

SESHA

**SESHA 45th Annual
International
High Technology
ESH Symposium
& Exhibition**

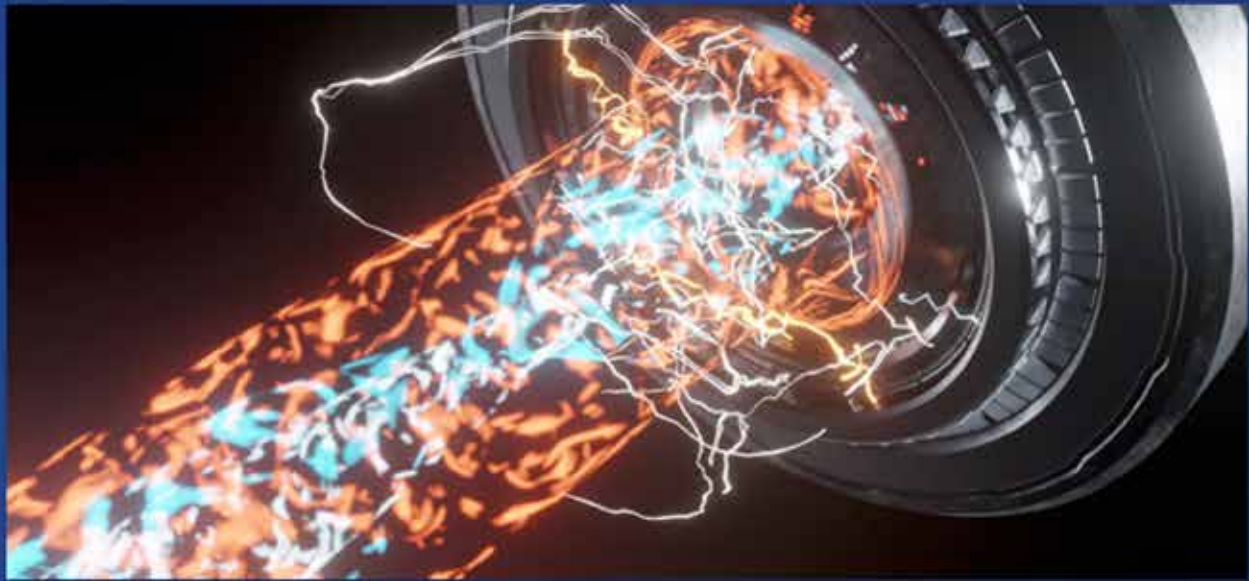


CONFERENCE PROGRAM

April 24-27, 2023

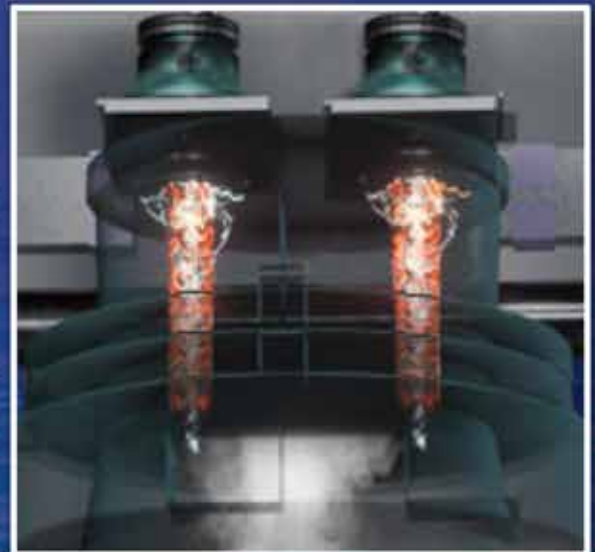
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Booth #32



SESHA 45th Annual International High Technology ESH Symposium & Exposition

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Convention Hotel

Hilton Phoenix Resort at the Peak
 7677 N 16th St
 Phoenix, AZ 85020
 Phone: 602-997-2626

Registration Hours:

Anasazi Lobby

Monday, April 24	3:30 pm-5:30 pm
Tuesday, April 25	7:30 am-5:00 pm
Wednesday, April 26	8:00 am-3:00 pm
Thursday, April 27	9:00 am-12:00 pm

Important CM Point Information

Please see the registration desk for a certificate of participation for CM Points.

This event contains the following technical content hours. (PDCs are additional)

- Tuesday - 6 technical hours
- Wednesday - 6 technical hours
- Thursday - 4 technical hours

These may be eligible for ABIH and BCSP CM credit. See ABIH website (www.ABIH.org) and BCSP website (www.BCSP.org) for CM credit criteria.

Exhibit Hall Hours:

Anasazi Ballroom Exhibit Hall

Tuesday, April 25	10:00 am-7:30 pm
Break	10:15 am-10:45 am
Lunch & Raffle Ticket Distribution	11:30 am-12:40 pm
Break & Raffle Ticket Distribution	2:50 pm-3:25 pm
Opening Reception & Raffle Ticket Distribution/Drawing	5:30 pm-7:30 pm
Wednesday, April 26	9:00 am-4:00 pm
Break & Raffle Ticket Distribution.....	9:45 am-10:15 am
Lunch & Raffle Ticket Distribution/Drawing ...	11:35 am-1:00 pm
Break & Raffle Ticket Distribution/Drawing.....	2:50 pm-3:20 pm

Thank you to the following SESHA Sponsors

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Week Schedule-at-a-Glance

All Sessions take place in the Hilton Phoenix Resort at the Peak

MONDAY, APRIL 24

PDC #2 – Bootcamp

8:00 am-5:00 pm *Hopi*

Break, sponsored by Wolfspeed

10:15 am-10:45 am *Hohakam Ballroom Lobby*

PDC #3 – Building & Maintaining An Effective IH Program

Dave Risi
1:30 pm-5:00 pm *Navajo*

PDC #4 – The Science of Exhaust Management

Steve Cottle; Matthew Kowalski
1:30 pm-5:00 pm *Pima*

Break, sponsored by Edwards

3:00 pm-3:30 pm *Hohakam Ballroom Lobby*

Registration

3:30 pm-5:30 pm *Anasazi Lobby*

TUESDAY, APRIL 25

Registration

7:30 am-5:00 pm *Anasazi Lobby*

Opening Ceremony

Steven Trammell (Outgoing SESHA President)
8:30 am-9:30 am *Navajo*

Keynote Presentation - Future-proofing EH&S and Sustainability Amidst Rapid Growth & Change

Donavan Hornsby
9:30 am-10:15 am *Navajo*

Exhibits

10:00 am-7:30 pm *Anasazi Ballroom Exhibit Hall*

Break, sponsored by Edwards

10:15 am-10:45 am *Anasazi Ballroom Exhibit Hall*

Concurrent Sessions

10:45 am-11:30 am *Various Locations*

Complimentary Lunch - Raffle Ticket Distribution, sponsored by Benchmark Gensuite

11:30 am-12:40 pm *Anasazi Ballroom Exhibit Hall*

Keynote Presentation - CHIPS Act: What it is and Impacts on the U.S. Semiconductor Industry

David Isaacs
12:40 pm-1:25 pm *Navajo*

Concurrent Sessions

1:30 pm-3:00 pm *Various Locations*

Break, sponsored by ASM

2:50pm-3:25pm *Anasazi Ballroom Exhibit Hall*

Concurrent Sessions

3:30 pm-5:00 pm *Various Locations*

Opening Reception - Raffle Ticket Distribution & Raffle Drawing, sponsored by Airgard

5:30 pm-7:30 pm *Anasazi Ballroom Exhibit Hall*

WEDNESDAY, APRIL 26

Piestewa Peak Hike

6:00 am *Off-site*

Registration

8:00 am-3:00 pm *Anasazi Lobby*

Keynote Presentation - How to Successfully Navigate the Environmental Permitting Labyrinth for Semiconductor Fab Construction

Michelle De Blasi, Esq.
9:00 am-9:45 am *Navajo*

Exhibitor Meeting

8:00 am-9:00 am *Anasazi Ballroom Exhibit Hall*

Exhibits

9:00 am-4:00 pm *Anasazi Ballroom Exhibit Hall*

Break - Raffle Ticket Distribution, sponsored by FM Global

9:45 am-10:15 am *Anasazi Ballroom Exhibit Hall*

Let's solve your toughest challenges, together.

We are leading the industry by pushing the boundaries to deliver innovative solutions which are intrinsic to semiconductor manufacturing sustainability, enabling next generation semiconductor processes, and working in partnership with our customers to meet new environmental and safety standards.

Partnership capabilities

- **Partner with industry leaders** to develop and validate new technology within the subfab
- **Improve current subfab equipment** to meet increased performance needs
- **Provide solutions** to roadblocks or pain points that slow down new semiconductor process development



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Let's connect

Kurtis Fairley

Innovation Center Manager

kurtis.fairley@edwardsvacuum.com

Follow the QR Code for a video on the Innovation Center

Week Schedule-at-a-Glance

THURSDAY, APRIL 27

Concurrent Sessions

10:15 am-11:35 am *Various Locations*

Complimentary Lunch - Raffle Ticket Distribution & Raffle Drawing, sponsored by UL Solutions

11:35 am-1:00 pm *Anasazi Ballroom Exhibit Hall*

Keynote Presentation - Fire Chiefs Roundtable

Mike Duran III; Dan King

12:45 pm-1:25 pm *Navajo*

Concurrent Sessions

1:30 pm-2:50 pm *Various Locations*

Break - Raffle Ticket Distribution & Raffle Drawing, sponsored by BSI

2:50 pm-3:20 pm *Anasazi Ballroom Exhibit Hall*

Concurrent Sessions

3:20 pm-5:00 pm *Various Locations*

5K Run

6:30 am-7:00 pm *Off-site*

Registration

9:00 am-12:00 pm *Anasazi Lobby*

Keynote Presentation - Risk Reduction Project

Ken Broadstreet

9:00 am-9:45 am *Navajo*

Break, sponsored by Edwards

9:45 am-10:00 am *Hohakam Ballroom Lobby*

Concurrent Sessions

10:00 am-11:30 am *Various Locations*

Closing Ceremony

Jay McCroskey (Incoming SESHSA President)

11:40 am-12:00 pm *Navajo*

Complimentary Lunch, sponsored by FM Global

12:00 pm-1:00 pm *Fountain Terrace*

PDC #6 – Energy Storage Systems

Dwayne Sloan; Alex Schraiber

1:00 pm-5:00 pm *Hopi*

ASU Lab Tour, pre-registration required

1:00 pm-5:00 pm *Off-site*



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SESHA Schedule – 2023 Annual Symposium

All Sessions take place in the Hilton Phoenix Resort at the Peak

MONDAY			
<p>8:00 am-5:00 pm PDC #2 – Bootcamp. Hopi 10:15 am-10:45 am Break. <i>Sponsored by Wolfspeed</i>. Hohakam Ballroom Lobby 1:30 pm-5:00 pm PDC #3 – Building & Maintaining An Effective IH Program. <i>Dave Risi</i>. Navajo</p> <p>7:30 am-5:00 pm Registration. Anasazi Lobby 8:30 am-9:30 am Opening Ceremony. <i>Steven Trammell (Outgoing SESA President)</i>. Navajo 9:30 am-10:15 am Keynote Presentation. Future-proofing EH&S and Sustainability Amidst Rapid Growth & Change. <i>Donavan Hornsby</i>. Navajo 10:00 am-7:30 pm Exhibits. Anasazi Ballroom Exhibit Hall 10:15 am-10:45 am Break. <i>Sponsored by Edwards</i>. Anasazi Ballroom Exhibit Hall 10:45 am-11:30 am Concurrent Sessions</p>	<p>1:30 pm-5:00 pm PDC #4 – The Science of Exhaust Management. <i>Steve Cottle</i>. <i>Matthew Kowalski</i>. Pima Break. <i>Sponsored by Edwards</i>. Hohakam Ballroom Lobby Registration. Anasazi Lobby</p> <p>11:30 am-12:40 pm Complimentary Lunch - Raffle Ticket Distribution. <i>Sponsored by Benchmark Gensuite</i>. Anasazi Ballroom Exhibit Hall 12:40 pm-1:25 pm Keynote Presentation. CHIPS Act: What it is and Impacts on the U.S. Semiconductor Industry. <i>David Isaacs</i>. Navajo 1:30 pm-2:50 pm Concurrent Sessions 2:50 pm-3:25 pm Break - Raffle Ticket Distribution. <i>Sponsored by ASM</i>. Anasazi Ballroom Exhibit Hall 3:25 pm-5:20 pm Concurrent Sessions 5:30 pm-7:30 pm Opening Reception - Raffle Ticket Distribution & Raffle Drawing. <i>Sponsored by Airgard</i>. Anasazi Ballroom Exhibit Hall</p>		
TUESDAY	Zuni	Hopi	Pima
<p>10:45 am The Benefits of a Digitized EHS Management Program. <i>Robert Bondarer</i></p> <p>1:30 pm Applying a Bow Tie Risk Analysis to Illustrate Business Impact and Improve Electronic Product and Supply Chain Environmental, Health and Safety (EHS) Programs. <i>Conor Grieve</i></p> <p>3:25 pm Leveraging Prevention-through-Design, Reclassification and Alternate Entry Options for your Confined Spaces Program. <i>Susan Reynolds</i> 4:00 pm Chemical Management in Laboratory Areas. <i>Ron Scholtz</i> 4:35 pm From Chaos to Clarity: How 3DAP Streamlines Emergency Response. <i>Todd Murray</i></p>	<p>10:45 am Common Mistakes With The Application Of A Risk Matrix. <i>Kelsey Forde; Timothy Stirrup</i></p> <p>1:30 pm Investigating Ammonium Nitrate Precursor Formation in Dry Etch Processes. <i>Tyler Tolman</i></p> <p>2:05 pm Electrical Safety for Researchers. <i>Ron Scholtz</i></p> <p>3:25 pm PFAS and Advanced Packaging: Lessons from the Assembly Test Packaging and Substrates WG of the Semiconductor PFAS Consortium. <i>Beverly Canham</i></p>	<p>10:45 am Air Permitting and Modeling for Semiconductor Fabrication Plants. <i>Qi Zhang</i></p> <p>1:30 pm Lessons Learned – Integration of EHS Requirements into Hazardous Waste Collection System Projects. <i>David Hoffman</i></p> <p>2:05 pm Reduction of NOx emission from waste gas treatment. <i>Andreas Frenzel</i></p> <p>3:25 pm Proper QA/QC and Traceability Methods When Analytically Characterizing Process Exhaust Emissions from New Tools. <i>Curtis Laush</i></p> <p>4:00 pm PFAS and Advanced Packaging: Lessons from the Assembly Test Packaging and Substrate. <i>Daniel Hall</i></p> <p>4:35 pm Gas Identification. <i>Jeyong Jin</i></p>	<p>10:45 am Update on Semiconductor Climate Consortium Activities. <i>James Amano</i></p> <p>1:30 pm PFAS Regulation Update: Overview of the Semiconductor PFAS Consortium. <i>Judah Prevo</i></p> <p>2:05 pm Roundtable: Updates from organizations addressing PFAS (presentations and discussion) Semiconductor PFAS Consortium, SPAN, SIA, SEMI. <i>Laurie Beu</i></p> <p>3:25 pm The 10 Commandments of Supply Chain Compliance. <i>Walker Carlisle; James Calder</i></p>

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All Sessions take place in the Hilton Phoenix Resort at the Peak

		WEDNESDAY	
		Zuni	Hopi
		Pima	Navajo
6:00 am	Piestewa Peak Hike. Off-site Registration. <i>Anasazi Lobby</i>		
8:00 am-3:00 pm			
9:00 am-9:45 am	Keynote Presentation. How to Successfully Navigate the Environmental Permitting Labyrinth for Semiconductor Fab Construction. <i>Michelle De Biasi, Esq. Navajo</i>		
9:00 am-4:00 pm	Exhibits. <i>Anasazi Ballroom Exhibit Hall</i>	10:15 am Hazard Analysis Lessons Learned: The Good, The bad, The Ugly... The Untold Stories. <i>Kelsey Forde; Timothy Stirrup</i>	10:15 am New Fab Codes. <i>Michelle Peafross</i>
9:45 am-10:15 am	Break - Raffle Ticket Distribution. <i>Sponsored by FM Global. Anasazi Ballroom Exhibit Hall</i>	11:05 am Compliance to Product Chemical Regulations. <i>Brian Martin</i>	11:05 am innovative Digital Tools for EHS Compliance. <i>Michael Zimmerman</i>
10:15 am-11:35 am	Concurrent Sessions		
11:35 am-12:45 pm	Complimentary Lunch - Raffle Ticket Distribution & Raffle Drawing. <i>Sponsored by UL Solutions. Anasazi Ballroom Exhibit Hall</i>		
12:45 pm-1:25 pm	Keynote Presentation. Fire Chiefs Roundtable. <i>Mike Duran III; Dan King. Navajo</i>		
1:30 pm-2:50 pm	Concurrent Sessions		
2:50 pm-3:20 pm	Break - Raffle Ticket Distribution & Raffle Drawing. <i>Sponsored by BSI. Anasazi Ballroom Exhibit Hall</i>	10:15 am Towards Carbon Neutrality: Effect of Gas Abatement Selection and Destruction Efficiency. <i>Adam Stover</i>	1:30 pm Introduction to the Special Risks and Safety Challenges in New Fabs. <i>CC Huang</i>
3:20 pm-5:00 pm	Concurrent Sessions		
1:30 pm		1:30 pm Building Your Ergonomics Process. <i>Kristi Harnes</i>	2:05 pm Project Planning Considerations for the Semiconductor Industry. <i>Jesse Gonzalez; Ben Hubertus</i>
2:05 pm		2:05 pm Process Safety – Why's it's important? <i>Chris Tan</i>	
3:20 pm		3:20 pm Waste Hydrogen Recycling – Energy and Footprint Reduction in Vacuum and Abatement Systems. <i>Chris Jones</i>	3:20 pm Evolution of Risk Assessment process – The Importance of a Smart Database. <i>Alessandro Petracca; Jennifer Stratton</i>
3:55 pm		3:55 pm Chemical Footprint Methodology: Balancing Multiple Factors. <i>Beverly Canham</i>	3:55 pm The Importance of Industrial Firefighters. <i>Dan King</i>
4:30 pm		4:30 pm Using Lean Tools to Change a Culture. <i>Melanie Koerth</i>	4:30 pm Accidents and Investigations Roundtable.
1:30 pm	EHS and Product Safety – Amazing Together: New Industry, New Vision. <i>Tara Collins; Carrie Hurlbut</i>	1:30 pm When Molecules Fall Apart: Assessment of Chemicals that Dissociate. <i>Jessie Kneeland</i>	
2:05 pm	Best in Class Contractor Management: Program Elements and Data-Driven Insights on SIFs. <i>Katie McLaughlin</i>	2:05 pm Regrettable substitution: Reducing "Unknown Unknowns". <i>Matthew Taylor</i>	
3:20 pm	Comprehensive Injury Prevention Models and Their Effects on Total Worker Health. <i>Bryan Reich</i>	3:20 pm Environmental Justice and Semiconductor Product Stewardship. <i>Ari Lewis</i>	
3:55 pm	For Better or Worse: How to Successfully Scale an Onsite Clinic Up in Good Times and Down in Challenging Times. <i>Jeff Paddock</i>	3:55 pm Safe solution to transferring heavy pumps to an elevated location in the subfab. <i>Kurtis Fairley</i>	
4:30 pm	Building a Culture of Total Worker Health & Safety. <i>Al Roth</i>	4:30 pm Service interruption: The Hazards and Consequences. <i>Alan Gillespie</i>	



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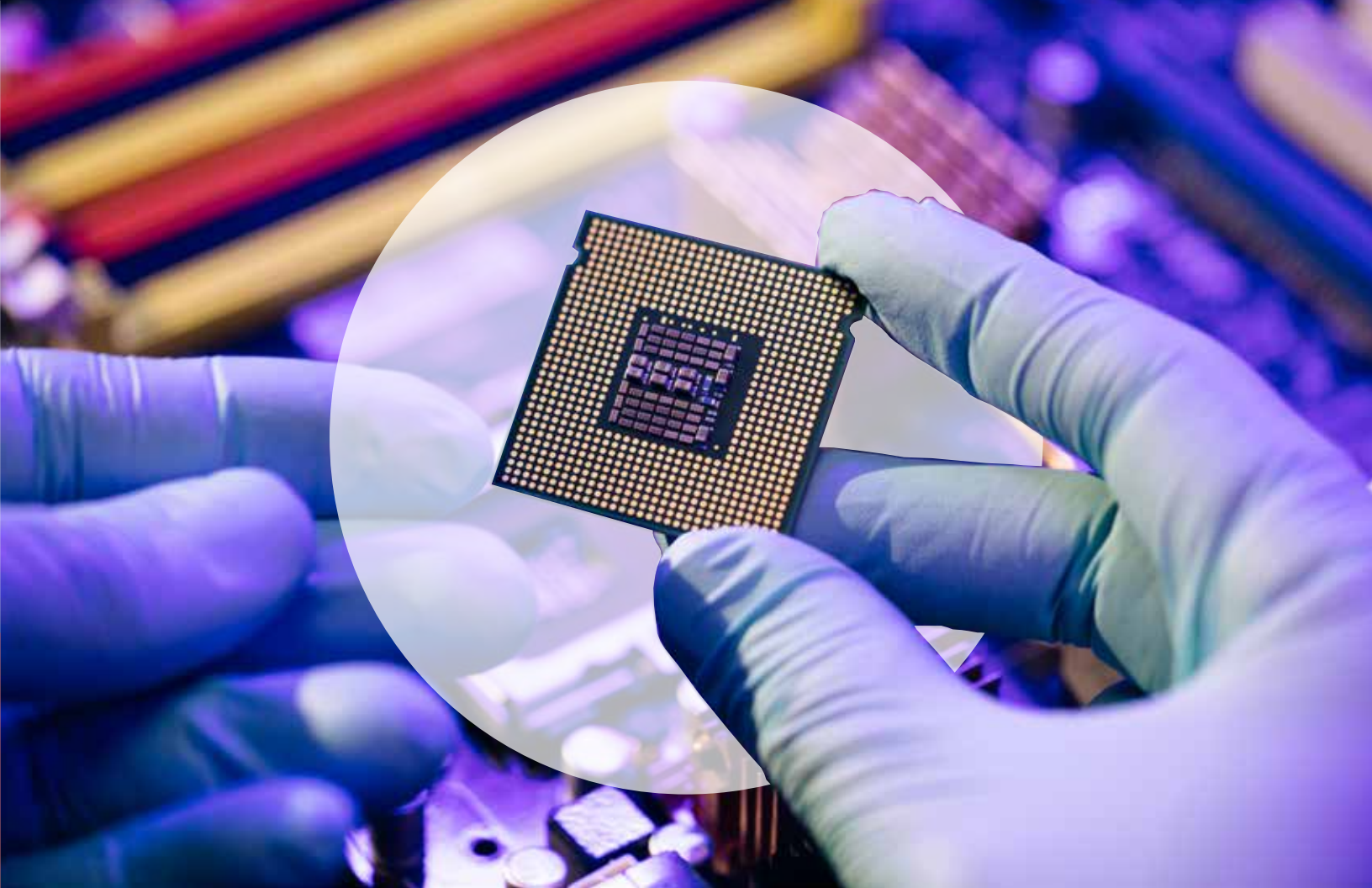
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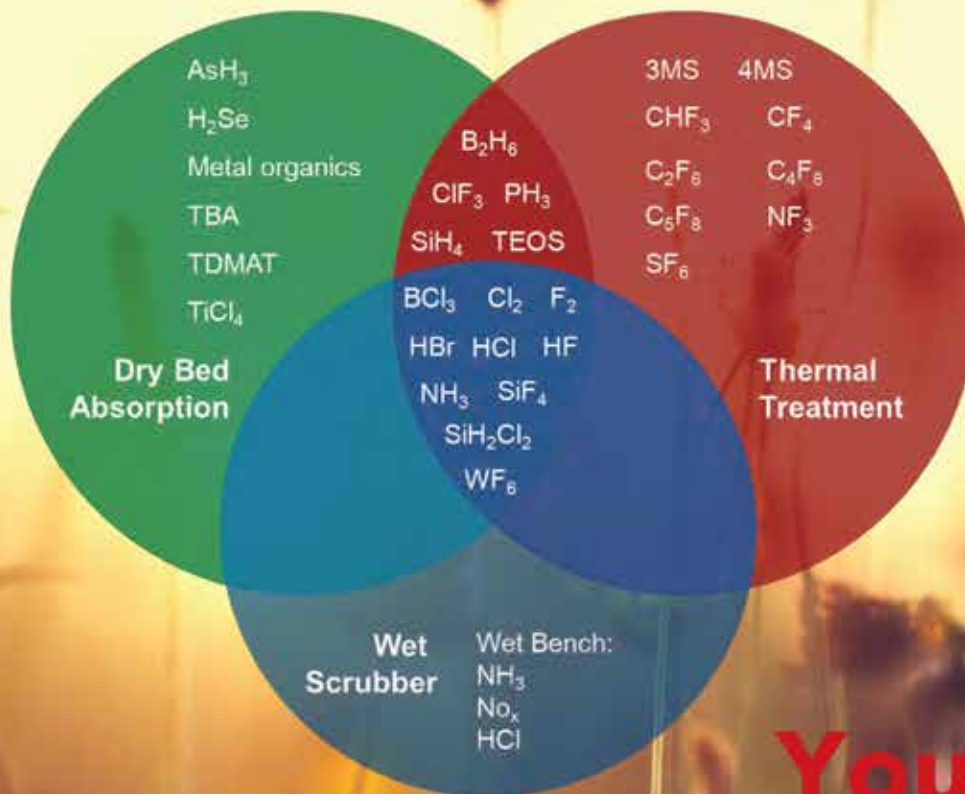
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Environmental Compliance...

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SESHA 2023

Booth # 5



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Exhibitors & Exhibitor Floor Plan



View the latest floorplan and company profiles on your phone or tablet. Scan the QR Code to download the mobile app.

Exhibit Hall Hours: *Anasazi Ballroom Exhibit Hall*

Tuesday, April 25 10:00 am-7:30 pm

Break.....10:15 am-10:45 am
 Lunch & Raffle Ticket Distribution11:30 am-12:40 pm
 Break & Raffle Ticket Distribution 2:50 pm-3:25 pm
 Opening Reception & Raffle Ticket Distribution/Drawing 5:30 pm-7:30 pm

Wednesday, April 26 9:00 am-4:00 pm

Break & Raffle Ticket Distribution9:45 am-10:15 am
 Lunch & Raffle Ticket Distribution/Drawing11:35 am-1:00 pm
 Break & Raffle Ticket Distribution/Drawing..... 2:50 pm-3:20 pm

Thank you for Sponsoring!

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Exhibit Hall Raffle

We will be holding a raffle with some very nice prizes in the Exhibit Hall on Tuesday and Wednesday. Starting Tuesday you will be able to get tickets at each exhibit booth in exchange for a business card.

You must be present to win.

Learn more about how your organization can support SESH A and the education and professional development of our members at sesha.org.

Exhibitors

Alliance Technical Group

255 Grant St. SE, Suite 600
Decatur, AL 35601
256-351-0121
alliancetg.com

Alliance Technical Group is an environmental testing, monitoring, and analysis company. Through the delivery of multiple service lines – Stack Testing, LDAR, CEMS, Combustion, Analytical, Ambient Air Monitoring, and Environmental Consulting Services – Alliance is a trusted partner providing premier technical solutions that support the full spectrum of our customers' environmental needs.

Booth: 20

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8855 N. 55th St.
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Booth: 30

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Booth: 10

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Booth: 13

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Booth: 11

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216-765-7100
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Booth: 6

ProActivity by Dakota Software helps organizations ensure EHS compliance by centralizing their regulatory obligations and management of related tasks, issues, and documents. It features a constantly updated regulatory library that guides users in the creation of facility-specific compliance plans and ensures that audit protocols are always up-to-date.

DAS

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Booth: 23

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DOD Technologies, Inc.**Booth: 16**

675 Industrial Blvd, Bldg. A
Cary, IL 60013
815-88-5200
DODtec.com

Platinum Sponsor

DOD Technologies is the leading global supplier of industrial low-level gas detection systems and solutions. Our innovative products are engineered and designed to the highest safety standards. These state-of-the-art technologies are essential in keeping employees and workplaces safe from explosions, fire, suffocation, and injuries related to the inhalation of toxins.

Draeger, Inc**Booth: 14**

7256 S Sam Houston Pkwy W
Houston, TX 77085
800-437-2437
www.draeger.com

Dräger's complete portfolio of fixed gas detectors includes an extended range of toxic, flammable and oxygen monitors that interface seamlessly with our range of control systems and other components, even third-party devices.

Ebara Technologies, Inc.**Booth: 15**

51 Main Ave
Sacramento, CA 95838
800-535-5376
www.ebaratech.com

EBARA is an innovative global provider of vacuum pumps and advanced exhaust management solutions. An extensive global service network backs EBARA's superior products. Continually expanding its product portfolio of Dry Vacuum, Turbomolecular Pumps, Point-of-Use Abatement, Line Heaters and Parts Cleaning into semiconductor, photovoltaic, thin films and R&D industries.

EcoSys Abatement**Booth: 32**

7380 W. Sand Lake Road
Orlando, FL 32819
408-477-0706
ecosysabatement.com

Bronze Sponsor

EcoSys Abatement is a world leading supplier of best-in-class process exhaust gas abatement solutions. Our line of scrubbers include the brands CDO, Guardian, Marathon & Vector that set the standard for equipment performance and reliability. An experienced, talented team and singular focus make us the right partner for your manufacturing.

Edwards**Booth: 25**

6220 NE Century Blvd
Hillsboro, OR 97124
503-710-1077
www.edwardsvacuum.com

Platinum Sponsor

Edwards is a global leader of vacuum and abatement. We are proud to lead the industry, pushing the boundaries of science to deliver innovative products which are intrinsic to everyday life, working in partnership with our customers and continually setting new standards..

Gasmet Technologies Inc.**Booth: 26**

5865 McLaughlin Road
Mississauga, ON L5R1B8 Canada
866-685-0050
www.gasmet.com/applications/safety

Gasmet helps our global partners rapidly solve air quality issues caused by gases like: freons, VOC's, other organics, inorganics including metal hydrides, off-gassing from volatile liquids, and more. Visit us to discuss EHS goals, measurement of gas risks from daily operations, and identification of gases you didn't know were present.

GreenSoft Technology, Inc.**Booth: 34**

155 S. El Molino Ave. Suite 100
Pasadena, CA 91101
323-254-5961
www.greensofttech.com

GreenSoft Technology is a leading provider of environmental compliance data services and software for electronics manufacturers, offering hands-on supply chain data collection covering EU REACH, EU RoHS, Conflict Minerals, Proposition 65, Full Material Declaration and more. Plus, GreenData Manager software for due diligence reporting and centralized substance database management.

Highvac Corp.**Booth: 27**

4710 N Chestnut Street
Colorado Springs, CO 80907
719-260-1185
www.highvacgroup.com

Bronze Sponsor

HIGHVAC'S EcoGuard™ SGS point of use abatement system maintains total separation of effluent gas streams from multiple process chambers. The EcoGuard™ PoU abatement systems are highly configurable to accommodate multiple applications. Our commitment is to find the best solution for your application and provide continued support to our customers.

Honeywell

855 S Mint Street
Charlotte, NC 28202
sps.honeywell.com

Booth: 3

Silver Sponsor

Honeywell offers a comprehensive range of gas and flame detection solutions to help protect your workers and facility. We manufacture portable, fixed, commercial, high-tech & semiconductor detection and gas cloud imaging solutions for a wide variety of industries around the globe.

ISN

3232 McKinney Ave
Dallas, TX 75204
310-698-8732
www.isnetwork.com

Booth: 9

ISN is the global leader in contractor and supplier pre-qualification and information management. ISN's platform (ISNetworld) helps 700+ organizations source and qualify vendors who meet and exceed industry and/or regulatory standards specifically in health, safety, quality, insurance, financial, training, cybersecurity, and ESG.

KFPI

10351 Olympic Drive
Dallas, TX 75220
214-358-3593
kfpi.com

Booth: 17

Platinum Sponsor

KFPI is a premier semiconductor company specializing in fire and gas safety solutions. KFPI provides fire and gas safety systems including consulting, design, product, installation, integration, certification, training, service, and support. KFPI specializes in performance-based solutions with focus on reliability, uptime, chemical compatibility, and longevity. In addition, KFPI offers compliance guarantees with SEMI S2, FM, & NFPA. KFPI recommends and provides the best gas detection technologies to protect your personnel and operations against hazardous chemical leaks. KFPI developed LCAS - the first and only complete automatic fire safety prevention system for bulk delivery cabinets using pyrophoric chemistries. LCAS safely contains and abates any size leak without fire, particle exposure, or damage to the fab. KFPI is a global leader with offices throughout the USA, Taiwan, Japan, China, Korea, Singapore, & Europe.

Micropack Fire & Gas

800 Town and Country Blvd, Suite 500
Houston, TX 77024
970-980-3642
micropackfireandgas.com

Booth: 1

Line of advanced optical flame detection for the semiconductor industry which includes listings and approvals to detect Silane gas and other gases and solvents. Intelligent video imaging detectors also provide real time surveillance of the areas being protected to compliment existing security systems.

Montrose Environmental Group

5120 Northshore Drive
North Little Rock, AR 72118
501-900-6400
montrose-env.com

Booth: 2

Montrose Environmental Group, Inc. is a leading environmental services company with operations across North America, Australia and Europe. Montrose supports government and commercial organizations with a diverse range of services, from comprehensive air measurement and laboratory services to regulatory compliance, permitting, engineering, and remediation.

Precision Sensors Division of UE

340 Woodmont Road
Milford, CT 06460
415-517-5229
www.precisionsensors.com

Bronze Sponsor

UE Precision Sensors has over 35 years experience designing and manufacturing electromechanical and solid state pressure, vacuum, flow, liquid level and temperature sensors for OEM's and Fabs in the semiconductor industry. PSI uses proven design concepts that meet the safety and performance needed in critical processes. Additional third party safety ratings including UL, CE, ATEX, ISO 13849 and SIL 3.

Process Insights

Booth: 29

4140 World Houston Parkway #180
Houston, TX 77032
www.process-insights.com

Process Insights provides analytical instrumentation, gas analysis solutions, process automation and safety products for a variety of industries including chemical, petrochemical, oil and gas, pharmaceutical, environmental, and more. Our analytical, process, liquid, gas, and moisture measurement solutions are recognized around the world and help reduce complexity, improve yield, and keep personnel, facilities, and environment safe.

Salus Engineering

Booth: 12

3004 Scott Blvd
Santa Clara, CA 95054
408-235-8831
www.salusengineering.com

Salus Engineering International provides the highest quality equipment safety services and aid to equipment manufacturers in satisfying the environmental health and safety requirements of this marketplace. In addition to SEMI S2 and related supporting standards, the experienced Salus team provides the complete breadth of services to meet the safety needs of the high tech and semiconductor industry. Our experienced staff of professionals includes electrical & mechanical professional engineers, certified industrial hygienists, environmentalists, ergonomists and ventilation specialists.

Spectrum Environmental Solutions

Booth: 18

Bronze Sponsor

2340 W Braker Lane Suite A
Austin, TX 78758
713-253-2743
www.spectrumenvsoln.com

Spectrum Environmental Solutions, LLC is a technology leader in optical analytical techniques. We provide customized solutions using Fourier Transform Infrared (FTIR) spectroscopy, ultraviolet (UV), tunable diode laser (TDL), and quantum cascade laser (QCL) devices. Optical measurements provide dynamic, near real-time insight into plant operations, fence line monitoring, and flare characterization utilizing both open path and extractive configurations.

Trinity Consultants

Booth: 33

Bronze Sponsor

12700 Park Central Drive, Suite 600
Dallas, TX 75251
972-661-8100
trinityconsultants.com

Founded in 1974, Trinity Consultants helps organizations overcome complex, mission-critical challenges in EHS, engineering, and science through expertise in consulting, technology, training, and staffing. We support clients in geographies worldwide and across a broad range of sectors including industrial, energy, manufacturing, mining, life sciences, and commercial/institutional.

UL Solutions

Booth: 28

Cobalt Sponsor

5000 Meridian Blvd., Suite 600
Franklin, TN 37067
714-223-3659
www.ul.com/services/ehs-online-safety-training-courses

UL Solutions has developed training courses to provide a comprehensive safety training foundation for SESH partners and industry workers. A collection of 18 modules, a bootcamp suite, and OSHA 10 course designed by safety experts and adult learning specialists. Contact UL Solutions to learn more.

Veolia

Booth: 7

53 State St Ste 14
Boston, MA 02109
617-849-6600
www.veolianorthamerica.com

Veolia is a valued partner to the semiconductor industry delivering a wide range of solutions. Services include beneficial reuse, solvent recycling, on site labor services, incineration and lab packing. Veolia can be a part of your environmental program with service and treatment and disposal facilities located throughout the U.S.

WorkWell Prevention & Care

Booth: 8

306 W Michigan Street Ste. 301
Duluth, MN 55802
866-997-9675
www.workwell.com

WorkWell helps organizations prevent and treat sprains, strains, and back pain by delivering comprehensive and scalable musculoskeletal health programs. We partner with employers to keep employees safe, healthy, and productive by identifying workplace risks, implementing early intervention and proactive ergonomics, providing employee testing and treatment, and ensuring safety compliance.

Professional Development Courses

All Sessions take place in the Hilton Phoenix Resort at the Peak

MONDAY, APRIL 24

PDC #2 – Bootcamp

8:00 am-5:00 pm

Hopi

Boot Camp is being offered this year as a Professional Development Course that is FREE with any full conference registration.

With all the recent activity in the industry and the need for fundamental education on high-tech EHS, this course will cover key aspects of EHS in the industry. Boot Camp is the do not miss event for anyone new to the industry, and those who want a refresher of EHS in the high-tech industry.

We encourage interested participants to attend start to finish since many of the topics are interrelated, and this will ensure you gain the context of all topics and discussions.

Some of the topics covered are:

- Semiconductor Fabrication Overview
- Semiconductor Processing
- The Chemistry of Semiconductor Gases
- EHS Process Hazards
- Processing Equipment
- Codes/Fire Protection/Monitoring
- Exhaust Gas Management
- Environmental Considerations
- Risk Reduction in Manufacturing
- Open Discussion

PDC #3 – Building & Maintaining An Effective IH Program

Dave Risi

1:30 pm-5:00 pm

Navajo

During this four-hour interactive workshop, VelocityEHS Certified Industrial Hygienist, Dave Risi, CSP, CIH, will take a deep dive into the seven steps of the IH Program Cycle. In this hands-on experience, attendees will complete a series of Excel worksheets to enhance their IH program and document good examples of their workplace.

Key topics include:

- Identifying best practices for establishing and managing similar exposure groups (SEGs)
- Qualitative exposure assessments (QEAs): what they are, performance methods, and how to effectively communicate risks with key stakeholders
- IH sampling plan fundamentals and how they contribute to the overall success of your IH program
- Medical surveillance program (MSP) basics and essential considerations for compliance with MSP requirements
- Common IH statistical methodologies and tools and how use them to draw key IH program insights
- Guidelines for defining your IH program goals, and how to select metrics for evaluating performance toward program goals

*Please note, bring your laptop to complete the hands-on exercises.

PDC #4 – The Science of Exhaust Management

Steve Cottle; Matthew Kowalski

1:30 pm-5:00 pm

Pima

Part 1: The Chemistry of Exhaust Gas Abatement

- Survey of process gases and their properties as they relate to exhaust gas management

Part 2: Point of Use Abatement Technologies

- Scientifically, how do abatement systems work?
- Water scrubbers, dry scrubbers, combustors, plasma, traps, etc

Part 3: Abatement by Application

- Semiconductor manufacturing by application, OEMs, tools
- How exhaust management fits
- Survey of commercial products that are available today.

PDC #6 – Energy Storage Systems

Dwayne Sloan; Alex Schraiber

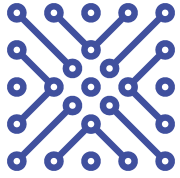
1:00 pm-5:00 pm

Hopi

This 2-Part Program from UL Solutions will focus on Fire Protection in Semiconductor Facilities and Challenges with Batteries

For Part 1, Fire Protection in Buildings, UL Solutions Technical Director, Dwayne Sloan will provide foundational principles for comprehensive fire protection in buildings. UL will share about testing and standards that collectively provide the fire protection features critical for fire and life safety in buildings. This segment will provide a deeper dive into fire protection specifically in semiconductor facilities with a focus on NFPA 318 and correlation to those key fire protection standards (such as ASTM, NFPA, FM, and UL).

For part II, Challenges with Batteries, UL Solutions Manager of Fire Research, Alex Schraiber will give an overview of how lithium ion battery hazards develop from small events into large incidents that can create life safety and property safety risks. She will share examples of different hazard scenarios demonstrated by field incidents (including Surprise, Arizona) and UL research being performed at UL Solutions in collaboration with the International Association of Fire Fighters and the Department of Energy.



SESHA

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SESHA 46th Annual International High Technology ESH Symposium & Exposition

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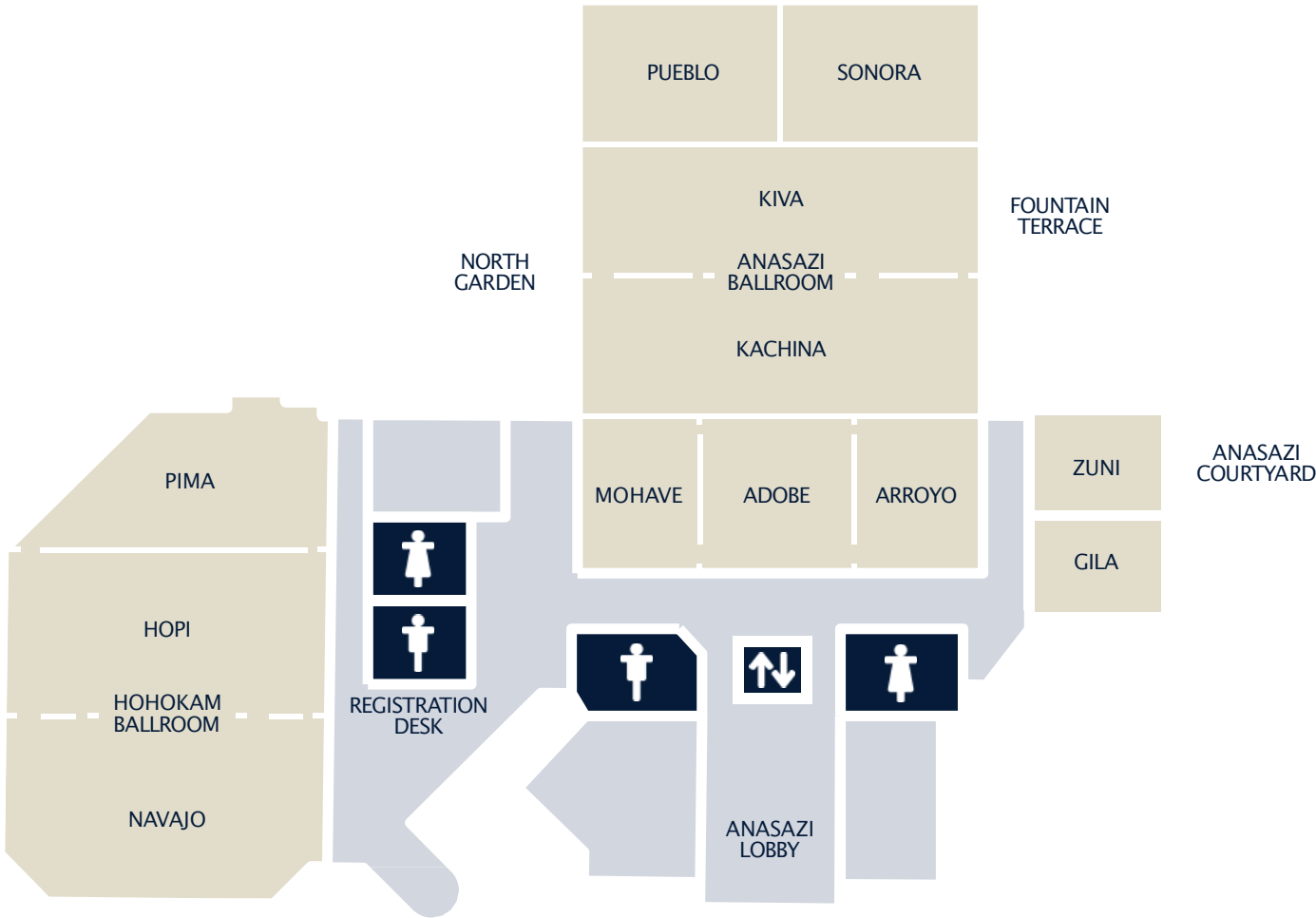
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Hilton Phoenix Resort at the Peak Floorplan

Convention Center First Level



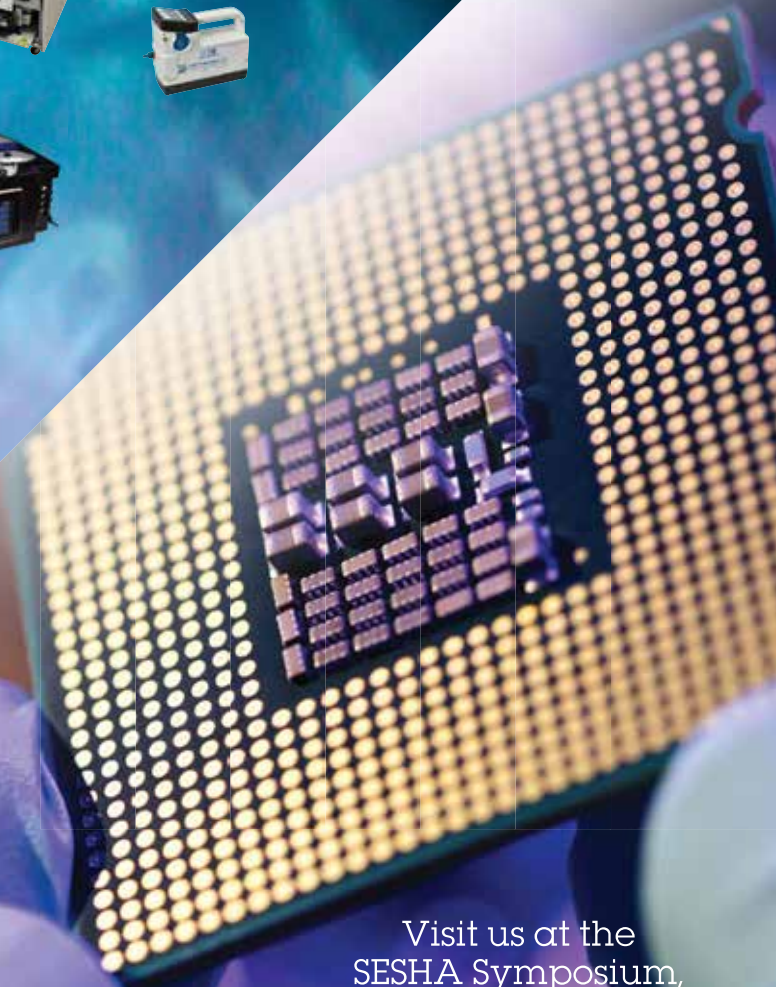


20th

DOD Technologies

Anniversary

The Leader in Low-Level Gas Detection



Visit us at the
SESHA Symposium,

Booth #16

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ASM product safety,
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