stacy Ewert at (408) 742-2521 or stacy.s.ewert@lmco.com
Reservation deadline is noon on Monday, Nov 11



**The Materials
Information Society**
Santa Clara Valley Chapter
P.O. Box 60487
Sunnyvale, CA 94089-0487

FIRST-CLASS MAIL
U.S. POSTAGE
PAID
SUNNYVALE, CA
PERMIT NO. 770

Meeting Directions

From points south: north on Lawrence Expressway, pass over 237, make the first left (Moffett Park Drive/Baylands Park), then the first left onto Chesapeake Terrace. **From points east or west:** Caribbean Drive (Lawrence Expressway North) exit off 237, first left at Moffet Park Drive/Baylands Park, then left on Chesapeake Terrace. **In either case, once you are on Chesapeake, simply proceed to the end where you'll find The Wyndham Garden Hotel.**

RETURN SERVICE REQUESTED

Inside this Issue...

About the Talk.....2
Salazar Glass Tour.....2
Upcoming Events.....3
SCV Earns 5 Stars!.....3
Tour Preview.....6
2002-2003 Program.....8

Have You Moved Recently?

If so, please remember to correct your address by logging onto the national website, www.asminternational.org, where you can review and update your membership record.

About the Topic

Surface Engineering: Interactions Between Thermal Spray Processes, Materials and Applications

The topic of surface engineering covers a variety of different processes which all have technological and economic advantages and disadvantages. This presentation introduces the economic and technological aspects of surface engineering and then focuses on thermal spray processes. This presentation will describe and discuss the interactions between the process and material selected to form the coating, together with their resulting properties, and the industrial applications which have become successful globally. These cover applications for such industries as aerospace, energy generation, automotive, medical, steel, paper, electronics and printing.

About the Speaker

Andrew R. Nicoll, FASM
Sulzer Metco

Mr. Nicoll obtained an honors degree in metallurgy and materials technology from the University of Surrey in Great Britain in 1971. He began his career as a research engineer in Switzerland at Brown Boveri (now ABB), focusing on high-temperature materials, and materials testing and surfaces. He soon moved to Germany to work on the development of self-fluxing and MCrAlY coatings, as well as thermal spray deposition. In 1984, he returned to Switzerland to join Plasma-Technik AG as head of laboratory, where he was responsible for installing the R&D capacity in Wohlen. He was promoted to manager of research and development in 1988. Plasma-Technik was bought by the Sulzer Corporation, and became part of Sulzer Surface Technologies. In 1992, Mr. Nicoll was named technology marketing manager for the new company with a focus on Asia/Pacific. In 1994, he became integrally involved in the Sulzer team responsible for the acquisition of Metco, and the eventual merger of all Sulzer Surface Technologies' companies into Sulzer Metco. In 1995, he joined Sulzer Metco's global marketing team, developing worldwide marketing strategies. In 1999, he moved to Sulzer Metco on Long Island providing top-level sales support for the U.S. organization (including Canada, Mexico, and Brazil, in addition to the U.S.). In 2000 he returned to Europe to set up the Sulzer Metco European Customer Care organization located in Frankfurt. In this position he was responsible for Sales transactions, Technical Service and Product Support located in 8 European countries.

A member of ASM since 1986, he was elected a Fellow in 1995. He is presently a Trustee of ASM.

Mr. Nicoll is a past technical editor of the Plasma Technik Symposium, and is the author of more than 70 technical publications. He was elected a Fellow of the Institute of Materials in 1995.

Last Month's Sponsor!

We did secure a sponsor for last month's meeting, after all! We would like to thank Exponent for sponsoring our October Meeting. Exponent is a leading engineering and scientific and consulting firm. We appreciate Exponent's support, which enables us to provide quality technical programming at a reasonable cost. We are still seeking sponsors for future meetings. If you are interested, please contact Gabriel Toea at gtoea@yahoo.com or (831)634-1443.

Roland Huet, P.E.
Senior Managing Engineer

Exponent®
Failure Analysis Associates®

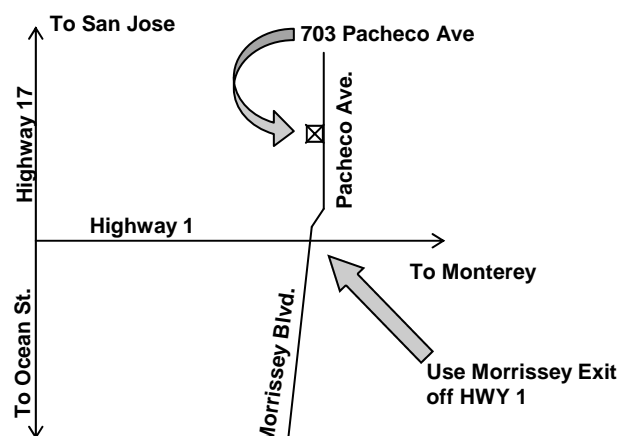
149 Commonwealth Drive
Menlo Park, CA 94025
telephone 650-688-7087
facsimile 650-328-2990
huet@exponent.com

Tour of David P. Salazar Glass

We are excited to offer a tour of David P. Salazar Glass in Santa Cruz again this year! For those of you that don't know, David P. Salazar Glass is a glass art studio in Santa Cruz. The artist, David Salazar, uses the techniques of torchwork, lampwork and millefiori to create his dazzling art glass. This is an opportunity to see the fascinating process in action, as well as to prepare for some of your holiday gift-giving needs. David is a very entertaining host, and his tours have always been hits in the past, especially with the kids. To get an idea of what his work looks like, visit www.salazarglass.com.

The tour will be on **Saturday, December 14, 2002**. We'll meet at the studio at **10am sharp**, and the tour should run for several hours. We need an accurate headcount by **Thursday, December 12**, so if you plan to attend, please sign up. To do so, call Bob Wallace at (408) 867-4576. The location Salazar Glass is: 703 Pacheco Ave., Santa Cruz., see the map at the right.

Map to David P. Salazar Glass



Buehler full page ad

Foothills Analytical Laboratory

A complete materials analysis and consulting service



Auger EDX ESCA FTIR GC/MS SEM SIMS

We do provide a broad range of analytical services and techniques but, more importantly, we share our years of industry experience to work with you, to help solve problems, not just sell data. Give us a call to see how we may be able to help you.

Evaluation of Electropolished Stainless Steel

Failure Analyses

In-House Seminars

Laboratory: 780 Montague Expressway, Suite 407, San Jose, CA, 95131

(408) 456-0370

Business Office: 3661 Mace Court, San Jose, CA, 95127

FAX (408) 923-5536

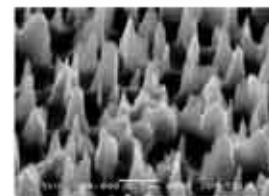
and now on the web at www.foothills-analytical.com

Take Your Best Shot!

Whether you're imaging pollen grains or CVD thin films, the new JEOL JSM-6460LV and JSM-6360LV will give you your best shot at resolution, versatility and ease-of-use. Call now for more information.



*Pasture Flower
Pollen Grain -
1500x at 3 kV*



*Teflon -
90,000x at 5 kV*



JEOL

11 Dearborn Road, Peabody, MA 01960
(978)555-5900 eod@jeol.com



ROBERT PRISTERA
bob_pristera@leco.com (Email)

LECO Corporation
3000 Lakeview Avenue
St. Joseph, MI 49085-2396
Voice Mail: 877-877-4377 ext. 5520
Fax: 616-982-8987

Colorado: 303-770-8198
Fax: 303-770-8442
Nevada: 702-614-1190
Fax: 702-263-6579
Toll Free: 800-292-6141

Metallurgical Solutions

*Metallic Materials, Components, and Consulting
Specializing in Nitinol Alloys*

James L. Proft

2 Williams Lane, Foster City, CA 94404
Phone: (650) 358-4076 • Fax: (650) 357-8140
email: jimnitinol@aol.com

More Tours in the Future

As noted on page 2, we are pleased to offer a tour of David P. Salazar Glass this coming December. However, our tour coordinator, Bob Wallace, has been busy arranging even more events like this! Specifically, Bob is currently finalizing plans for a tour of **Coherent, Inc.** sometime in January.

Coherent is a leading provider of photonics-based solutions to the commercial and scientific markets. Founded in 1966, Coherent sells products in over 80 countries and today has 11 production and research facilities worldwide. Coherent products serve a wide range of manufacturing applications including semiconductor manufacturing, test and inspection, advanced packaging, optical communications, graphic arts and display, and a variety of precision instrumentation applications in the biotechnology and semiconductor processing industries. In the electro-optical scientific market, scientists use Coherent lasers to enhance their research efforts in such diverse fields as engineering, genetics, biology, chemistry, and physics.

ASM-SCV has offered tours of Coherent's local facilities in the past, and they have always been popular. This promises to be another fascinating event! We thank Bob Wallace for taking the initiative to set up these activities! **Stay tuned next month for more details on the Coherent tour.**



ASM International has refocused their efforts recently so that they can be considered *The Materials Information Society* of choice. As part of this effort, they have made major improvements their information systems and the ASMI website.

To bring you up to speed on these improvements, we present...

The Top Ten Things You Can Do on www.asminternational.org

10. Get news updates

See the latest in materials-related business news, culled straight from the day's headlines. (*Home...News*)

9. Network with other members

Search the ASMI Membership directory on any combination of criteria. (*Home...Membership...Member Login*)

8. Buy a book

Browse the ASMI's technical book catalog online, and order online as well. (*Home...Bookstore*)

7. Take an online course

Metallurgy for the Nonmetallurgist and *Corrosion* are two initial offerings, with more to follow. (*Home...Training*)

6. Read an ASMI magazine article

Full versions of articles from *Advanced Materials & Processes* and *Heat Treating Progress* are available online. (*Home...Magazines*)

5. View the ASM Handbook

The Desk Edition of both the *Engineered Materials Handbook* and the *Metals Handbook* are available online. (*Home...Membership...For Members Only*)

4. Get a technical question answered

ASMI sponsors discussion groups in Failure Analysis, Heat Treating, and Surface Engineering. (*Home...Ask ASM*)

3. Find a job

Search ASMI's database of materials-related technical jobs, or link to the listings of *metal.monster.com*. You can also post a job opening. (*Home...Career Center*)

2. Update your member information

Update your interest areas or personal information, such as address and e-mail. (*Home...Member Login*)

And the number one thing you can do at www.asminternational.org...

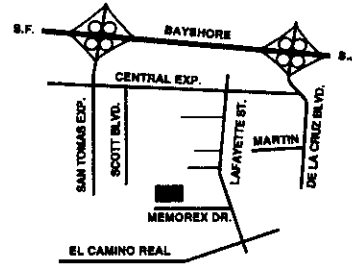
Renew your membership! (*Home...Member Login*)

BILL BYINGTON
President



**BYINGTON
STEEL
TREATING
INC.**

1225 MEMOREX DRIVE
SANTA CLARA, CALIFORNIA 95050
TELEPHONE (408) 727-6630



EVERYTHING IN HEAT TREATING

- GENERAL HEAT TREATING
 - ALUMINUM HEAT TREATING
 - INDUCTION HARDENING
 - STRESS RELIEVING
 - FLAME HARDENING
 - CARBURIZING
 - CYANIDING
 - NORMALIZING
 - VACUUM HEAT TREATING
- BRIGHT HARDENING
 - BRIGHT ANNEALING
 - DEEP FREEZING
 - STRAIGHTENING
 - SANDBLASTING
 - BEAD BLASTING
 - ROTOBLASTING
 - DEGREASING

GOVERNMENT CERTIFIED

MILESTONE TECHNOLOGY

Scanning Electron Microscope Analysis

- Failure Analysis
- Fracture Analysis
- Steels
- Thin Films
- Recording Media & Heads
- Semiconducting Materials

EDX and Light Element Analysis

High Quality • Economical Rates • Overnight Service

(408) 243-TEST (8378)

1122-A Aster Avenue, Sunnyvale, CA 94086

Chapter Information & Upcoming Activities

Officers

Chair: <i>Janine Kardokus</i>	(408)986-7568
Vice Chair: <i>HuiHui Lin</i>	(408)256-1072
Treasurer: <i>Stacy Ewert</i>	(408)742-2521
Secretary: <i>Jacques Matteau</i>	(650)591-7787

Executive Committee

<i>Richard Chung</i>	(408)924-3927
<i>Paul Fojas</i>	(650)361-2969
<i>Dave Himmelblau</i>	(408)743-7893
<i>Francis Honey</i>	(408)748-9955
<i>James Knowles</i>	(650)728-3786
<i>Alfred Kwong</i>	(408)935-5805
<i>Mingwei Li</i>	(650)966-5735
<i>Leonard Migliore</i>	(650)967-0977
<i>Ramas Raman</i>	(408)295-8976
<i>John Stringer</i>	(650)855-2472
<i>Gabriel Toea</i>	(831)634-1443
<i>Lou Wirtz</i>	(408)756-0621

Special Positions

SVEC Rep: <i>Ed Kaminski</i>	(408)241-4842
Newsletter Editor: <i>Scott Dickerson</i>	(408)584-1013

Thanks to our ASMI-SCV Sustaining Members:

Evans Analytical Group	Charles Evans, Jr.	San Mateo
CSU—Fresno	Henry Madden	Fresno
R.L. Engineering	Richard Lund	Placerville
Vivid Incorporated	John H. Comeau	Santa Clara

*Would your company like to support the chapter by being a sustaining member?
To find out more, contact Janine Kardokus at (408)986-7568.*

Executive Committee Meetings: 4th Wednesday of September, October, January, March and May at 6:00 pm, Round Table Pizza at El Camino & 237. Any member can attend! Call Janine Kardokus at (408)986-7568 to confirm the schedule and reserve a seat at the table.

Your Ad Could Be Here!

Place your business card ad here for targeted exposure to the valley's materials professionals

Contact Scott Dickerson at (408)584-1013 or
scott_dickerson@amat.com for more
Information.

2002-2003 Technical Program

Sep 11	Lead-Free Soldering: A Global Contract Electronic Manufacturer's Perspective <i>Jasbir Bath, Solectron Corporation</i>	<i>Past Chair's Night</i>
Oct 9	Failure Analysis -Interesting Case Studies <i>Eric Sullivan, Aptech Engineering Services, Inc.</i>	
Nov 13	Surface Engineering: The Interactions Between Thermal Spray Materials, Processes, and Applications <i>Andrew Nicoll, FASM, Sulzer Metco</i>	<i>Trustee's Night</i>
Dec 11	TBD	<i>Companion's Night</i>
Jan 15	Procedure and Use of Tribo-metrology <i>Dr. Norm Gitis, Center for Tribology</i>	<i>SCV Fellow's Night</i>
Feb 12	Ceramics: Aluminum Oxide and Anodizing <i>Dr. Frank Anderson, CoorsTek</i>	<i>Joint with ACerS</i>
Mar 12	Nanotechnology and Space Science <i>Meyya Meyyappan, NASA-Ames Research Center</i>	<i>Joint with SAMPE</i>
Apr 9	Microfluidics <i>Dr. Nghia Chiem, Teragenics</i>	<i>Student Posters & Scholarship Awards</i>
May 14	Laser Shock Peening <i>Dr. Lloyd Hackel, Lawrence Livermore National Laboratory</i>	<i>Awards & Elections Night</i>