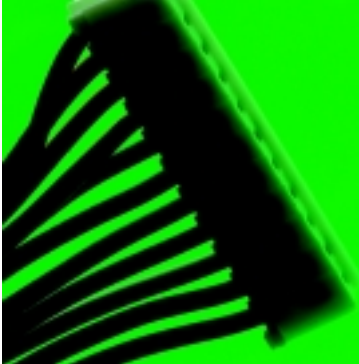
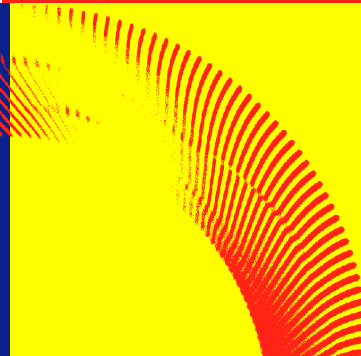
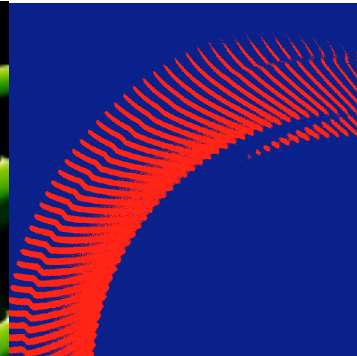
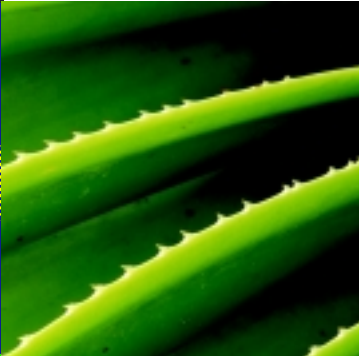
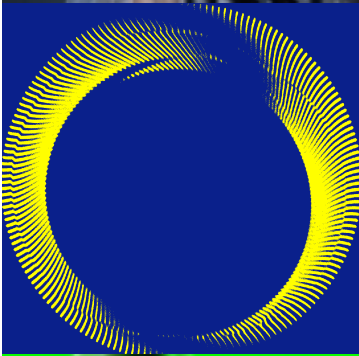
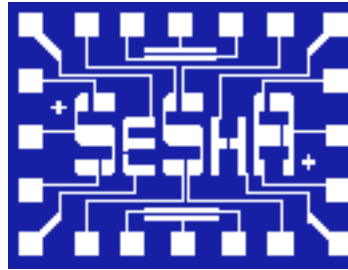


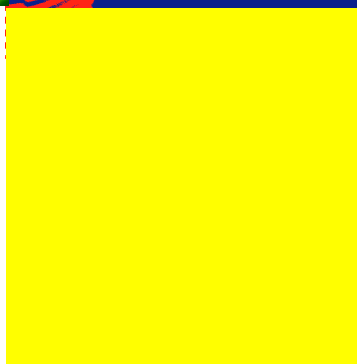
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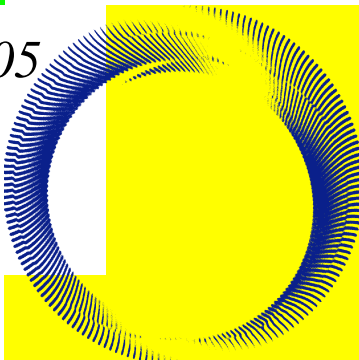
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*May 9-12, 2005*



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- ◆ Bios on the presenters
- ◆ Complete Program Grid
- ◆ Registration form

# KEYNOTE FORUM ON CRITICAL ISSUES



## **Semiconductor Industry Forecast and the Future of Nanotechnology**

Jim Feldhan  
*Semico Research Corp.*



## **Exploring Opportunities to Further Eliminate Potential Equipment Related Exposures**

Andrew McIntyre  
*EORM*



## **Retooling Yourself for the Next EH&S Wave**

David Tighe  
*Bovo-Tighe*

## **Semiconductor Industry PFC Emissions Estimating and Reduction: Status and Future Directions**



Walter Worth  
*International Sematech*

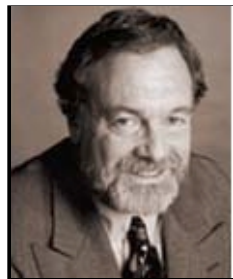


Laurie Beu  
*Laurie Beu Consulting*

## **The Semiconductor Industry Association Worker Health Project: An Update**



Michael Fischman  
*Intel Corporation*



Chuck Fraust  
*Semiconductor Industry Association*



## **Fire Codes 2005 - A Review of the Fire Codes and Standards Applicable to the Semiconductor Industry Today**

Roger Benson  
*Factory Mutual Global*

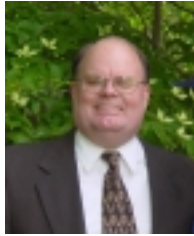
# SIX KEYNOTE SESSIONS ON CRITICAL ISSUES

## Keynote Session

Tuesday, May 10

8:15 AM-4:45 PM

8:15 Coffee, Danish & Networking



8:45 Welcome to SESA Annual Symposium & Expo and Awards Presentation.

John Cox  
SESA President

9:30 **Keynote 1: Semiconductor Industry Forecast and the Future of Nanotechnology.**

Jim Feldhan  
Semico Research Corp.

10:15 Coffee Break

10:30 **Keynote 2: Retooling Yourself for the Next EH&S Wave.**

David Tighe  
Bovo-Tighe

11:15 Lunch Sponsored by Exhibitors in Exhibit Hall

1:15 **Keynote 3: The Semiconductor Industry Association Worker Health Project: An Update.**

Michael Fischman, MD, MPH  
Intel Corporation  
Chuck Fraust, PhD, PE, CIH  
Semiconductor Industry Association

2:00 **Keynote 4: Exploring Opportunities to Further Eliminate Potential Equipment Related Exposures.**  
Andrew McIntyre, CIH  
Environmental and Occupational Risk Management, (EORM, Inc.)

2:45 Coffee Break

3:15 **Keynote 5: Semiconductor Industry PFC Emissions Estimating and Reduction: Status and Future Directions.**

Walter Worth  
International Sematech  
Laurie Beu, PE  
Laurie Beu Consulting

4:00 **Keynote 6: Fire Codes 2005 - A Review of the Fire Codes and Standards Applicable to the Semiconductor Industry Today.**

Roger Benson  
Factory Mutual Global

Tuesday, May 10

**Keynote 1 Semiconductor Industry Forecast and the Future of Nanotechnology.**

Jim Feldhan  
Semico Research Corp.

Jim's Keynote will focus on his semiconductor forecast and emerging markets, plus the direction he foresees nanotechnology taking in the future and the challenges it will present.

**Keynote 2 Retooling Yourself for the Next EH&S Wave.**

David Tighe  
Bovo-Tighe, Bellevue, WA

EH&S professionals today are faced with a career "perfect storm." Expectations are increasing that their projects show ROI and business contribution beyond regulatory compliance. Shrinking infrastructure and limited hiring have left EH&S professionals with little growth opportunity yet greater responsibility. These factors have created high stress and burn-out rates. Many are leaving the industry. Now is the time to retool yourself and your team to not only weather the storm, but thrive in the new environment. In this session you will be offered a proven, systematic approach to set yourself and your team up for greater success. This approach is a fresh way, proven with numerous organizations, to get results beyond what anyone be-

lieved possible. You will discover 1) new ways to truly understand your talents and skill gaps (they are different than you think), 2) better ways to discern your future opportunities (you can do better, even in your current job), and 3) how to prepare yourself for any eventuality (yes, any eventuality!). You owe it to yourself and your team to check out this new technology. It might be the best thing you can do this year to create gains in productivity, personal growth, and enthusiasm.

### **Keynote 3**

#### **The Semiconductor Industry Association Worker Health Project: An Update.**

Michael Fischman, MD, MPH  
*Intel Corporation*

Chuck Fraust, PhD, PE, CIH  
*Semiconductor Industry Association*

Over the past year, the Semiconductor Industry Association (SIA) has made considerable progress on its Worker Health initiatives. We will share some key results from the completed initiatives, the Retrospective Cohort Scoping (Feasibility) Study, the Primary Prevention Initiative, and the Health Surveillance Initiative. However, the focus of the presentation will be on the progress toward initiation of the large retrospective cohort epidemiology study involving multiple SIA member companies. The emphasis of

the study is on cancer risk, with planned evaluation of the cancer mortality and, if feasible, the cancer incidence of semiconductor fab workers. We will also discuss the critical role of various components of the study effort, including the Scientific Advisory Board and independent academic investigators, in fostering a credible, scientifically defensible and ultimately successful study.

### **Keynote 4**

#### **Exploring Opportunities to Further Eliminate Potential Equipment Related Exposures.**

Andrew McIntyre, CIH  
*Environmental and Occupational Risk Management, (EORM, Inc.)*

In response to allegations of increased cancer risk for semiconductor industry fabrication workers, the Semiconductor Industry Association commissioned a Scientific Advisory Committee (SAC) whose primary objective was to conduct an independent, objective analysis of whether potential semiconductor "clean room" chemical exposures are likely to elevate cancer risk and, based on this analysis, make appropriate recommendations to SIA. The SAC concluded that there was no affirmative evidence of increased risk of cancer for the fab population and also reported that insufficient data exists to conclude whether exposure to

chemicals or other hazardous materials has or has not increased cancer risk. As a result, the SAC provided recommendations to the SIA for further studies. The SIA outlined various follow-up actions known collectively as the "Worker Health Project" which included the identification of Primary Prevention Initiative (PPI) Tasks. These PPI Tasks had multiple objectives and focused on further strengthening of ongoing efforts to ensure a safe workplace, and were designed to provide member companies with a broader base of knowledge to help enhance their existing worker safety programs. One of the PPI projects identified as a priority was the need to study certain manufacturing process areas to:

- Identify opportunities for capital equipment suppliers to demonstrate further hazard mitigation through changes to normal operation, preventive and corrective maintenance procedures and tool design
- Identify alternatives that might provide opportunities to reduce and/or eliminate the need for administrative controls as the primary means of preventing unsafe exposures. Areas chosen included Etch, Implant, Thin Films, CVD and Epitaxy.

This paper focuses on a review of the Semiconductor Industry Association Worker Health Initiative (WHI) Primary Prevention Initiative (PPI)

# SIX KEYNOTE SESSIONS ON CRITICAL ISSUES

project conducted by Environmental & Occupational Risk Management (EORM) and important findings and conclusions as they pertain to innovative controls and techniques being used to further minimize potential exposures during equipment maintenance.

## **Keynote 5**

### **Semiconductor Industry PFC Emissions Estimating and Reduction: Status and Future Directions.**

Walter Worth  
*International Sematech*

Laurie Beu, PE  
*Laurie Beu Consulting*

The Kyoto Protocol will come into force on February 16, 2005, following Russia's official ratification on November 18, 2004. The Protocol requires that Annex I signatories such as the European Union, Japan, and Canada reduce their emissions of carbon dioxide, methane, nitrous oxide, sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFC) and perfluorocarbons. The Protocol also calls for the establishment of an emissions trading system and entities such as the United Kingdom (UK), Chicago Climate Exchange and European Union (EU) have proactively established greenhouse gas (GHG) trading systems. While the United States has chosen not to ratify the Protocol, the U.S. Environmental Protection Agency has initiated the Cli-

mate Leaders Partnership to encourage companies to develop long-term climate change strategies and to commit to reduce GHG emissions. Members of the semiconductor industry world-wide have committed to tracking and reducing absolute emissions of perfluorocompounds (PFC), HFC and SF<sub>6</sub> via Memoranda of Agreement (MOA) or Memoranda of Understanding (MOU) at the World Semiconductor Council. As part of the second MOU between the Semiconductor Industry Association (SIA) and the U.S. EPA, the MOU partners agreed to publish a report by December 15, 2005, "detailing the progress that has been made toward achieving the Partnership Goal" of reducing the absolute PFC emissions by 10% (on an MMTCE basis) below the 1995 baseline by 2010. In 2005, the semiconductor industry will develop a State-of-the-Technology report to summarize the status of the various technology options, changes in the PFC use and the progress, globally, to meet the 2010 goal. This presentation will review the status of efforts requiring GHG emissions estimating and reporting, provide an overview of changes to the Intergovernmental Panel on Climate Change (IPCC) National Greenhouse Gas Inventory Guidance as it applies to the semiconductor and electron-

ics industry, and provide a preliminary update of global semiconductor industry PFC activities and the commercial readiness of reduced emission technology options.

## **Keynote 6**

### **Fire Codes 2005 - A Review of the Fire Codes and Standards Applicable to the Semiconductor Industry Today.**

Roger Benson  
*Factory Mutual Global*

Fire Codes 2005 - A review of the Fire Codes and Standards applicable to the Semiconductor industry today. 1. The International Fire Code (IFC) today and changes proposed by the SIA-FABS group. 2. The NFPA 318 Standard for the Protection of Semiconductor Fabrication Facilities and the proposed changes for the 2005 edition. 3. A brief look at existing SEMI Standards and the ones being currently revised. 4. Where are we headed? The drive toward more performance based rather than prescriptive requirements, the widening use of Alternate Materials and Methods solutions to problems and the preference of proactive rather than reactive ways to process safety.

# KEYNOTE SPEAKER BIOGRAPHIES

## **Roger Benson**

Roger is a Senior Engineering Specialist with Factory Mutual Global. His responsibilities include design review of new I.C. Fab facilities, visiting existing Fabs to review operations and the training of other FM engineers in I.C. Fab operations. He has a BS in Civil Engineering from the University of Miami. He is a member of the NFPA 318 technical committee, co-chair of the SEMI Tool Fire Protection Task Force West group, a former member of the Board of Directors of SSHA and a frequent speaker at SSHA conferences and seminars.

## **Laurie Beu**

Laurie Beu is a consultant in the area of environmental policy, strategy and management. Ms Beu has extensive experience as an environmental professional including environmental construction management, program development and compliance management, integration of environmental solutions into manufacturing process development, and industry benchmarking. She has formulated company and industry environmental strategies, and has served as an industry representative in environmental policy negotiations with suppliers and government agencies.

As chair of the Semiconductor Industry Association (SIA) Global Warming committee, Ms Beu drove the development of the second Semiconductor Industry PFC Emissions Reduction Partnership memorandum of understanding (MOU) with the Environmental Protection Agency (EPA) and establishment of an industry PFC emissions reduction goal. Ms Beu is a member of the United Nations Intergovernmental Panel on Climate Change industry experts group responsible for developing good practice guidance for estimating electronics industry greenhouse gas emissions. Ms. Beu is a Registered Professional Engineer in Texas.

## **Jim Feldhan**

Jim Feldhan founded Semico Research in 1994. A 20-year veteran of the semiconductor industry, he brings his management, forecasting and modeling expertise to Semico. Jim designed and developed the research methodologies and report structures, which are the basis for Semico's Research and Portfolio Services. Jim develops Semico's overall economic outlook as well as conducting consulting and forecasting projects. With a focus on quality, Semico Research has grown to the largest

semiconductor-focused consulting and research firm. Jim was formerly the Executive Vice-President and General Manager at In-Stat. As a member of the start-up team there, Feldhan was responsible for the design and methodologies of research that was the basis for the Semiconductor Services. Mr. Feldhan has held various management positions at GTE Microcircuits and Greyhound/Dial Corporation. Jim received a BS in Business with a minor in Chemistry from the University of Arizona and a MS in Marketing focusing on statistics and market research from the University of Arizona.

## **Michael Fischman**

Dr. Michael Fischman is an occupational medicine physician and toxicologist from the San Francisco Bay Area. He is an Associate Clinical Professor in, and the Assistant Chief of, the Division of Occupational & Environmental Medicine, Department of Medicine, at the University of California, San Francisco. He received his medical degree at the University of Michigan and his masters degree in public health, in environmental health sciences, from the University of California, Berkeley. He did his residency training in internal

# KEYNOTE SPEAKER BIOGRAPHIES

medicine and in occupational medicine at the University of California, San Francisco. Dr. Fischman is co-author of a textbook, *Chemical Hazards Of The Workplace*, and author of a number of book chapters, including "Semiconductor Manufacturing Hazards" in *Clinical Environmental Health and Toxic Exposures* and a chapter on occupational cancer in an occupational medicine textbook. He has been the Corporate Medical Director of Intel Corporation since 1986. He is the co-chair of the Project Management Committee for the Semiconductor Industry Association's Worker Health Projects. He is a fellow in the American College of Occupational and Environmental Medicine.

## **Chuck Fraust**

Charles L. (Chuck) Fraust is Director, Environment, Health and Safety for the Semiconductor Industry Association, a position he has held since 1999. Up until the time he joined SIA, he was a Senior Staff Engineer for Lucent Technologies, Microelectronics Group, serving in the capacity of Corporate Consultant and lead Microelectronics Environmental Health Engineer. He received his B.S. in Civil Engineering from the Cooper Union and his M.S. and Ph.D in Environmental Health

Engineering from Northwestern University. He is a Registered Professional Engineer in Pennsylvania and a Certified Industrial Hygienist. Dr. Fraust's professional career started with Western Electric in 1968 at their semiconductor manufacturing facility in Allentown, Pennsylvania, working on issues related to product contamination. He was subsequently tasked with developing EHS programs for the Allentown Works. Chuck stayed with the Allentown facility through its transition to AT&T Technologies, AT&T Microelectronics, and the Lucent Technologies Microelectronics Group. He left Lucent Technologies shortly before Agere Systems was spun off. Dr. Fraust represented Lucent Technologies on the Semiconductor Industry Association's Environment, Safety and Health Committees and chaired numerous industry committees in this capacity. He was the Lucent Technologies ES&H representative to SEMATECH and International SEMATECH and is a former ES&H Council Chair. Additionally, he serves as a representative, and former chair, of the SIA contingent to the World Semiconductor Council ESH Taskforce. He currently is chair of the WSC ESH Taskforce PFC Working Group. Additionally, Dr.

Fraust is a member of the Domestic Technical Working Group for the International Technology Roadmap for Semiconductors. He is also a member of the Industrial Advisory Board for the NSF/SRC Engineering Research Center for Environmentally Benign Semiconductor Manufacturing. In 1994, Dr. Fraust was named the Lehigh Valley Professional Engineer of the Year and, subsequently, the Pennsylvania Professional Engineer of the Year in 1995

## **Andrew McIntyre**

Andy McIntyre has been an environmental, health and safety professional for more than 22 years and is a co-founder of EORM. He previously worked for Hewlett Packard's Component Group and the Electronics Division of Xerox Corporation. At EORM's founding, Mr. McIntyre served as vice president and managing principal. He was instrumental in the formation of the semiconductor industry's first joint venture consulting company, Global Semiconductor Safety Services, LLC (GS3), a collaboration between EORM and Intertek Testing Services (ITS). Mr. McIntyre served as president of GS3 until the sale of EORM's interest to ITS in January 1999. He then rejoined EORM as executive

vice president and chief operating officer and has since worked with the executive management team to develop EORM into a national management and technical EHS consulting firm. Mr. McIntyre is a board certified industrial hygienist and is the second recipient of Peninsula Industry Business Association (PIBA) Health and Safety Professional of the Year Award (1999). He is an active member of the Semiconductor Environmental Safety and Health Association (SESHA) where he was elected a Fellow in 2001. Prior to that, he served as SESHAs president ('96-'97) and as a member of its Board of Directors ('89-'96).

### **David Tighe**

David works extensively with EH&S and other service teams in the semiconductor and related industries, implementing cutting edge personal and organizational effectiveness programs and making them produce measurable results. His previous presentations at SESHAs have been popular due to his unique style and fresh, practical insights. David holds a degree in Chemical Engineering, a technical background which qualifies him to develop approaches to create lasting change

within technically-based organizations. As co-founder of Bovo-Tighe, LLC, David specializes in designing culture-changing approaches that motivate and fully leverage the capabilities of employees. His clients include organizations such as the Hewlett-Packard Company, Royal Dutch/Shell, the AeA (American Electronics Association), Microsoft, and Genentech. David also works with a number of smaller entrepreneurial organizations and industry consortia.

### **Walter Worth**

Walter F. Worth is a SEMATECH Fellow and member of SEMATECH's Environment, Safety and Health Technology Development Group. He has been employed by SEMATECH since 1993. Prior experience has been with Exxon Research & Engineering, Bechtel and Brown & Root in the chemical and petrochemical industries. He has earned a B.S. degree from the University of Toronto, and M.S. and Ph.D. degrees from MIT, all in chemical engineering. He is a registered Professional Engineer in the State of Texas and a member of AIChE, The Electrochemical Society and SESHAs.

# North Center Ballroom

Tuesday

- 8:15 Continental Breakfast**
- 8:45 Welcome to SESH Annual Symposium & Expo and Awards Presentation.** *Cox, J.; SESH President*
- 9:30 Keynote 1:** Semiconductor Industry Forecast and the Future of Nanotechnology. *Feldhan, J.; Semico Research Corporation*
- 10:15 Break**
- 10:30 Keynote 2:** Retooling Yourself for the Next EH&S Wave. *Tighe, D.; Bovo-Tighe, Bellevue, WA*
- 11:15 Exhibitor Sponsored Lunch in Exhibit Hall**
- 1:15 Keynote 3:** The Semiconductor Industry Association Worker Health Project: An Update. *Fischman, M.; Intel Corporation and Fraust, C.; Semiconductor Industry Association*
- 2:00 Keynote 4:** Exploring Opportunities to Further Eliminate Potential Equipment Related Exposures. *McIntyre, A.; Environmental and Occupational Risk Management, (EORM, Inc.)*
- 2:45 Break in Exhibit Hall**
- 3:15 Keynote 5:** Semiconductor Industry PFC Emissions Estimating and Reduction: Status and Future Directions. *Worth, W.; International SEMATECH and Beu, L.; Laurie Beu Consulting*
- 4:00 Keynote 6:** Fire Codes 2005 - A Review of the Fire Codes and Standards Applicable to the Semiconductor Industry Today. *Benson, R.; Factory Mutual Global*

## Rio Verde/Sonora

Wednesday

### Session 1: Boot Camp: Back to Basics

Moderator: Judi Barker

- 8:00** An Overview of the Semiconductor Manufacturing Process. *Benson, R.; Factory Mutual Global*
- 9:30 Poster Session in Exhibit Hall**
- 10:30** Ergonomic Assessment of Cumulative Trauma Risk. *Kelso, D.; Earth Tech Inc.; San Jose, California*
- 11:15** Industrial Hygiene Speak for the Non IH – Applying Strategies and Methods. *Visty, J.; Earth Tech Inc., Colorado Springs, CO*
- Noon Cash & Carry Lunch in Exhibit Hall**

### Session 2: Emerging EHS Technologies & Issues

Moderator: Tim Jones

- 1:30** The Brave New World of Nanotechnology. *Moffitt, M.; Western Technologies Inc., Phoenix, AZ*
- 2:15** Methods & Resources Used to Help Close ESH Data Gaps and New Tools to Screen Novel Semiconductor Chemicals. *Speranza, D. and Kuntz, M.; SEMATECH, Austin, TX.*
- 3:00 Break in Exhibit Hall**
- 3:30** Reducing PFC Emissions Through Advances in CVD and Etch Processing. *Johnson, A., Ridgeway, R. and Maroulis, P.; Air Products and Chemicals, Inc., Allentown, PA.*
- 4:15** Developing a Climate Change Action Plan. *Higgs, T.; Intel, Chandler, AZ*

## Rio Verde/Sonora

Thursday

### Session 7: Environmental

Moderator: Mike Sherer

- 8:00** Common Yet Complex RCRA Issues Facing SESH Environmental Managers: A Discussion of Regulations, Policies and Pointers on Such Topics as Printed Circuit Board Recycling, Management of Contaminated. *von Oppenfeld, R.; TESTLaw Practice Group*
- 8:45** Catalytic Decomposition of Ammonia from GaN Processes. *Van Gompel, J.; BOC Edwards, Austin TX*
- 9:30 Break**
- 10:00** Removing Fluoride from Industrial Wastewater Using Hybrid-Membrane Technology. *Peterson, J.; Geomatrix, Scottsdale, AZ and Madole, J.; Nalco, Phoenix, AZ*
- 10:45** Chemical Vapor Deposition Process Emission Reduction Using Point-Of-Use Wet Scrubber Technology. *Kempton, C. and Jain, A.; Rogers, Chandler, AZ*
- 11:30 Lunch**

### Session 8: Regulatory/Code Developments

Moderator: Brian Sherin

- 1:00** Assessing the Impact of Technology on the Regulatory Process. *Gannod, G.; Koehnmann, H.; Arizona State University, Tempe, AZ and Litchfield, L.; City of Phoenix, AZ.*
- 1:45** Global S&H Management. *Seabrook, K. A.; Global Solutions, Inc, New Jersey, USA and Global Solutions International Limited, UK*
- 2:30 Break**
- Roundtable: Effect of WEEE & RoHS on the Global Electronics Industry Supply Chain**  
Chair: Brian Sherin, ESHconnect, Inc.
- 2:45 PM** Opening Remarks. *B. Sherin*  
Semiconductor Equipment Manufacturing. *B. Claes, Lam Research*  
Semiconductor Device Manufacturing. *N. Bolinger, IBM*  
Consumer Electronics/Electronic OEMs. *TBD*

Wednesday

## Center Ballroom

### Session 3: Leadership Forum

Moderator: Pat Tierney

- 8:00 Thriving in an Era of Scarcity. *Niekerk, G.; Intel Corporation, Chandler, AZ*  
8:45 Integration of an ESH Chapter into the International Technology Roadmap for Semiconductors (ITRS). *Jewett, J.; Intel Corporation, Chandler, AZ*  
9:30 **Poster Session in Exhibit Hall**

### Session 4: EHS Management

Moderator: Pat Tierney

- 10:30 Transitioning Your EMS from ISO 14001:1996 to ISO 14001:2004. *Wilk, L., Esty, P.; Capaccio Environmental Engineering, Inc., Marlborough, MA*  
11:15 Global Care is Smart Business! *Row, R.; SEMI, San Jose, CA*

### Session 5: Value-Added EHS

Moderator: Rick Row

- Noon **Cash & Carry Lunch in Exhibit Hall**  
1:30 Identifying and Communicating EHS Value. *MacLean, R.; Competitive Environment, Scottsdale, AZ*  
2:15 Using Business Metrics and Leading Indicators of EHS Performance – Translating EHS into Business Benefit. *Rankin, K.; ERM, Austin, TX*  
3:00 **Break in Exhibit Hall**

### Session 6: Chemical & Product Stewardship

Moderator: Rene Bade

- 3:30 Around the World in 80 Days with a New Chemical Substance? *Majors, M.; Air Products and Chemicals, Inc., Carlsbad, CA*  
4:15 Intel Corporation's Technology & Development EHS Chemical Approval Process. *Brown, S.; Intel, Hillsboro, OR*

## Center Ballroom

Thursday

### Session 9: Industrial Hygiene

Moderator: Doug Thornton

- 8:00 Arsenic Regulated Areas – A Reality in the “Clean Semiconductor Industry.” *Rubin, J.; Agilent Technologies, Fort Collins, CO*  
8:45 Health and Nanotechnologies, from Benefits to Hazards. *Proust, N.; TRT-Fr, Orsay, France*  
9:30 **Break**

### Session 10: Occupational Health

Moderator: Molly Doddo

- 10:00 Managing Ergonomics as a Process. *Rostykus, W.; Humantech*  
10:45 Personal Empowerment: An Unconventional Concept in Stress Management. *Jackson, C.; Freescale Semiconductor, Tempe, AZ.*  
11:30 **Lunch**

### Session 11: Safety

Moderator: John Bucciarelli

- 1:00 Intel's EHS New Facilities Equipment Procurement Process (FEPP). *Yurconic, M.; Ronler Acres, Hillsboro, OR*  
1:45 Life Cycle Concerns for a Toxic Gas Monitoring System. *Pugh, J.; Pugh Engineering*  
2:30 **Break**  
2:45 Arc Flash Safety Practices in the Semiconductor Industry. *Clough, J.; Square D/Schneider Electric, Spokane, WA*  
3:30 Fire Risk Mitigation for Integral IPA Dryers - Using Engineering controls versus Gaseous Fire Suppression. *McDaid, R.; Applied Materials, Santa Clara, CA and Wyman, M.; Koetter Fire Protection, Dallas, TX*

## 4:15 PM General Closing Session

### Center Ballroom

# SESHA 27<sup>TH</sup> ANNUAL SYMPOSIUM

## WELCOME TO THE SESHA ANNUAL SYMPOSIUM

SESHA is the world's most respected and widely recognized organization dedicated to communication and education concerning environmental, health and safety (EHS) issues relating to the electronics and high technology industries. SESHA is holding its 27th Annual Symposium and Expo, the forum for exchanging information, techniques and methodologies used in the industry, May 9-12, 2005. Also offered are Professional Development Courses which will be submitted to ABIH and BCSP for continuing education credit approval.

## WEEK-AT-A-GLANCE

MONDAY, MAY 9

**8:00 AM–4:30 PM**—Student Scholarship Paper Presentations  
**8:00 AM–5:00 PM**—Professional Development Courses  
**3:00–6:00 PM**—Conference Registration

TUESDAY, MAY 10

**6:30 AM**—Morning Training Run  
**7:30 AM–4:00 PM**—Conference Registration  
**8:15 AM**—Continental Breakfast at the Keynote Forum  
**8:45 AM–4:45 PM**—Keynote Forum  
**11:15 AM–1:15 PM**—Exhibitor Luncheon  
**11:15 AM–7:00 PM**—Exhibit Hall Open  
**5:00–7:00 PM**—Welcome Reception in the Exhibit Hall

WEDNESDAY, MAY 11

**6:30 AM**—Morning Training Run  
**8:00 AM–3:00 PM**—Conference Registration  
**8:00 AM–5:00 PM**—Concurrent Sessions  
**9:00 AM–3:30 PM**—Exhibit Hall Open  
**9:00 AM–3:30 PM**—Poster Session  
**Noon–1:30 PM**—Cash & Carry Lunch in the Exhibit Hall and Raffle Drawing

THURSDAY, MAY 12

**6:30 AM**—5K Race  
**8:00 AM–1:00 PM**—Conference Registration  
**8:00 AM–4:15 PM**—Concurrent Sessions  
**4:15 PM**—General Closing Session

FRIDAY, MAY 13

**AM**—Golf Tournament

**Don't Forget THESE Dates!**

For Special Hotel Rates,  
Register by April 18.

For Special Symposium  
Registration Rates,  
Register by April 13.

# GENERAL INFORMATION

## TRANSPORTATION

### HOW TO GET TO THE SESHANNUAL SYMPOSIUM & EXPO

All SESHAN sessions, courses and the exhibition will take place at the DoubleTree Paradise Valley in Scottsdale, AZ. Taxis from the Phoenix Sky Harbor Airport are approximately \$30 each way. 24-hour Super Shuttle service is available for about \$14 one way.

### SAVE ON ROUND TRIP AIRFARE TO SESHAN

America West Airlines is offering a discount of up to 10% on airfare, plus other travel discount options to and from the *SESHAN Annual Symposium*. Use the Convention and Meeting Services (CAMS) Code AP7468 to receive your discounts. There are three options for making your discounted reservations:

- Use your CAMS Code at [americawest.com](http://americawest.com) in the eCertificate area of the Air Reservations page for your airline reservations. Your discount will be outlined in detail on the Purchase page. Enter AP7468T if purchasing your tickets 60 days or more prior to travel and AP7468 for ticket purchases less than 60 days prior to travel.
- Call the America West Group & Specialty Travel Department directly at 800-548-7575 Monday through Friday from 6am-6pm.
- Contact your preferred travel agent and reference your CAMS Code AP7468.

America West Airlines can serve virtually all of your meeting travel needs with over 800 daily departures from more than 90 cities all across the United States, Mexico and Canada.

To learn more about the discounts available to you, or to book your reservation, please call America West Airlines today!

## CAR RENTAL

Avis Rent A Car has joined SESHAN to offer you special low car rental rates which apply beginning one week prior to and continuing one week after the dates of the meeting. All Avis rentals include automatic transmission, air conditioning, radio and unlimited mileage. Weekly rates require a five day minimum stay.

<b>Special Rates:</b>	<b>Daily</b>	<b>Weekly</b>	<b>Weekend</b>
<b>Sub Compact</b>	<b>40.99</b>	<b>167.99</b>	<b>25.99</b>
<b>Compact</b>	<b>44.99</b>	<b>179.99</b>	<b>26.99</b>
<b>Intermediate</b>	<b>48.99</b>	<b>195.99</b>	<b>28.99</b>
<b>Full Size 2 Door</b>	<b>49.99</b>	<b>207.99</b>	<b>29.99</b>
<b>Full Size 4 Door</b>	<b>52.99</b>	<b>219.99</b>	<b>30.99</b>
<b>Premium</b>	<b>56.99</b>	<b>230.99</b>	<b>35.99</b>

Call Avis at 1-800-331-1600 or online at [www.avis.com](http://www.avis.com) Request the Avis Worldwide Discount # J948652 or special rates.

The above rates are guaranteed. Return to the same renting location or additional surcharges may apply. All rates include unlimited free mileage. Weekend daily rates are available from noon Thursday - Monday at 11:59 P.M. (vehicle must be checked out by 3:00 PM Sunday). Rates available from May 02, 2005 to May 19, 2005.

Should a lower qualifying rate become available at the time of booking, Avis is pleased to offer a 5% discount off the lower qualifying rate or the meeting rate, whichever is lower. The attendee must use the assigned Meeting Avis Discount Number and meet Avis rate requirements to receive the discount. (Rate discounts are available at all corporate and participating licensee locations.)

# GENERAL INFORMATION

## HOTEL INFORMATION

SESHA has arranged a special rate at the DoubleTree Paradise Valley. The Doubletree Paradise Valley Resort hotel is located just minutes from Old Town Scottsdale and just 12 miles from Phoenix Sky Harbor International Airport. A member of the Hilton Hotels Family of Brands, the resort is located near Scottsdale Fashion Square, the largest shopping center in the Southwest. Scottsdale is a premier golfing destination with nearly 200 courses in the metro area. Scottsdale is also home to several other outdoor activities including hiking and biking. Sports fans have plenty to cheer about with teams in all four major sports, Spring Training Baseball, the Fiesta Bowl, two NASCAR races a year, the 2006 NHL All Star Game, and the 2008 Super Bowl. All guestrooms offer the ambience of an upscale resort and amenities. Your luxurious guestroom will feature views of lush courtyard filled pools and fountains or exquisite desert vistas. Guestroom amenities include high-speed internet access, and large work areas. Premium rooms include Sweet Dream Beds with upgraded linen and pillows. The resort offers two large heated outdoor pools with Jacuzzi, health club facilities, kids play area, concierge, and a full-service restaurant

and lounge. And, of course, you will always enjoy our signature DoubleTree chocolate chip cookies served warm upon check-in.

### RATES:

Single	\$150.00
Double	\$155.00

Please note that these rates do not include tax.

DoubleTree Paradise Valley  
5401 N. Scottsdale Road  
Scottsdale, AZ 85250  
Phone: 800-648-4462

Reserve your room online at [www.seshaonline.org](http://www.seshaonline.org), or [http://www.hilton.com/en/dt/groups/private\\_groups/phxsj\\_ses/index.jhtml](http://www.hilton.com/en/dt/groups/private_groups/phxsj_ses/index.jhtml) use code word SES or call or fax using the form on page 19. **Reserve early to ensure a room at the group rate. Once the block is sold out rooms may not be available at the group rate.**

## CANCELLATION POLICY

All conference, recreation events and tour cancellations must be in writing and must reach the SESHA Office by April 13 to receive a refund. All refunds will be issued after the meeting and will be subject to a \$50 processing fee. Refunds will not be issued to no-shows.

## EXHIBITION

May 10-11:15 AM-7 PM  
May 11-9:00 AM-3:30 PM

For many of the industry professionals who attend, the

focus of the SESHA Annual Conference is the three-day exhibition. You will find state-of-the-art products and services directly relating to the safety and industrial hygiene, environmental and high technology fields on display.

At the exhibition, industry leaders have a firsthand opportunity to examine, talk about, and learn from the products and services on display.

The Exhibitors are hosting a variety of events throughout the week, so check your final program for further details.

## RESERVING SPACE FOR ADJUNCT MEETINGS

If you would like to hold an adjunct meeting at the 2005 Annual Conference, please contact Lori Strong at SESHA Headquarters, 703-790-1745 or [LStrong@BurkInc.com](mailto:LStrong@BurkInc.com), as soon as possible. After the SESHA Committee meetings have been accommodated, space will be assigned on a first-come, first-served basis.

## PROFESSIONAL CERTIFICATION POINTS

Conference attendees typically receive certification maintenance points from both BCSP and ABIH. Occupational health nursing CEU's are also pending approval.

# PROFESSIONAL DEVELOPMENT COURSES

## MONDAY, MAY 9

**8:00 AM-5:00 PM**

**PDC1-Media/Crisis Communications for EH&S Professionals**

*Organizers: Kenneth Haseley; The Ammerman Experience, Houston, TX and Sheila Sorvari*

Discipline: Management

Class Level: Intermediate

Talking to a reporter can be a daunting task – especially if you lack confidence and competence in dealing with the news media. This one-day, interactive workshop addresses the increasingly important media and crisis training needs of environmental, health and safety professionals who may find themselves interacting with the news media in a variety of situations.

The morning portion of the workshop focuses on the fundamentals of effective media communications: four absolutes when dealing with the media, the importance of having a message and how to deliver that message, the most common and damaging traps encountered when talking to a reporter, and how to establish trust and credibility – the primary goal of all communication.

The afternoon portion focuses on crisis management: the five predictable stages of every crisis, and how to conduct a successful press briefing. Participants form teams and will be given a variety of semiconductor industry-re-

lated scenarios. Each team analyzes its scenario, develops a media strategy, and selects a team member to participate in an interview that is taped and critiqued.

This is a fast-paced, entertaining workshop that offers practical guidance. A total of 15 individuals will participate in a variety of videotaped simulations. The session also includes extensive use of non-confidential, public-domain video clips. Participants receive detailed notes summarizing the concepts covered in the workshop.

**8:00 AM-5:00 PM**

**PDC2-Applied Industrial Ergonomics**

*Organizers: Walt Rostykus, CPE, CSP, CIH; Humantech*

Discipline: Safety

Class Level: Basic

The Applied Industrial Ergonomics professional development course provides the resources and tools to make simple yet effective human performance improvements in your workplace. Hands-on problem solving methods will help you recognize, evaluate, and control ergonomic risk in the industrial environment. Learn to conduct complete ergonomic risk assessments using proven methodologies. Description of Presentation: The Applied Industrial Ergonomics course provides the resources and tools to make simple and effective human performance improve-

ments in your workplace. Hands-on problem solving methods will help you recognize, evaluate, and control ergonomic risk in the industrial environment. This session is targeted to individuals responsible for finding and improving problem jobs in industrial environments including ergonomics team members; site-based engineers and maintenance staff; and health and safety professionals. By the end of the course, participants will be able to: - Describe ergonomics and why it is important to their company - Identify common work-related musculoskeletal disorders (WMSDs) and their signs and symptoms - Quickly and easily identify ergonomic issues and solutions - Identify ergonomics risk factors - Prioritize jobs based on ergonomic risk factors and other data - Analyze manual material handling tasks with advanced ergonomic assessment tools. Identify and implement effective ergonomic improvements including: Specifying basic working heights, reach distances, and force limits with the design & build Guidelines; Cost justifying improvements; Performing an ergonomic job review using the appropriate methods.

# PROFESSIONAL DEVELOPMENT COURSES

**8:00 AM-5:00 PM**

**PDC3-EHS Design and Installation Considerations for Specialty Gas, Chemical Distribution, and POU Delivery Systems**

*Organizers: Varun Gopalakrishna; EORM, Sunnyvale, CA; Aaron Zude; Facilities and Safety Solutions, Fremont, CA and Susan Creighton; Applied Materials, Santa Clara, CA*

Discipline: Safety

Class Level: Intermediate

This PDC will review the key hazards, requirements and implementation of engineering controls associated with gas and chemical delivery system design, construction and commissioning. Participants will learn practices that form the basis for sound design criteria and installation principles of specialty gas, chemical distribution, and point-of-use (POU) delivery systems in both R&D and manufacturing environments. The focus of this full day workshop will be on identifying engineering and administrative controls that enhance the safety, operability and flexibility of these systems. Materials of construction, gas and chemical delivery and maintenance logistics, detection of upset conditions, LOTO practices, and key safety control points will be examined in relation to their role in providing a safe work environment and minimizing business interruption. The workshop will be structured with a mix of pre-

sentation and group activities, with participants spending a large portion of their time reviewing examples and schematics prepared for this workshop. It is recommended that attendees familiarize themselves with the fundamental code requirements related to specialty gas and chemical system installation in high tech facilities (e.g. UFC, UBC, TGO) in advance of the workshop.

**8:00 AM-5:00 PM**

**PDC4-Global Environmental Health and Safety Management**

*Organizer: Kathy Seabrook; Global Solutions International Ltd., United Kingdom*

Discipline: Management

Class Level: Intermediate

This one-day seminar is experience based and practical, designed for both new and experienced environmental, health and safety (EHS) managers with global responsibilities. The seminar includes an overview of global EHS management systems, their implementation challenges and examples of strategies used by multinational companies to meet those challenges. It provides resources relating to S&H regulations, cross cultural issues and EHS references. It also provides attendees with opportunities to share their own company's approaches to global EHS management through breakout groups and case studies. At the conclusion of the seminar,

attendees will have the tools, perspective and resources to tailor a best practice global EHS management approach to meet the needs of their own company. Learning Objectives: 1. Tailor 'best/good management practice' strategies for developing, implementing and monitoring a global EHS management process to meet the needs of your organization. 2. Develop a strategy for managing regulatory compliance at global sites. 3. Develop a "Global Fluency," in issues of country culture and how it impacts EHS business results. 4. Develop a network of and share information with EHS professionals actively involved in managing global EHS processes/systems.

**8:00 AM-5:00 PM**

**PDC5-RCRA Waste Identification and Generator Performance Standards**

*Organizers: Rolf von Oppenfeld; TESTLaw Practice Group*

Discipline: Environmental

Class Level: Intermediate

This is a full day (eight hours of lecture) on RCRA and the requirements to categorize waste streams at a facility and then to identify the appropriate generator performance standards that apply. The class starts with the basic RCRA program and its cradle to grave requirements for regulated hazardous waste. It then goes through the RCRA waste identification process, working

# PROFESSIONAL DEVELOPMENT COURSES

through 40 C.F.R. Section 261. The solid waste triggers and exemptions are reviewed to determine what is regulated solid waste, then the eight hazardous waste jurisdictional triggers are reviewed. The role of recycling exemptions is discussed. Once the waste identification process and the need to document it for each waste stream is thoroughly explored, the various generator performance standards are covered. The requirements for conditionally exempt, small quantity and large quantity generator requirements are discussed. Finally, a short tutorial on federal release reporting requirements concludes the session. This class is appropriate for beginners, but there will be many advanced concepts discussed that may not be absorbed the first time by beginners. The class will satisfy RCRA 8 hour refresher training requirements.

## 1:00-5:00 PM

### **PDC6-Performance-Based Auditing: How It's Different and Why It's Better**

*Organizers: Jeanne Yturri; Zephyr, Austin, TX*

Discipline: Environmental  
Class Level: Advanced

Look up 'audit' in Webster's and you will find that it simply means to examine or verify. Yet anyone who has conducted an environmental or safety audit knows that it is a complex process that is intended to provide meaningful

information that can be used to drive improvement. No matter what, how big the facility or the number of topics being addressed, it is vital that the auditor see what is 'real' and not miss something important. A different form of auditing has emerged as organizations improve the way they manage their environmental and safety issues. The new and improved audit process is called a 'performance-based audit' and it requires a different skill set and attitude than a 'compliance-based audit.' In a compliance-based audit, the auditor considers potentially applicable regulations and then reviews documents and records, makes observations, and conducts interviews to verify whether compliance requirements are being met. During a performance-based audit, an organization must also demonstrate that controls and practices are in place to adequately manage the aspects of their business that pose a potential for harm in terms of injury, ill health, or impacts to the environment. This professional development course will teach you how to look for evidence that environmental and safety risks are being addressed and how to conduct a performance-based audit that will provide your organization or your client with accurate and meaningful results.

## 8:00 AM-Noon

### **PDC7-Enhancing your EMS - View from the Field**

*Organizer: Gabriele Crognale, P.E.; Merrimack College*

Discipline: Management  
Class Level: Intermediate

This Professional Development Course follows a B-School Case Study approach in utilizing a number of EMS management tools to improve upon an organization's EMS, and looking at these tools in the context of actual field experiences in a number of regulated industries - from electronics to automotive suppliers, and others in between. The solutions we will provide, including working with the ISO registrar as an ally, will be presented in a workshop-type setting in which actual implementation assistance and registrar audit observations will be presented to generate feedback from the participants. Included among the tools we will discuss are SOP shortfalls (a quick fix), various auditing techniques, pitfalls associated with some of these techniques, and our approach to auditing as a true management solution-seeking tool. There will also be a brief introduction to performance-based auditing, which is the afternoon PDC session. We also recommend that participants procure a copy of our book, *Environmental Management Strategies: The 21st Century Perspective*. [www.](http://www.)

amazon.com. The book includes several sections about EMS implementation (S-T Microelectronics) and auditing and is a good reference source for this PDC's lesson plan.

## 1:00-5:00 PM

### **PDC8-Beyond CTDs...An Ergonomic Sprain/Strain Prevention Strategy**

*Organizers: Michael O'Brien; Intel, Chandler, AZ*

Discipline: Safety

Class Level: Basic

This course covers an approach taken by one of Intel's manufacturing organizations to address ergonomic sprain/strain injuries. Previous ergonomics efforts have largely focused on CTD prevention, including training, engineering and administrative controls. While these efforts have been effective, a concern remains about how to prevent acute sprain/strain injuries. The approach taken by this factory included 2 programs: an ergonomic emphasis to job hazard analysis, and a new training class to convey the importance of proper body mechanics. The JHA is intended to address conditions that may cause a sprain/strain, and includes detailed definitions of ergonomic risk factors and related hazard control strategies. The training class was developed to raise awareness and employee commitment to practicing good ergonomic behaviors daily. Both of these

programs will be presented in detail, with discussion on the results and future action plans.

## 8:00 AM-Noon

### **PDC9-WEEE/RoHS and Other EU Legislation and Their Likely Effects on the Semiconductor Industry**

*Organizer: Andrew Sweatman; ESH Connect*

Discipline: Environmental

Class Level: Basic

The European Union's Waste Electronics and Electrical Equipment (WEEE) and Restriction of Hazardous Substances (RoHS) Directives impose unprecedented regulatory restrictions on substances used in the manufacturing of electronics and the entire global electronics industry supply chain. Manufacturers and their suppliers must comply with significant, and potentially costly, compliance requirements in order to meet the deadlines that are occurring in 2005 and 2006. Like many new sweeping regulations, the means of compliance are not clear. For example, clear requirements for implementation are not yet provided, specifically what actions will constitute "compliance." This makes it not only difficult to prove RoHS compliance to regulatory bodies, but just as importantly to customers. Europe is just the beginning of such compliance requirements. China, Japan, Korea,

and the USA and other jurisdictions are developing similar laws. In addition, the EU is also proposing significant new regulations on chemical registration and risk assessment (REACH) and energy efficiency (Directive on the eco-design of Energy-using Products [EuP]), which will also have significant effects on this industry. In the absence of well-defined statutory or regulatory guidance, implementation of a best management practice approach that incorporates the common compliance activities of industry leaders may prove a valuable corporate strategy. This program will provide ESHconnect (a leader in providing web-based compliance data) and Agile (A provider of Product Lifecycle Management solutions) will present a process for developing and implementing a strategy for compliance. The session will provide both the legal framework and strategies for actually establishing a compliance system. Where possible, the presenters will include case studies of how companies in the global electronics supply chain are implementing such plans as part of their ESH, Sustainability, and/or Product Lifecycle Management programs.

# STUDENT PRESENTATIONS - 8 AM-4:30 PM

## MONDAY, MAY 9

- 8:00 EHS Performance Management: A Study of Corporate Data Tracking Practices and Organizational Learning.  
*C. White; Berkeley*
- 8:40 Challenges and Environmental Issues in the Development and Use of Lead-Free Solders.  
*A. Schmidt; Cal Poly*
- 9:20 P2 in the Semiconductor Industry: From the Golden State to the EU.  
*B. Orchard; Cal Poly*
- 10:00 Break**
- 10:20 Safe Decontamination of Shock Sensitive Materials Used in the Semiconductor Industry.  
*C. Gilbertson; UM-Duluth*
- 11:00 Evaluating the Options: Recycling Hydrofluoric Acid.  
*J. Kavanagh; UM-Duluth*
- 11:40 Effects of ACGIH Proposed Reduction in the TLV of Arsine on the Semiconductor Manufacturing Process.  
*P. Sayles; UM-Duluth*
- 12:20 Lunch (on your own)**
- 1:30 Consequences and Impacts of the Multi-Employer Work Site Standards in the Semiconductor Industry.  
*B. Spielman; UW-Stout*
- 2:10 Analyzing Health Promotion Programming Utilization and the Benefits as a Profit Center for the Semiconductor Industry.  
*B. Borke; UW-Stout*
- 2:50 Break**
- 3:10 An Assessment of the Potential Impacts of the Proposed European Union Registration, Evaluation, and Authorization of Chemicals (REACH) Regulation on the Semiconductor Industry.  
*D. Moilanen; UW-Stout*
- 3:50 The Security Considerations for Domestic Terrorism Within the Semiconductor Industry.  
*J. Market; UW-Stout*

SEMICONDUCTOR ENVIRONMENTAL, HEALTH & SAFETY ASSOCIATION  
HOTEL RESERVATION FORM

**MAY 9-12, 2005**

**DOUBLETREE PARADISE VALLEY RESORT**  
**5401 N. SCOTTSDALE RD., SCOTTSDALE, AZ 85250**

RESERVATIONS: 480-947-5400; FAX: 480-946-1524

Online Reservations: [http://www.hilton.com/en/dt/groups/private\\_groups/phxsj\\_ses/index.jhtml](http://www.hilton.com/en/dt/groups/private_groups/phxsj_ses/index.jhtml)

Use Promotional Code Word: **SES**

Check In Time: 4:00 PM – Check Out Time: Noon  
Single \$150/Double \$155/Triple \$165/Quad \$180

Room rates are subject to the current 11.9% city tax. Family Plan is at no additional charge for children 17 years and younger sharing the same room with parents.

Reservation must be received and guaranteed by April 18, 2005 with one of the following:

- An enclosed check or money order covering the first night's stay to include 11.9% city tax.  
Amount of Check/Money Order \$ \_\_\_\_\_  
or  
 Major credit card with an expiration date and an authorized signature.

Deposits will be refunded only if cancellation notification is received at least 72 hours (3 days) prior to arrival.

**Reservations must be received by April 18, 2005.** All Reservations received are on a space and rate available basis. Reserve early to ensure a room at the group rate. Rates are good for 3 days before and after the convention dates.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Country: \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_

Sharing Room With: \_\_\_\_\_ # of Adults in Room \_\_\_\_\_

Arrival Date: \_\_\_\_\_ Time: \_\_\_\_\_ Depart. Date: \_\_\_\_\_ Time: \_\_\_\_\_

Preferred Hotel/Room Type:  King  Double/Double  
 Smoking  Non-Smoking

HHonors # \_\_\_\_\_

**Accommodations for the Disabled:** The Hotels, in compliance with the American Disabilities Act, has equipment and services available. Please inform them of your needs prior to arrival.

Special Requests: \_\_\_\_\_

**Credit Card:**  American Express  MasterCard  VISA  Diners Club

Cardholder's Name: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Credit Card # \_\_\_\_\_

Cardholder's Signature \_\_\_\_\_

*PLEASE COPY THIS FORM AND MAIL OR FAX YOUR  
RESERVATION TO THE ADDRESS/FAX NUMBER ABOVE*

# SESHA 27th Annual Symposium Registration Form

May 9-12 - DoubleTree Paradise Valley, Scottsdale, AZ

**PLEASE PRINT CLEARLY**

Early Registration Deadline is April 13.

Member # \_\_\_\_\_

Name: (For Badge) \_\_\_\_\_

Job Title: \_\_\_\_\_

Company: (For Badge) (Limit to 15 Characters and Spaces) \_\_\_\_\_

Mailing Address: (Include Full Name of Business Affiliation) \_\_\_\_\_

City: \_\_\_\_\_ State/Country: \_\_\_\_\_ ZIP/Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ Email: \_\_\_\_\_

Special Needs _____	On & Before 4/13	After 4/13
<input type="checkbox"/> SESHA Member (Includes a full day or two 1/2 day PDC's)	\$595.00	\$645.00
<input type="checkbox"/> Non-Member* (Includes a full day or two 1/2 day PDC's)	\$695.00	\$745.00
<input type="checkbox"/> Full-Time Student & Full-Time Professor	\$ 75.00	\$100.00
<input type="checkbox"/> SESHA Member + 2005 dues (Includes a full day or two 1/2 day PDC's)	\$695.00	\$745.00
<input type="checkbox"/> One Day Member <input type="checkbox"/> Tues. <input type="checkbox"/> Wed. <input type="checkbox"/> Thurs.	\$225.00	\$225.00
<input type="checkbox"/> One Day Non Member <input type="checkbox"/> Tues. <input type="checkbox"/> Wed. <input type="checkbox"/> Thurs.	\$250.00	\$250.00

\*Includes a 1 year 2005 SESHA Membership - available to **first time members ONLY**

Professional Development Courses – Monday, May 9 – Class Size is Limited (Register Early)	Member	Non-Member
<input type="checkbox"/> <b>PDC 3</b> -EHS Design & Installation Considerations for Specialty Gas, Chemical Distribution & POU Delivery Systems. <i>V. Gopalakrishna, A. Zude. S. Creighton</i> (Full Day)	\$225.00	\$250.00
<input type="checkbox"/> <b>PDC 4</b> -Global Environmental Health and Safety Management. <i>K. Seabrook</i> (Full Day)	\$225.00	\$250.00
<input type="checkbox"/> <b>PDC 6</b> -Performance-Based Auditing: How it's Different & Why it's Better. <i>J. Yturri</i> (Half Day PM)	\$125.00	\$150.00
<input type="checkbox"/> <b>PDC 8</b> -Beyond CTDs...An Ergonomic Sprain/Strain Prevention Strategy. <i>M. O'Brien</i> (Half Day PM)	\$125.00	\$150.00
<input type="checkbox"/> <b>PDC 9</b> -WEEE/RoHS and Other EU Legislation and Their Likely Effects on the Semiconductor Industry. <i>A. Sweatman</i> (Half Day AM)	\$125.00	\$150.00

## Additional Activities

<input type="checkbox"/> 5K Run	No Charge
<input type="checkbox"/> Friday, May 13 Golf Tournament (Golf must be paid for outside of your corporate membership)	\$100.00
<input type="checkbox"/> Lunch after Golf Tournament (Golf must be paid for outside of your corporate membership)	\$TBD

**PAYMENT** –  Made through Corporate Membership  American Express  VISA  MasterCard **Total Amount Due** \_\_\_\_\_

Card # \_\_\_\_\_ Exp Date \_\_\_\_\_

Cardholder Name \_\_\_\_\_ Cardholder Signature \_\_\_\_\_

If paying by check please mail to SESHA, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101

SESHA Federal ID # 86-0455636

**Meeting Refund Policy:** Request for refunds will be honored **if received in writing by April 13**. All refunds will be issued **AFTER** the meeting and will be subject to a **\$50.00 processing fee**. NO REFUNDS WILL BE ISSUED AT THE MEETING. Refunds will not be issued to no-shows.

*If faxing in registration with credit card payment, 703-790-2672, please do not mail in original*