

**Wednesday, December 11**

**Predicting the Future:  
Planning Methods for Materials Research**

Dr. John Stringer  
Electric Power Research Institute (EPRI)

*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: Beef, Fish, or Vegetarian*

**RESERVATIONS REQUIRED:**  
Stacy Ewert at (408) 742-2521 or [stacy.s.ewert@lmco.com](mailto:stacy.s.ewert@lmco.com)  
**Reservation deadline is noon on Monday, Dec 9**

*Please Take our Materials Education Survey on the Back Page!  
Help the Chapter plan Educational activities tailored to your interests!*



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**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**

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If so, please remember to correct your address by logging onto the national website, [www.asminternational.org](http://www.asminternational.org), where you can review and update your membership record.

## About the Topic

### Predicting the Future: Planning Methods for Materials Research

Recently there has been increasing interest in attempting to plan future research directions. In the case of the applied sciences like materials, this typically leads us to thinking what the future might look like, and what materials advances would be required to attain it. Of course, we can also look at the new advances in materials science, think what futures they might make possible, and what advances in materials technology might be needed to make these possibilities attainable. Another interesting path is first to look at those writers who attempted to predict the times we are now living in! As has been said, "Prediction is difficult, particularly of the future!" This talk will examine all these approaches to predicting the future, including the issue of "Predicting the Present." Should be easier? But you will see that in fact it isn't!

## About the Speaker

### Dr. John Stringer

**Electric Power Research Institute (EPRI) - Palo Alto, CA**

Dr. John Stringer is currently Executive Technical Fellow in the Science & Technology Development Division (S&TDD) at the Electric Power Research Institute (EPRI) in Palo Alto, California, a position he assumed in 2000. Dr. Stringer has also been a Consulting Professor at Stanford University, a position he held from 1977 through 2001. Before joining EPRI, Dr. Stringer was Professor of Materials Science and Head of the Department of Metallurgy and Materials Science at the University of Liverpool, England.

Dr. Stringer is a Fellow of a number of Technical Societies, including AAAS, TMS, ASM International, NACE International, Inst. Energy, Inst. Corrosion, and the Royal Society of Arts. He has published extensively in the technical literature, with over 350 papers.

For the last several years, Dr. Stringer has assisted the U.S. Department of Energy in a number of ways. He was a member of the Basic Energy Sciences Advisory Committee (BESAC) from 1992 to 1998; for the final two years of this period he was Chair. Since then, he has chaired a number of Panels for BESAC, most recently on the BES Electron Beam Microcharacterization User Centers; the Measurement of Performance; and currently the Basic Research Needs to Assure a Secure Energy Future.

### Last Month's Sponsor!

We were once again a bit tardy in securing a meeting sponsor! We would like to thank **Metal Fusion** for sponsoring our November Meeting. We appreciate Metal Fusion'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](mailto:gtoea@yahoo.com) or (831)634-1443.

### A Word From Metal Fusion

**Metal Fusion** was happy to sponsor November's meeting. We have been in business in Redwood City since 1985. We are a FAA repair station doing welding, machining and metal spraying. We also do metal spray work for many firms in the valley. Additionally, we provide R&D and production spraying using dual arc wire, thermo spraying, fuel wire or plasma processes.

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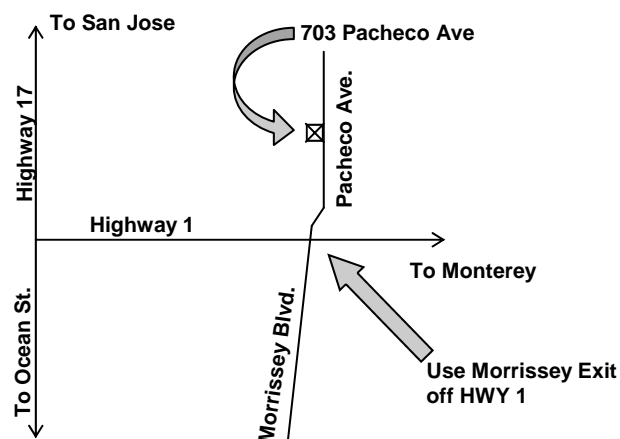
Contact Paul Carrick  
Phone: 650-368-7692  
Fax: 650-368-7691  
[paul.c.metalfusion@telocity.com](mailto:paul.c.metalfusion@telocity.com)

## 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](http://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



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## Upcoming Events

*As usual, very few events for December...*

**Dec 3:** SME, "Chapter 98 50th Anniversary Celebration – Winter Social". Visit [chapters.sme.org/098/](http://chapters.sme.org/098/)

**Dec 4:** IEEE, "SCV Annual Banquet". Visit [www.ewh.ieee.org/r6/scv/scvconf2002.html](http://www.ewh.ieee.org/r6/scv/scvconf2002.html)

**Dec 5:** AIAA, "Gamma Ray Large Area Space Telescope". Visit [www.aiaa-sf.org](http://www.aiaa-sf.org)

**Dec 11:** IEEE-CPMT, "Broadband: Pushing out the Limits of Copper". Visit [cpmt.org/scv/meetings/cpmt0212.html](http://cpmt.org/scv/meetings/cpmt0212.html)

**Jan 20-24:** IS&T/SPIE, "Electronic Imaging 2003". Visit [electronicimaging.org/Program/03/](http://electronicimaging.org/Program/03/)

**Jan 21:** AIChE, "Abgenix Plant Tour". Visit [www.aiche-norcal.org/meetings.html](http://www.aiche-norcal.org/meetings.html)


View an online version of this event listing at:

[www.asm-scv.org](http://www.asm-scv.org)

## Job Opening!

Nothrup Grumman Marine Systems in Sunnyvale needs a Materials/Metallurgical Engineer for product support. Northrop Grumman Marine Systems provides steam turbines, gearboxes and missile launching systems to the US Navy. The ideal candidate will have a BS in Materials Engineering and 10 years experience in fabrication of machinery. Advanced degrees would be a bonus. Experience with high temperature materials, non-destructive testing, corrosion, casting, welding, failure analysis, military materials and process specifications, and laboratory analysis equipment would be expected. US citizenship required. Please submit your resumes to:

[ngms\\_jobs@northropgrumman.com](mailto:ngms_jobs@northropgrumman.com).



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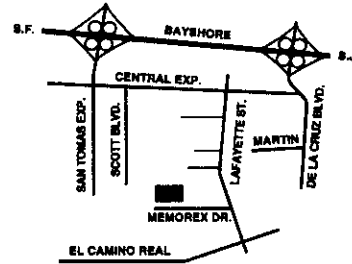
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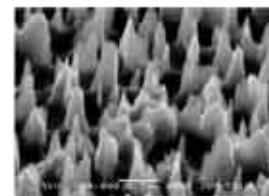
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## Chapter Information & Upcoming Activities

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

### Executive Committee

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### Special Positions

<b>SVEC Rep:</b> Ed Kaminski	(408)241-4842
<b>Newsletter Editor:</b> Scott Dickerson	(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:** ASM-SCV Executive Committee meetings are held in September, October, January, March and May. Any member can attend! Call Janine Kardokus at (408)986-7568 for meeting times and locations, and to reserve a seat at the table.

## Coherent Tour in February

As noted last month, we are currently planning a tour of **Coherent, Inc.** in February 2003. As you may already know, Coherent is a leading provider of photonics-based solutions to the commercial and scientific markets. 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. 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 and Leonard Migliore for arranging this activity! **Stay tuned next month for more details on the Coherent tour.**

## Upcoming Technical Meetings

Jan 15	<b>Procedure and Use of Tribo-metrology</b> <i>Dr. Norm Gitis, Center for Tribology</i>	<i>SCV Fellow's Night</i>
Feb 12	<b>Ceramics: Aluminum Oxide and Anodizing</b> <i>Dr. Frank Anderson, CoorsTek</i>	<i>Joint with ACerS</i>
Mar 12	<b>Nanotechnology and Space Science</b> <i>Meyya Meyyappan, NASA-Ames Research Center</i>	<i>Joint with SAMPE &amp; Scholarship Awards</i>
Apr 9	<b>Microfluidics</b> <i>Dr. Nghia Chiem, Teragenics</i>	<i>Student Posters</i>
May 14	<b>Laser Shock Peening</b> <i>Dr. Lloyd Hackel, Lawrence Livermore National Laboratory</i>	<i>Awards &amp; Elections Night</i>

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# ASM International - Santa Clara Valley Chapter

## Survey for Materials Education Courses

Santa Clara Valley Chapter of ASM International is planning a series of short courses on the materials technology and business development in local industries. Please take a moment to answer this simple survey of course topics so that we can choose the courses that best suit your interests. **Thanks for your help!**

Note: The Chapter will charge course participants a fee to cover the costs. The amount of the fees will depend on the class size and will be announced with the course announcement.

	Not Interested	Somewhat Interested	Interested	Very Interested	Extremely Interested	
						<p><b>Directions:</b> Use the columns at the left to indicate your interest in courses in the followings topic areas. Additionally, please circle and/or write in the specific areas within each topic that are of the greatest interest to you. Then simply remove this page from your newsletter, fold in half, staple or tape shut, stamp, and mail!</p>
						<p><b>A. Technology related classes (1 session each topic) - short course series on materials trends &amp; new technology development in the following areas:</b></p>
						<p><b>Aerospace vehicles</b> Specific interest areas? (circle): space shuttle, aircraft engine, other _____</p>
						<p><b>Bio-medical devices</b> Specific interest areas? (circle): implant, stent, MEMS, other _____</p>
						<p><b>Disk drives</b> Specific interest areas? (circle): head, disk, other _____</p>
						<p><b>Display devices</b> Specific interest areas? (circle): flat panel, plasma display, OLED, other _____</p>
						<p><b>Nanotechnology</b> Specific interest areas? (circle): microelectronics, MEMS, other _____</p>
						<p><b>Photonic devices</b> Specific interest areas? (circle): fiber optics, laser, MEMS, other _____</p>
						<p><b>Semiconductor manufacturing</b> Specific interest areas? (circle): interconnect, wafer, lithography, etch, gas, other _____</p>
						<p><b>B. Business related classes (1-2 sessions each topic) in the following areas:</b></p>
						<p><b>Internet search for materials information</b></p>
						<p><b>Supply chain management in microelectronics industry</b></p>
<p><b>Are there any other specific topics interesting to you but not listed above?</b></p>  						
<p><b>Any additional comments?</b></p>   						