

From Global Warming to RoHS.... keep up-to-date on emerging issues and trends

SESHA 29TH ANNUAL INTERNATIONAL HIGH TECHNOLOGY ESH SYMPOSIUM & EXPOSITION

**April 10-14, 2007
Santa Clara Marriott
Santa Clara, California**

More than 40 education sessions on:

- Emergency Preparedness
- Safety/IH
- Environmental/Facilities
- ESH Management
- International ESH Issues
- Emerging ESH Issues
- Worker's Comp/General Wellness
- Product Stewardship

Plus....Semi Bootcamp, Keynotes on Sustainability, Planning for Success in China, Global Warming, a virtual fab tour and much more

More reasons why you should register now:

- Earn up to 5.0 CEUs
- 3 PDCs presented by National Fire Protection Association
- New PDC on Developing an Effective Asset Decommissioning and Investment Recovery Program

Scroll down for:

- ◆ Full description of each Keynote session
- ◆ Bios on the presenters
- ◆ Complete Program Grid
- ◆ Registration form

**For Special Rates at the
Santa Clara Marriott,
Reserve Your Room By
March 16**

KEYNOTE SPEAKERS

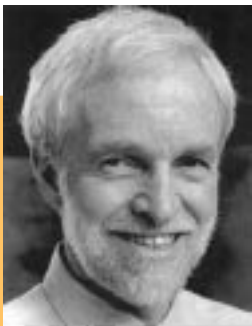


Keynote 1: Keynote 1: How sustainability drivers are shifting the business landscape and the five business questions you need to be able to ask your CXO. *Gil Friend*



Keynote 2: Planning for Success in China: Understanding the Key Product-related ESH Regulations Such as China RoHS. *Tad Ferris*

In China, the number of regulatory programs affecting the semiconductor and other high-technology industry sectors continues to grow. Over the past year, Chinese authorities engaged in the development of rules which involve electronic information product substance restriction and related information disclosure, electrical and electronic equipment take-back and recycling, materials reuse and recovery, energy efficiency, manufacturing facility pollution control, green procurement, and used equipment import and export restriction. The growth of such programs has been portrayed as a challenge. Indeed, characteristics of the Chinese regulatory system such as overlapping agency authorities, limited transparency, phased implementation of rules, and a reluctance to reflect interpretive details in written documents contribute to this portrayal. A deeper understanding of the Chinese rulemaking system, priorities, and practices can minimize challenges. Indeed, as this keynote will address, a proactive approach to addressing such developments and the responsible Chinese officials is increasingly critical to success in the China market.



Keynote 3: Global Warming: More than Hot Air. *David Chapman*

We know from weather station records that Earth's surface temperature has increased on average by 0.8 oC in the last 100 years. Proxy records suggest an average increase of 1.2 oC since the industrial revolution with polar regions warming much more. Sea level is increasing and the outer layer of Earth is accumulating heat energy. We know also that planet Earth has an atmosphere that creates a natural greenhouse effect, keeping our surface warmer than it would otherwise be. Human activities are substantially increasing the atmospheric concentrations of greenhouse gases, principally carbon dioxide and methane, to levels far above those that have existed for the past 200,000 years. We do not know, on the other hand, all the details of our complex climate system sufficiently well to predict the exact consequence of greenhouse gas increases on global temperature. Should we wait for greater certainty about global warming or should we take steps immediately to stabilize possible climate change? Global trends suggest that allowing "business as usual" is a risky path. World population is nearing 6.6 billion and will likely rise to 10 billion in the lifetimes of our children. Much of the population growth will be in developing countries with a natural desire for an increased standard of living. That living standard increase, according to current examples, comes with increases in per capita energy consumption. Because 90% of society's energy presently is produced by burning fossil fuels, the inevitable population increase and drive towards higher standard of living simultaneously aggravates the enhanced greenhouse gas condition and, with it, global warming. There is an alternate path. We could unleash our engineering, economic, and political entrepreneurs to improve energy conservation and efficiency and move us towards greater use of renewable energy sources. Technology and training in energy efficiency and use of non polluting fuels could allow developing nations to skip the carbon intensive energy production stage of industrialization. Such a path would simultaneously reduce excessive consumption in developed countries and provide conditions that would bring worldwide population growth under control. Global warming may be the "smoke alarm" that pushes us to action.

KEYNOTE BIOGRAPHIES

Keynote 1: Gil Friend

Gil Friend is founder, president & CEO of Natural Logic Inc, providing advisory services in strategy, design, operations and information systems that help clients build economic advantage through exceptional environmental performance – *Sustainable performance you can take to the bank™*

Clients have included Agilent Technologies, Ex'pression Center for New Media, General Mills, Gilead Sciences, Granite Construction, Green Mountain Energy, Hewlett Packard, Nike, Odwalla, Pacific Gas & Electric, Sun Microsystems, the US General Services Administration and many others.

A systems ecologist and business strategist with 35 years experience in business, communications and environmental innovation, Friend combines broad business experience with unique content experience spanning strategy, systems ecology, economic development, management cybernetics, and public policy. Tomorrow Magazine called him “One of the country’s leading environmental management consultants — a real expert who combines theoretical sophistication with hands-on, in-the-trenches know-how.”

He is a founding board member of the Sustainable Business Alliance, the California Sustainable Business Council, and internet pioneer

of the Institute for Global Communications, and was Co-founder and Co-Director of the Institute for Local Self-Reliance, one of the nation’s leading urban ecology and economic development “think-and-do tanks,” where he pioneered the current “green roof” trend more than 30 years ago.

Friend lectures widely on business strategy and environmental policy, and currently writes “The New Bottom Line,” a monthly column on business strategy; the “Ask the Experts” feature at GreenBiz.com; a “Sustainability Sundays” column for WorldChanging.com; an irregular weblog on strategic sustainability and other matters of interest at blogs.natlogic.com/friend; and a forthcoming book: *Risk, Fiduciary Responsibility and the Laws of Nature*.

He holds an MS in Systems Ecology from Antioch University, a black belt in Aikido, and is a seasoned practitioner of “The Natural Step” environmental management system.

Keynote 2: Tad Ferris

Tad Ferris is a Partner at Holland + Knight and a principal with the firm’s China team, focusing on China regulatory and government relations matters. Tad helps multinational corporations, associations and other entities develop and implement successful investment strategies that minimize product environmental regulatory and other risks in the China market.

Tad’s practice focuses on Chinese environmental, health and safety legal issues and he advises clients on regulatory and government relations issues regarding doing business in China. These issues include environmental compliance planning, RoHS, product registration, WEEE recycling, hygiene regulation, pre-market certification and associated testing requirements, chemical registration, product design standardization, regulated materials transportation, product import and export, end-of-life product and materials disposition, worker health and safety, employment/labor management, emergency planning, and associated negotiations.

Tad has acted as a comparative environmental law consultant for U. N. organizations, development banks, and foreign institutions, including developing-country organizations such as China’s National People’s Congress.

Tad holds a Juris Doctor degree, a Master’s of Law in

KEYNOTE BIOGRAPHIES

Comparative and International Legal Studies from Duke University, a Master's in East Asian Studies from the George Washington University, and a Bachelor's in International Relations from Clark University.

Tad has served as Vice Chair of the China Committee of the U. S. Council for International Business (USCIB), Chair of the USCIB China-Environment Working Group, and is a member of the China Task Force of the Business and Industry Advisory Committee (BIAC) to the OECD. Tad co-established and is counsel to the China EHS Roundtable and is outside counsel to the Program Advisory Committee for the American Bar Association China Governance Project.

In October 2006, Tad received an Outstanding Contribution Award from the International Fund for China's Environment for his contributions to China's environmental protection.

Tad is fluent in Mandarin Chinese, speaks Southern Min, Fukkienese, and Japanese, and reads French.

Keynote 3: David Chapman

David Chapman is Professor of Geophysics and Dean of the Graduate School at the University of Utah. Dr. Chapman received his B.S. and M.S. degrees in physics from the University of British Columbia and his Ph.D. in geophysics from the University of Michigan. He joined the faculty at the University of Utah in 1976. Chapman leads an active research group studying thermal aspects of geological processes including global warming. He is author of more than 120 publications including two Scientific American articles, four papers in Nature and one in Science. He has commuted to work for the past 30 years on the same Peugeot 10 speed, enjoys back country skiing, and reserves part of each summer for long-distance walking. In 2006 Chapman was awarded the Rosenblatt Prize, the University of Utah's highest award for excellence in research, teaching, and academic leadership.

Opening Session

9:00 Welcome to SESHAs Annual Symposium & Expo and Awards Presentation. Karl Albrecht, *SESHA President*

Keynote Address

10:00 Keynote 1: How Sustainability Drivers are Shifting the Business Landscape and the Five Business Questions you Need to be Able to Ask your CXO. *Gil Friend*

11:00 Exhibitor Sponsored Lunch in Exhibit Hall

12-5:00 Student Paper Presentations - a new paper presentation will occur every half hour

Bootcamp

Safety/IH

Environmental/Facilities

Moderator: Susan Creighton

Moderator: Jay Jamali

Moderator: Mike Sherer

1:00 Take the Virtual Fab Tour
DeGiorgio, V.; FM Global

1:00 Global Harmonization System of Classification and Labeling of Chemicals (GHS)
Sullivan, M.; MRS Associates

1:00 Hazardous Materials Systems - Alternate Means and Methods of Fire Code Compliance
Hansen, D., Gopalakrishna, V.; Santa Clara Fire Department, EORM

2:30 **Break in Exhibit Hall**

1:45 Current Topics in Industrial Hygiene
Rohm, T.; Industrial Hygiene Services

1:45 Hazardous Materials Systems Permitting - A Partnering Approach
Gopalakrishna, V., Hansen, D.; EORM, Santa Clara Fire Department

2:30 **Break in Exhibit Hall**

2:30 **Break in Exhibit Hall**

Bootcamp

Safety/IH

Round Table 1

Moderator: Susan Creighton

Moderator: Jay Jamali

Moderator: Steve Roberge

3:00 Hazards Associated with Epitaxy
O'Hehir, J.; Applied Materials

3:00 Ergonomics - Human Factors and Challenges of Semiconductor Manufacturing Equipment
Macklin, R.; Applied Materials, Inc.

3:00 Leveraging Product Innovation for Sustainable Environmental Compliance
Cote, D.; PRTM

3:45 Hazards Associated with Photolithography Tools
Greenberg, C.; Nikon Precision

3:45 Statistics: An Intro to A New Way of EHS Analysis and Reporting
Fessler, M.; Tokyo Electron America (TEA)

4:30 **Break in Exhibit Hall**

4:30 **Break in Exhibit Hall**

4:30 **Break in Exhibit Hall**

4:30-7:00

Exhibitor Sponsored Opening Reception in Exhibit Hall

Keynote Address

- 9:00** **Keynote 2: Planning for Success in China: Understanding the Key Product-Related ESH Regulations Such as China RoHS.** *Tad Ferris*
- 10:00** **Break in Exhibit Hall**

Bootcamp

- Moderator: Sunny Rai**
- 10:30** Plasma Etch Equipment Safety Considerations
Claes, B.; Lam Research
- 11:15** EHS Concerns with Diffusion Processes
Mullenga, E.; Applied Materials

Safety/IH

- Moderator: Faith Seal**
- 10:30** The Laws are Changed
Hanselka, R.; IES
- 11:15** Top 20 OSHA Violations in the Semiconductor Industry
Jamali, J.; Enviro Safetech

International ESH

- Moderator: Brett Davis**
- 10:30** Chemical Control Measures: Comparison of EU and the US at Fed and State Level
Donkers, R.; Delegation of the European Commission to the US
- 11:15** Are you Ready for REACH?
Natarajan, P.; 3E Company

Noon

Lunch in Exhibit Hall

Bootcamp

- Moderator: Sunny Rai**
- 1:00** Implant Tools Hazards associated with the use and PM tasks of Implanters
Tyrrell, N., D'Agostino, M.; Varian Semiconductor Equipment Associates, Inc.

SEMI Standards

- Moderator: James Beasley**
- 1:00** Overview of SEMI EHS Standards and Safety Guidelines
McLeod, I.; SEMI
- 1:20** SEMI Standards and New Methods to impact on the EHS in the Fab
Barcik, S.
- 1:40** Industry Standards: Adding Value to Equipment Safety Design
Greenberg, C.

Environ/Facilities

- Moderator: Mike Sherer**
- 1:00** The Role of POU Abatement in Sustainable Manufacturing.
Holsbrink, J., Worth, W.; SEMATECH/ISMI

Bootcamp

- Moderator: Sunny Rai**
- 1:45** Hazards Associated with Vapor Deposition Capital Equipment
Kryaska, P., Brewster, A.; Novellus Systems Inc.
- 2:30** **Break in Exhibit Hall**

SEMI Round Table

- 2:00** SEMI Standards Round Table
- 2:30** **Break in Exhibit Hall**

Environ/Facilities

- 1:45** 300-mm Abatement: The Devil is in the Details
Van Gompel, J.; BOC Edwards
- 2:30** **Break in Exhibit Hall**

Bootcamp

- Moderator: Sunny Rai**
- 3:00** Chemical Mechanical Planarization (CMP) Process Hazards
McLean, R.; Applied Materials

Emer Preparedness

- Moderator: Jeff Clark**
- 3:00** Preparedness Planning for Businesses Pandemic Influenza and Bioterrorist Attacks
Wilder, C., Burkhart, J.; Santa Clara County Public Health Office

Environ/Facilities

- 3:00** Introduction to AERMOD and Semiconductor Industry Case Study
Smedley, G.; Trinity Consultants

Product Stewardship

- 3:45** Product Ecology Regulation and its Impact on the Electronics Industry and Beyond
Brady, T., Rallison, T., Young, L.; Intel Corporation

Emer Preparedness

- 3:45** Equipment Decontamination, Recovery, & Restoration: Lessons Learned – the Good, the Bad, and the Ugly
Svendsen, C., Barnes, R.; BELFOR USA

Environ/Facilities

- 3:45** New Cooling Water Control Technology Facilitates Fabs' Water Reuse Strategies
Duncombe, J., Madera, E., Jenkins, B.; Intersil, Linear Technology Corporation, Nalco Company

4:30-5:30

TERF Update

Keynote Address

9:00 Keynote 3: Global Warming: More than Hot Air. *David Chapman*

10:00 Break

| Emerging ESH Issues | Workers' Comp/Gen Wellness | ESH Management |
|---|---|---|
| <p>Moderator: Jerry Reid</p> <p>10:30 Nanotechnology Health and Safety Issues <i>Kelly, R.; Lawrence Berkeley National Laboratory</i></p> <p>11:15 Nanoparticle Monitoring in Occupational Environments - Comparing and Contrasting Measurement Metrics <i>Norman, S., Olson, G.; TSI, Inc.</i></p> <p>Noon Lunch</p> | <p>Moderator: Roy Dojahn</p> <p>10:30 Assessing Fitness-for-Duty in a Medical Framework <i>Blink, R.C.; American College of Occupational and Environmental Medicine</i></p> <p>11:15 Investing in Wellness Programs to Improve Health and Manage Costs <i>Luthra, J.; Intel Corporation</i></p> <p>Noon Lunch</p> | <p>Moderator: Rick Row</p> <p>10:30 Implementing OSHA VPP at a Semiconductor Facility <i>Ayers, D.; National Semiconductor</i></p> <p>11:15 Overcoming Environmental Challenges with Management of Change in R&D Facilities. <i>Subedar, H., Hawk, N., Fernandez, A.; Applied Materials</i></p> <p>Noon Lunch</p> |

| Emerging ESH Issues | International ESH | Facilities Safety |
|---|---|---|
| <p>1:00 Challenges of LEED® for Advanced Technology (AT) Facilities <i>Chasey, A., Beasley, J.; Arizona State University, Tempe, ISMI</i></p> <p>1:45 Silicon to Solar: Semiconductor Technology for Renewable Energy <i>Sherin, B.; SLAC</i></p> | <p>Moderator: TBD</p> <p>1:00 International EHS Management Systems and Compliance Auditing Protocols - Development, Application And Challenges <i>Trammell, S.; Freescale Semiconductor</i></p> <p>1:45 Measuring and Reporting EH&S Performance in a Global Economy <i>Wilk, L.; Capaccio Environmental Engineering, Inc.</i></p> | <p>Moderator: Aaron Zude</p> <p>1:00 Introduction and Overview <i>Taylor, A.; Applied Power Technologies, Inc.</i></p> <p>1:15 Failure Analysis of Recent Arc Flash Incidents – Findings You Need to Know <i>Vahlstrom, W.; Emerson Process Management</i></p> <p>1:35 Arc Flash Calculations – What Other Companies are Doing <i>Vahlstrom, W.; Emerson Process Management</i></p> <p>1:55 The Myths and Realities of Working Live <i>Renne, R.; Exar Corporation</i></p> <p>2:15 Panel Discussion</p> |

| Emergency Response | Safety/IH | Facilities Safety |
|--|---|--|
| <p>Moderator: Jeff Clark</p> <p>3:00 Chlorine Trifluoride, Silane and Trimethylaluminum in the Semiconductor Facility, Unique ER and Safety Challenges <i>Ngai, E.; Air Products and Chemicals</i></p> <p>3:45 Emergency Response in Semiconductor Fabs <i>Cashion, C.; FM Global</i></p> | <p>Moderator: Jeanne Yturri</p> <p>3:00 Equipment and Facility Decommissioning: How Can Wipe Sample Results Be Used to Verify Process Equipment and Facility Decontamination During Decommissioning? <i>Belk, B.; DECON Environmental Services, Inc.</i></p> <p>3:45 How To Survive A Corporate Environment & Safety Audit <i>Pompa, D.; Northrop Grumman Corp</i></p> | <p>Moderator: Aaron Zude</p> <p>3:00 Organizational Culture Change Needed to Support 70E Required Work Practices <i>Thornton, D.; Fairchild semiconductor</i></p> <p>3:20 Realities of working in Arc Rated PPE – An Interactive Demonstration <i>TBD</i></p> <p>3:45 Lessons Learned - SLAC Arc Flash Accident <i>Anthony, P.L.; Stanford Linear Accelerator Center SLAC)</i></p> |

4:30 PM General Closing Session

Steven Roberge, SSHA President Elect

Thursday

WELCOME TO THE SSHA 29TH ANNUAL INTERNATIONAL HIGH TECHNOLOGY ESH SYMPOSIUM & EXPOSITION

WEEK-AT-A-GLANCE

TUESDAY, APRIL 10

6:30 AM—Morning Training Run
7:30 AM—International Attendees Breakfast
8:00 AM–4:00 PM—Conference Registration
9:00–10:00 AM—Opening Session
10:00–11:00 AM—Keynote 1
11:00 AM–1:00 PM—Exhibitor Sponsored Lunch in the Exhibit Hall
11:00 AM–7:00 PM—Exhibit Hall Open
12:00–5:00 PM—Student Session
1:00–4:30 PM—Concurrent Sessions
2:30–3:00—Afternoon Break in Exhibit Hall with refreshments
4:30–7:00 PM—Welcome Reception in the Exhibit Hall (Raffle #1 tickets available)

WEDNESDAY, APRIL 11

6:30 AM—Morning Training Run
7:00 AM—Student Breakfast
8:00 AM—Exhibitor Meeting
8:30 AM–3:00 PM—Conference Registration
9:00–10:00 AM—Keynote Address 2
9:30 AM–Noon—Raffle #2 tickets available
10:00–10:30 AM—Exhibit Hall Break, Raffle Drawing #1, must be present to win
10:30 AM–4:30 PM—Concurrent Sessions
9:00 AM–3:30 PM—Exhibit Hall Open
Noon–1:00 PM—Cash & Carry Lunch in the Exhibit Hall
2:30–3:00 PM—Exhibit Hall Break, Raffle Drawing #2, must be present to win
4:30–5:30 PM—TERF Update
5:00 PM—Chapter Leadership Recognition Event

THURSDAY, APRIL 12

6:30 AM—5K Race
7:30 AM—Region/Chapter Meeting
8:30 AM–1:00 PM—Conference Registration
9:00–10:00 AM—Keynote Address 3
10:30 AM–4:30 PM—Concurrent Sessions
4:30 PM—General Closing Session
5:00 PM—Board of Directors Meeting

FRIDAY, APRIL 13

8 AM–5:00 PM—Professional Development Courses

SATURDAY, APRIL 14

8 AM–5:00 PM—Professional Development Courses

GENERAL INFORMATION

HOW TO GET TO THE SESH A 29TH ANNUAL INTERNATIONAL HIGH TECHNOLOGY ESH SYMPOSIUM & EXPOSITION

All SESH A sessions, courses and the exhibition will take place at the Santa Clara Marriott in Santa Clara, California. The area is serviced by 3 major airports as follows:

San Jose, California - SJC

- Hotel Direction: 4 mi S
- Driving Directions: From Mineta San Jose International Airport Highway; or 101 North; 4 miles to Great America Parkway; Exit right to Mission College Boulevard. Hotel is on the Right.
- Bus service, fee: \$1 (one way)
- Estimated taxi fare: \$15 (one way)

San Francisco - SFO

- Hotel Direction: 30 mi N
- Driving Directions: Highway 101 South 26 miles to Great America Parkway. Exit left to Mission College Boulevard Hotel is on the Right.
- Estimated taxi fare: \$90 (one way)

Oakland - OAK

- Hotel Direction: 30 mi NE
- Driving Directions: Take Highway 880 South 30 miles to Highway 237. West 4 miles to Great America Parkway. Left onto Great America Pkwy. Turn left on Mission College Boulevard to hotel entrance.
- Estimated taxi fare: \$90 (one way)

HOTEL INFORMATION

SESHA has arranged a special rate at the Santa Clara Marriott. Guestroom amenities include wired high-speed internet access, and large work areas. The Marriott offers a pool with Jacuzzi, health club facilities, concierge, and a full-service restaurant and lounge.

| | | |
|---------------|---------------|----------|
| RATES: | Single/Double | \$139.00 |
| | Triple | \$149.00 |
| | Quad | \$159.00 |

Please note that these rates do not include tax.

Santa Clara Marriott

2700 Mission College Blvd. Santa Clara, CA, 95054; (800) 228-9290 or (408) 988-1500

Reserve your room online at www.seshaonline.org, then go to conferences and then use the link or call 1 (800) 228-9290 or (408) 988-1500. **Reserve early to ensure a room at the group rate. The cut off date for reservations is March 16. *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 SESH A Office by April 1 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.

SESHA EXHIBITION EVENTS

Tuesday, April 10

11:00 AM-7:00 PM

11:00 AM-1:00 PM

Complimentary Luncheon

12:00-5:00 PM

*Poster Sessions in
Exhibit Hall*

4:30-7:00 PM

*Welcome Reception
(Raffle #1 tickets available)*

Wednesday, April 11

9:30 AM-3:00 PM

9:30 AM-Noon

(Raffle #2 tickets available)

10:00-10:30 AM

*Break in Exhibit Hall,
Raffle Drawing #1*

Noon-1:00 PM

Cash & Carry Lunch

2:30-3:00 PM

*Break in Exhibit Hall,
Raffle Drawing #2*

For many of the industry professionals who attend, the focus of the SESH Annual Symposium is the two-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.

Exhibitors as of 3/1/07

ATMI

Belfor Property Restoration
Bureau Veritas
BOC Edwards
Clean Harbors
Clean Rooms Magazine
CS Clean Systems, Inc.
Decon Environmental Services
DOD Technologies
 Draeger Safety Inc.
Earth Tech
Ebara Technologies
Emergency University

EORM

Galson Laboratories
Hatsuta Seisakusho Co., Ltd.
Honeywell Analytics
Mark Systems
Pure Safety
S&S Supplies & Solutions/TSI
Securiplex
SEMI
Solvay Solexis
Trinity Consultants
Work Care

RESERVING SPACE FOR ADJUNCT MEETINGS

If you would like to hold an adjunct meeting at the 2007 Symposium, please contact Lori Strong at SESH Headquarters, 703-790-1745 or LStrong@BurkInc.com, as soon as possible. After the SESH 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.

PROFESSIONAL DEVELOPMENT COURSES

Friday, April 13

- ½ day PDC's**
8:00 AM-Noon
- PDC 5** Understanding Safety Culture.
Axelrod, M.; Boeing
- 1:00-5:00 PM**
- PDC 6** Advanced Fall Protection: Explaining the New National Standards.
Ellis, N.; Fall Safety
- Full day PDC's**
8:00 AM-5:00 PM
- PDC 1** NFPA 70E™, Electrical Safety in the Workplace™.
Williams, N.; NFPA
- PDC 2** Applied Industrial Ergonomics.
Silva, T.; Humantech
- PDC 3** Developing an Effective Asset Decommissioning and Investment Recovery Program.
Chasey, A.; Arizona State University
- PDC 4** Emerging Nanotechnologies — Tremendous Promise, but also Uncertainty and Risk.
Moffitt, C.M.; Innova Science & Medicine, LLC

Saturday, April 14

- Full day PDC's**
8:00 AM-5:00 PM
- PDC 7** NFPA Electrical Inspection for the Safety Practitioner.
Williams, N.; NFPA
- PDC 8** Applying SEMI S22-1103: Safety Guideline Electrical Design of Semiconductor Manufacturing Equipment.
Visty, J., Austin, L.; EarthTech Microelectronic Services
- PDC 9** Building Design and Equipment Installation Considerations for Hazardous Material Use in Semiconductor and Life Science R&D Laboratories.
Gopalakrishna, V., Harris, J., Zude, A.; EORM, Xenoport, Facilities & Safety Solutions
- PDC 10** Building, Fire and Mechanical Codes and Your Legal Responsibilities.
Hanselka, R.; IES

Friday, April 13 & Saturday, April 14

- Full day PDC**
8:00 AM-5:00 PM
- PDC 11** NFPA 1600, Disaster/Emergency Management and Business Continuity Programs.
Schmidt, D.; NFPA

FRIDAY, APRIL 13

8:00 AM-5:00 PM

PDC 1: NFPA 70E™, Electrical Safety in the Workplace™

Williams, N.; NFPA

This seminar will help you comply with electrical safety regulations including OSHA 1910 for general industry and OSHA 1926 for construction. Get the tools you need to provide a safe work environment by learning to identify electrical safety hazards and plan protective schemes and techniques to address each hazard. Be able to recognize the steps needed to work safely on or near live parts, and use a simplified approach to assure adequate PPE for diverse tasks. Anyone concerned with electrical safety will benefit from this seminar. (Price includes seminar workbook and NFPA 70E™.)

PDC 2: Applied Industrial Ergonomics

Silva, T.; Humantech

This one-day Applied Industrial Ergonomics workshop provides the resources and tools needed to make simple yet effective human performance improvements in your industrial workplace. Learn how to improve human performance and reduce the frequency and severity of injuries. Hands-on problem solving methods will help you recognize, evaluate, and control ergonomic risk in the industrial environment. Attendees will learn to conduct complete ergonomic risk assessments, identify and implement workplace improvements, and cost-justify an ergonomics program using proven methodologies. Attendees will learn to: explain the application ergonomics to workstation retrofit and design; evaluate

PROFESSIONAL DEVELOPMENT COURSES

FRIDAY, APRIL 13

workstations and equipment for good ergonomic design; identify contributing factors to work-related musculoskeletal disorders; determine ergonomic criteria for manual work, including applied forces, working postures, frequency of movements, and exposure to vibration; identify high priority jobs/workstations for ergonomic improvement; accurately apply ergonomic assessment/solution tools; evaluate proposed and existing manufacturing processes for good ergonomic design; select tools and equipment according to ergonomic criteria for manual work.

PDC 3: Developing an Effective Asset Decommissioning and Investment Recovery Program.

Chasey, A.; Arizona State University

Featuring industry experts to help answer your questions

The global semiconductor industry will continue to decommission existing advanced technology manufacturing facilities as business models and technologies change. Complex decisions will be required through the transition periods to ensure safe, yet economical methodologies for asset decommissioning and investment recovery. The goal of this full day workshop is to present the issues faced by facility owners and service providers involved with the decision-making and safe decommissioning of advanced technology manufacturing facilities. This interactive session will be of value to anyone involved with the management and/or implementation of a facility decommissioning or decontamination project and will immediately help the participant to: Develop an Overall Sequence of Execution; Evaluate the Required Team Resources; Outline Decommissioning Methods for Process Tools and Facility/Infrastructure Systems; Develop a Health and Safety Plan for the Process; Outline an Environmental & Exposure Monitoring and Clearance Sampling Plan; Evaluate Asset Recovery Options; Understand the Scoping Documentation Required to Execute the Process; Evaluate Potential Contracting Strategies; Investigate Building Re-use Options and Opportunities; Under-

stand Code Compliance Issues during Decommissioning and for Facility Re-use; Discuss the Requirements for Documentation of the Process.

With millions of asset dollars involved in a decommissioning project and potential liability that could exceed this, it is essential that all management and support personnel involved have an opportunity to learn how to maximize their performance and mitigate risk. Based on a recent case study, participants will benefit from the key lessons learned from an actual decommissioning and decontamination planning project.

PDC 4: Emerging Nanotechnologies — Tremendous Promise, but also Uncertainty and Risk; Afternoon Tour of the Stanford Nanotechnology Laboratories

Moffitt, C.M., Rissman, P., Gibb, L.; Innova Science & Medicine, LLC, Stanford University

Extraordinary world-wide interest, anticipation, and government research dollars have been generated by the promise of nanotechnology and the manipulation of materials at the nanoscale (at 100 nm or less). Some nanotech proponents have likened the future to the world's next Industrial Revolution. However, the novelty of material properties at the nanoscale, which makes nanotechnology valuable to so many industrial and medical applications, also creates potential risk and serious concern regarding both public and worker health, and protection of the environment. This Professional Development Course will provide an introduction to the world of nanotechnology and the significance of working at the nanoscale, and provide an overview of current and potential applications in the areas of microelectronics, energy, building materials, military/aerospace, environmental remediation, and medicine. The course will also address the background and toxicological basis for concerns regarding public safety and possible harm to the environment from uncontrolled releases of free nanoparticles. Current and planned international regulatory activities which could affect emerging nanotechnology applications and engineered nanomaterials will also be discussed.

SATURDAY, APRIL 14

The afternoon will be onsite at Stanford's state-of-the-art Nanotechnology Labs starting with an introductory lecture, followed by a tour. Dr. Paul Rissman, Deputy Director of the Stanford Nanotechnology Lab, will be conducting the lecture and tour. The day will wrap up with a discussion with Stanford ESH on nanotech safety, led by Larry Gibb, Director of ESH.

8:00 AM-NOON

PDC 5: Understanding Safety Culture

Axelrod, M.; Boeing

A culture is a set of solutions produced by a group of people to meet specific problems posed by the situations that they face in common. How can we understand and influence the safety culture in our own organizations so that the safest solutions become institutionalized? We will examine the literature in the field, review both. Normal Accident Theory and High Reliable Organization theory, Safety Sociology and systems thinking. The goal will be to use this knowledge to increase our effectiveness and value as safety professionals managing risky technology.

1:00-5:00 PM

PDC 6: Advanced Fall Protection: Explaining The New National Standards

Ellis, N.; Fall Safety

A workshop dedicated to your specific fall protection needs.

Fall protection equipment is about to take a step forward in reliability.

Several critical changes in the revised Z359.1 standard will make connections stronger. In addition, the Z359.2 managed fall protection standard will give guidance on choice of fall protection equipment and the creation of fall protection systems through proper anchorage points.

The family of standards, Z359.0-4 includes definitions, fall arrest, work positioning and restraint and rescue is bundled for easier reference and will help those who are working in semiconductor business to provide alternative solutions for fall protection of employees and contractors, that allows more flexibility in operations and maintenance.

The speaker, a founding member of the Z359 committee and the author of the text, "Introduction to Fall Protection", will demonstrate the advances of these new standards in semiconductor industry.

8:00 AM-5:00 PM

PDC 7: NFPA Electrical Inspection for the Safety Practitioner

Williams, N.; NFPA

Improperly installed, poorly maintained, or damaged electrical systems can pose significant hazards to uninformed employees as well as property. Electrical inspections can reduce the threat of fire hazards. Safety practitioners will learn to identify common problems that need immediate attention and to recognize signs of potential problems needing further investigation by qualified electrical personnel. This seminar will also introduce the essential elements of an electrical safety program. (Price includes seminar workbook.)

PDC 8: Applying SEMI S22-1103: Safety Guideline for Electrical Design of Semiconductor Mfg Equipment

Visty, J., Austin, L.; Earth Tech Microelectronic Services

Applying SEMI S22-1103 "Safety Guideline For The Electrical Design of Semiconductor Manufacturing Equipment". This course focuses on applying the new SEMI electrical safety guideline—SEMI S22. The target audience is the knowledgeable electrical safety professional who has limited or no experience with this new important safety guideline. The course outline follows the sections of SEMI S22 with special emphasis on practical engineering safety application. The course will also provide a useful discussion of how this electrical guideline is similar to and differs from other such electrical safety standards such as NFPA 79 and EN60204-1.

This is an eight-hour course that strongly encourages audience participation with a number of short exercises followed by discussion.

SATURDAY, APRIL 14

PDC 9: Building Design and Equipment Installation Considerations for Hazardous Material Use in Semiconductor and Life Science R&D Laboratories

Gopalakrishna, V., Harris, J., Zude, A.; EORM, Xenoport, Facilities & Safety Solutions

This workshop will review key concerns and controls associated with building design, fire, life safety and hazardous materials use in Life Science and Semiconductor R&D laboratories during the design, construction and equipment commissioning process for a new or existing building. Participants will acquire a fundamental understanding of the ES&H considerations necessary for developing design criteria and installation requirements for R&D laboratory 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 areas. The workshop will examine the areas of facility needs assessment, site selection, stakeholder coordination, design build-out and equipment commissioning in relation to their role in providing a safe work environment and minimizing business interruption. Industry best practices, controls and standards for existing operations and safe management of growth/expansion will also be discussed. The workshop will be structured with a mix of presentation 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 laboratory installation in R&D laboratory facilities (e.g. UFC, UBC, TGO) in advance of the workshop.

PDC 10: Building, Fire and Mechanical Codes and Your Legal Responsibilities

Hanselka, R.; IES, Santa Clara County, CA

This workshop has been developed for: Facilities Managers, EH&S Professionals, Building and Fire Government Officials, Architects, Construction Managers Attend this and you will: learn first hand from the experts what the new codes will require

for remodels, new construction and existing facilities; gain a comprehensive understanding of the State's pending building, mechanical, and fire codes; keep your liability in control. These Codes are a radical departure from what we have now. There is no "Grand-Fathering" in California. All Facilities and Construction must comply. Reinhard Hanselka will conduct a comprehensive eight-hour workshop where you will learn how, and when, California's planned adoption of the International Building, International Fire, and Uniform Mechanical and Plumbing Codes in 2007 will affect all Bay Area Facilities Designs and Construction. Attendees are invited to bring facility questions and participate.

FRIDAY & SATURDAY

8:00 AM-5:00 PM

PDC 11: NFPA 1600, Disaster/Emergency Management and Business Continuity Programs

Schmidt, D.; NFPA

Newly acknowledged by both the Department of Homeland Security and the 9-11 Commission, the National Preparedness Standard (NFPA 1600) provides a "total program approach" to the challenge of integrating disaster and emergency management with business continuity planning. You will learn to use a standardized process to mitigate and prepare for disasters and emergency situations, while developing response and recovery plans. Whether you are establishing a new program or reviewing and improving your existing program, you will find this practical seminar essential. Includes seminar workbook and NFPA 1600.

SESHA 29th Annual Symposium Registration Form

April 10-14, 2007 - Santa Clara Marriott, California

PLEASE PRINT CLEARLY

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 _____

| | Advanced before 4/1 | Onsite after 4/1 |
|--|------------------------|---------------------|
| <input type="checkbox"/> SESHA Member | \$595 | \$645 |
| <input type="checkbox"/> Non-Member* | \$695 | \$745 |
| <input type="checkbox"/> Full-Time Student, Full-Time Professor, Government) | \$75 | \$100 |
| <input type="checkbox"/> SESHA Member + 2007 dues | \$695 | \$745 |
| <input type="checkbox"/> One Day Member __ Tues. __ Wed. __ Thurs. | \$250 | \$275 |
| <input type="checkbox"/> One Day Non Member __ Tues. __ Wed. __ Thurs. | \$275 | \$300 |

*Includes a 1 year 2007 SESHA Membership - available to **first time members ONLY**

Professional Development Courses – Friday, April 13 & Saturday, April 14

| | Member/Non Member | |
|---|-------------------|-------------|
| | Advanced | Onsite |
| <input type="checkbox"/> PDC 1-NFPA 70E™, Electrical Safety in the Workplace™ (Fri, Full Day) | \$295/\$295 | \$295/\$295 |
| <input type="checkbox"/> PDC 2-Applied Industrial Ergonomics (Fri, Full Day) | \$225/\$250 | \$250/\$275 |
| <input type="checkbox"/> PDC 3-Developing an Effective Asset Decommissioning ... (Fri, Full Day) | \$395/\$395 | \$450/\$450 |
| <input type="checkbox"/> PDC 4-Emerging Nanotechnologies — Tremendous ... (Fri, Full Day) | \$225/\$250 | \$250/\$275 |
| <input type="checkbox"/> PDC 5-Understanding Safety Culture (Fri, Half Day) | \$125/\$150 | \$150/\$175 |
| <input type="checkbox"/> PDC 6-Advanced Fall Protection: Explaining... (Fri, Half Day) | \$155/\$180 | \$180/\$205 |
| <input type="checkbox"/> PDC 7-NFPA Electrical Inspection for the Safety ...(Sat, Full Day) | \$295/\$295 | \$295/\$295 |
| <input type="checkbox"/> PDC 8- Applying SEMI S22-1103: Safety Guideline... (Sat, Full Day) | \$225/\$250 | \$250/\$275 |
| <input type="checkbox"/> PDC 9-Building Design and Equipment Installation ... (Sat, Full Day) | \$225/\$250 | \$250/\$275 |
| <input type="checkbox"/> PDC 10-Building, Fire and Mechanical Codes... (Sat, Full Day) | \$225/\$250 | \$250/\$275 |
| <input type="checkbox"/> PDC 11-NFPA 1600, Disaster/Emergency ... (Fri & Sat, Full Days) | \$495/\$495 | \$495/\$495 |

Additional Activities

5K Run (You must preregister for this event) No Charge

SESHA Federal ID # 86-0455636

Total Amount Due _____

PAYMENT – Made through Corporate Membership American Express VISA MasterCard

Card # _____ Exp Date _____

Cardholder Name _____ Cardholder Signature _____

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

Meeting Refund Policy: Request for refunds will be honored if received in writing by April 1. 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.

QUESTIONS? CALL 703-790-1745; FAX: (703) 790-2672; EMAIL: SESH@BURKINC.COM