

CONFERENCE FLYER



AGENDA

DAY I | Embracing Cleanroom Standards in Regulated Industries and Overcoming Obstacles

Athens, Greece | Thursday, 24th October 2024

- Session 1.1 | Cleanrooms Standards & Regulations
- Session 1.2 | Pharmaceutical Cleanrooms
- Session 1.3 | Food & Beverage Cleanrooms
- Interactive Panel Session | Emerging Trends in Cleanrooms

DAY II | Navigating through Future Technologies and Emerging Challenges in Cleanrooms

Athens, Greece | Friday, 25th October 2024

Session 2.1 | Energy Efficiency & Challenges in Cleanrooms

Session 2.2 | Cleanrooms for Space Technology

Session 2.3 | Dry Cleanrooms for EV Batteries

Interactive Panel Session | Technology Evolvement and Cleanroom Facilities

ASHRAE CEIC 2024

The ASHRAE Cleanrooms Excellence International Conference 2024 (ASHRAE CEIC 2024) will take place as a two-day event on October 24 and 25 in Athens, Greece. This prestigious event is organized by the **ASHRAE Hellenic Chapter** and co-sponsored by the **ASHRAE Society**.

The conference will spotlight innovative cleanroom technologies, focusing on ISO 14644 standards, Annex 1 GMP regulations, and advanced contamination control strategies. Key areas of discussion include cleanroom designs for space technology, lithium battery production, food processing, and pharmaceutical manufacturing. Sessions will cover energy efficiency, risk management, and compliance with international standards, providing insights into the latest advancements and best practices in cleanroom environments.

This event offers a unique opportunity to engage with leading experts in the field of clean spaces technology, share your insights, and explore the historic and picturesque city of Athens, Greece.



WHY ATTEND?

Don't miss the chance to be part of this premier event celebrating advancements in cleanroom technology! Enhance your expertise, network with industry leaders, and contribute to the future of cleanrooms at the ASHRAE CEIC 2024.

Why Attend:

- Expert-Led Sessions: Gain insights from leading experts in cleanroom standards, pharmaceutical manufacturing, food processing, space technology, electric vehicle lithium ion-batteries manufacturing and more. Our distinguished speakers hail from the USA, Ireland, Germany, China, Greece, Slovenia, Philippines, and other countries, bringing a wealth of global perspectives and expertise. Notably, Wei Sun, Vincent Sakraida, and Cesar Luis Lim, co-authors of the ASHRAE Design Guide for Cleanrooms, will share their extensive knowledge and experience.
- Innovative Topics: Stay ahead of the curve with sessions covering the latest advancements in cleanroom technology, energy efficiency, contamination control, and regulatory compliance. Learn about emerging trends and future technologies that will shape the industry.
- Interactive Panel Sessions: Participate in dynamic discussions and Q&A sessions with industry leaders on critical topics such as innovations in cleanroom practices, energy efficiency, and the future of cleanroom technology.
- Networking Opportunities: Connect with industry peers, thought leaders, and potential collaborators during networking breaks, lunches, and interactive panel sessions. Build valuable relationships that can help you and your organization thrive.
- **Beautiful Venue:** Experience the charm of Athens while attending sessions in a 5-star hotel with excellent facilities and breathtaking views of the Acropolis. Enjoy the perfect blend of professional development and cultural enrichment.





CONFERENCE SCHEDULE

DAY I | Thursday 24 October 2024

Embracing Cleanrooms Standards in Regulated Industries

8:30 - 9:30 : Registration & Welcome Coffee

9:30 – 10:00: Plenary – Opening Ceremony

Session I | Cleanroom Standards & Regulations

<u>10:00</u> The Impact of New ISO 14644 Standards in Controlling Airborne Contamination thus Targeting Energy Efficiency

Wei Sun PE • President Engysco LLC, USA | ASHRAE Member of BoD

10:30 New EU ANNEX 1: What has changed and How Affects Pharmaceutical Facilities

Conor Murray • Principal Consultant, 3 Dimension Cleanrooms LLD RVC CTTC Region XIV, Voting member 9.11 (Clean Spaces)

11:00 The Application of Cleanroom ISO Standards in China

Daqian Wanq • Executive Vice Secretary - Chinese Contamination Control Society, Beijing, China

11:30 – 12:00: Coffee Break - Networking

Session II | Pharmaceutical Cleanrooms

12:00 Airflow Visualization in Cleanrooms

Morgan Polen • Contamination Control Expert Microrite, Inc. USA

12:25 Source Strengths – It's not all about air Change Rates

Stephen Ward • Chair of BSI LBI/30 Cleanroom Technology Committee, ISO TC/209 UK • CEO T-SQUARED Validair Ltd

12:50 HVAC design for Clean Rooms - Guidelines and Case Studies

Davide Bertolina • Senior Technical Manager CSV L.S. Srl, Milan, Italy

13:15 a Holistic Approach in New Pharmaceutical Facilities Build

Aristotle Lymperopoulos • Director of Industrial Development DEMO SA

13:45 - 14:30: Lunch

Session III | Food and Beverage Cleanrooms

14:30 Clean Room Technology in Food Processing

Nick D. Valet • Chem. Engineer • Director Process R&D at Mondelez

15:00 Design Issues in Food & Beverage Processing Cleanrooms

Cesar Luis dL. Lim, MBA, FASHRAE, Managing Partner, Kilojoule Consultants Int'l. Co. Philippines

15:30 Dairy Processing Cleanrooms – Necessities & Challenges

FETA & Yellow Cheeses Production Food Expert (To be announced soon)

16:00 – 16:45: Coffee Break – Networking

End of DAY I : Interactive Panel Discussion

<u>16:45</u> Emerging Trends in Cleanrooms, where the future goes ? Moderator: Ziva Abraham PhD Microbiology • CEO Microrite | USA

Panelists: Conor Murray, Morgan. Polen, Nick Valet, D. Bertolina, A.Lymperopoulos

DAY II | Friday 25 October 2024

Navigating through Future Technologies & Emerging Challenges

8:30 - 9:30 : Welcome Coffee

9:30 – 10:00: Welcome Speeches from Public Administration Officers

Session IV | Energy Efficiency in Cleanrooms

10:00 Decarbonization Challenge in Cleanroom Technology

Don Colliver • Professor University of Kentucky • ASHRAE Fellow President 2002-2003 USA

<u>10:30</u> Energy Optimization and Regulatory Alignment in GMP Cleanrooms – Application of ISO 14644-16 to the latest Annex 1

Nataša Štirn • Co-owner, Business Director, GMP Quality Assurance Manager at Klimer Štirn & Co. d.n.o., Slovenia

11:00 Setting up Cleanroom HVAC Systems for Variable Airflow Operation

Vincent Sakraida PE • Senior Mech. Engineer Fluor Corporation USA

11:30 - 12:00: Coffee Break - Networking

Session V | Cleanrooms for Space Technology

12:00 Cleanroom Filtration and HVAC Design at NASA Goddard Space Flight Center

Yingrui "Zao" Huang • Cleanroom Operations and Purge Systems Team Lead • NASA, Goddard Space Flight Center, Greenbelt, MD USA

<u>12:30</u> How Small Nations can become Space Fearing – An Infrastructure Approach

Aithon Narlis • Ph.D. in Electronics • Former Director of Electronics Plant, Hellenic Aerospace Industry SA

13:00 Space: "the Final Frontier" of clean rooms?

Dr. Maria Kalama • Ph.D. in Satellite Networks • Managing Director Open Cosmos Aegean

13:30 - 14:30: Lunch

Session VI | Clean & Dry Rooms for EV Batteries

14:30 Technical Cleanliness in Li Giga Plants

Antonis Stefanidis • Expert for Technical Cleanliness and Clean & Dry Rooms at Automotive Cells Company-ACC

15:00 Basic Design and Challenges for Dry Cleanrooms for Battery R&D and Production Plants

André Meyer • Mech Engineer • Key Account Manager Munters GmbH

15:30 Effect of processing conditions on Li-ion battery performance

Dr. George Zardalidis • Lead Researcher of INEM Technologies PC • Postdoc Researcher of MNTL @DUTh

16:00 - 16:45: Coffee Break - Networking

End of DAY II : Interactive Panel Discussion

<u>16:45</u> Why Technology is so much linked with Cleanroom Facilities Moderator: Don Colliver

Panelists: Zao Huang, Aithon Narlis, A. Stefanidis, Nataša Štirn



SPEAKERS















Wei Sun is an ASHRAE's Board Director, an ASHRAE Fellow and a Distinguished Lecturer since 2009. He was the Principal Author of "ASHRAE Design Guide for Cleanrooms (2017)", and TC9.11 (Clean Spaces) Chair (2008-2011), Chair of Environmental Health Committee (EHC), Chair of Technology Transfer Committee (CTTC) (2012-13), and Detroit Chapter President (2010-11). Mr Sun was the President of Institute of Environmental Sciences and Technology (IEST) in 2016-17, and Chairman of WG-12 Working Group (Cleanroom Design) of IEST. He has been serving as ISO TC209, USA Delegate for ISO 14644-4 & 14644-16 Standards. Furthermore, he is the chairman of National Environmental Balancing Bureau (NEBB)'s Cleanroom Performance Testing (CPT) Standard since 2018.

Conor Murray has over 35 years of experience in cleanroom and biosafety lab design and construction. Since 2007, he has worked independently in oversight and consulting roles. Conor represents Ireland in ISO/TC209 and CEN/TC243, focusing on cleanroom standardization. He is the Convenor of ISO/TC209 WG2 on microbiological control and the Chair of the Healthcare Services Committee for NSAI. Conor is also the Chair of the Irish Cleanrooms Society and has lectured internationally. He is a past President of the ASHRAE Ireland chapter and serves on several ASHRAE committees, including TC 2.4 and TC 9.11.

Donald "Don" Colliver is a Professor in the Biosystems Engineering Department at the University of Kentucky, where he has specialized in building energy efficiency and sustainable design for over 40 years. He led the development of the first dehumidification design weather data published in the 1997 ASHRAE Handbook. As ASHRAE President (2002-2003), Don launched the Advanced Energy Design Guides, which have reached over 700,000 copies globally. He has held various ASHRAE leadership roles, including Chair of the Honors and Awards Committee and currently serves as Vice Chair of the ASHRAE Task Force for Building Decarbonization. He holds a doctorate from Purdue University and is an active member of Central Baptist Church.

Vincent Sakraida has 42 years of experience in the design, construction, commissioning, and operation of cleanroom facilities, including pharmaceutical, aerospace, and high-containment biological labs. He is the chairperson of ASHRAE's TC9.11 Clean Space technical committee and ASHRAE's representative to the ISO 14644 US TAG. Additionally, he serves on the NEBB Cleanroom Performance Testing standard committee. An ASHRAE Distinguished Lecturer, Vince has presented numerous international seminars and authored various technical articles.

Yingrui Zao Huang leads the cleanroom operations and purge team at NASA Goddard Space Flight Center, overseeing the largest ISO7 cleanroom in North America. Previously, he served as the deputy integration and testing lead for GSFC's robotics mission and was a contamination control engineer for the James Webb Space Telescope. Zao holds a Master's degree in Space Systems Engineering from Johns Hopkins University and a Bachelor's degree in Biochemistry from the University of Maryland. He has published several papers and received numerous awards, including the NASA Robert H. Goddard Exceptional Achievement Award.

Dagian Wang holds a Bachelor's degree in Statistics from Renmin University of China. With over 20 years of experience, he has actively participated in ISO/TC209 meetings and working groups, representing China. He has significantly contributed to translating and adopting international cleanroom standards as national standards. Wang is currently the Executive Vice Secretary-General of the Chinese Contamination Control Society and serves on various technical committees, including the Cleanroom Technology Standardization Working Committee of the China Institute of Electronics. He is also a registered Chinese Expert in ISO/TC209 and has held key roles in the International Confederation of Contamination Control Societies (ICCCS).

Cesar Luis Lim is an ASHRAE Fellow and a recipient of the Milton W. Garland Commemorative Refrigeration Award for Project Excellence. He has over 40 years of experience in HVAC-R design and engineering, having worked for companies such as PHILACOR, KOPPEL Inc., and the San Miguel Corporation Group. He has served as a voting member of TC9.11 and as Chair of the Refrigeration Technology CPCC. Currently, he is the Managing Partner of Kilojoule Consultants Int'l. Co. and serves as a judge for the low GWP Refrigeration System Awards of ASHRAE UN Environment. He holds a Bachelor's degree in Mechanical Engineering from the University of San Agustin and an MBA from De La Salle University.



SPEAKERS



Ziva Abraham is the President and Founder of Microrite Inc., a California-based GMP consulting firm specializing in contamination control. With over 35 years of experience in microbiology and quality assurance, Ziva has led significant research in developing microbial insecticides and has extensive experience in clinical and industrial microbiology. Her expertise includes establishing clinical laboratory systems and evaluating automated microbial identification systems. Ziva is a passionate educator, providing global training on microbiology and contamination control.







Morgan Polan is a subject matter expert on contamination control in cleanrooms with over 40 years of experience. He assists customers across industries including pharmaceuticals, medical devices, semiconductors, aerospace, and healthcare. Morgan has solved complex contamination issues, trained hundreds of professionals worldwide, and contributed to the development of cleanroom standards and guidelines. His expertise includes airflow visualization, risk assessment, and particle monitoring, making him a valuable resource for contamination control in critical environments.

Hatasa Stim is a GMP Cleanroom Consultant with over 15 years of experience in Life Science testing and certification. She is the co-founder and Business Strategy Director at Klimer Stirn & Co. d.n.o. Slovenia, where she manages operations, personnel, and financial strategies. Nataša provides comprehensive testing solutions for cleanrooms of all classes according to various standards, including ISO 14644, FS209e, and GMP. She represents Slovenia and SIST as the Head of Delegation and Subject Matter Expert on ISO/TC209. Nataša actively participates in ISO working groups related to cleanroom technology, including biocontamination control, operations, and airborne particle sampling techniques.

Nikolaos Valet is the Director of Process R&D at Mondelez, with a background in Chemical Engineering from Athens. He has extensive experience in the food industry, having worked in the Edible Oils & Fats sector and the Bakery & Confectionery sector. Nikolaos currently leads R&D Process Engineering for Soft Cakes & Pastries and manages the Mondelez R&D Technology Center in Greece. His expertise includes sanitary design, GMP rules, and the identification of food-related risks, focusing on improving food safety and consumer trust in processed foods.



Maria Kalama heads Open Cosmos's entity in Greece, bringing over 20 years of experience in the space sector, with both technical and commercial roles. She holds a PhD in Satellite Engineering and is an advocate for women in tech. Dr. Kalama has been instrumental in numerous space missions and projects, promoting innovation and diversity within the industry.







André Meyer has over 20 years of experience in sales engineering, starting at OLT GmbH and later joining Heimer Lackieranlagen and Wheelabrator Group. Since 2010, he has been with Munters GmbH, managing regional sales for North Rhine-Westphalia and Lower Saxony. In 2016, he became responsible for air dehumidification in the automotive and battery sectors, overseeing the DACH region, the Czech Republic, and Poland. André also heads key accounts for WET and GTEC.



VENUE

The conference will be held at the 5-star Divani Caravel Hotel in Athens, near the historic city center, offering a magnificent view of the Acropolis. The speaking sessions will take place in the Horizon View Hall, which accommodates more than 200 attendees in a theatrical seating setup. The sponsors will be located in the nearby Athens View Hall on the same floor, with a total surface area of 300m² accommodating up to 30 sponsor tables and booths. Coffee breaks and lunches will be held in the Sponsors Area, facilitating networking and bonding.



Speakers' Hall: HORIZON HALL

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Sponsors' Hall: ATHENS VIEW HALL



PRICING

Book your Place now and get the Special Early Bird Discount

Early Bird €445

Available until August 25, 2024

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Available from August 26 until October 6, 2024

Late Bird €525

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Registration Discounts

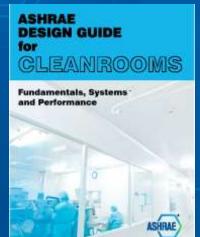
- ASHRAE Members: 10% off the registration fee.
- ASHRAE Student Members: 20% off the registration fee.
- Group Discount: 15% off for group registrations of 4 or more attendees. **Note:** Only one discount can be applied per registration.

Prices Include: full conference live participation (2 days), online conference attendance through live streaming, distribution of Speakers Presentations & Conference Documentation

<u>Design Guide Discount</u>

Attendees of the ASHRAE CEIC 2024 will receive an exclusive 10% discount on the ASHRAE Design Guide for Cleanrooms. This guide, coauthored by our distinguished speakers **Wei Sun**, **Vincent Sakraida**, and **Cesar Luis Lim**, is an essential resource for cleanroom design and engineering.

A promo code will be provided upon registration, which you can apply when purchasing the handbook. Don't miss this opportunity to enhance your professional library with expert insights and practical guidance!



Payment Options:All prices are displayed in euros (EUR). Please note that the final amount charged may
vary based on current exchange rates at the time of payment. VAT is not included.Refund Policy:Cancellations made before September 16, 2024, will receive a full refund minus a
processing fee of €50. No refunds will be issued after September 16, 2024.Data Protection:The delegate complies that the data provided as part of the registration will be retained
by ASHRAE Hellenic Chapter and stored in ASHRAE database. It will not be published,
sold or made available to any third parties besides conference delegates. For training
and security purposes telephone calls may be recorded.



REGISTRATION

For Registration visit Conference Website: www.ashraeceic.com and click on TICKETS or fill in the following list make the payment by Bank Transfer and send Payment Receipt & Attendees DATA

to registation@ashraeceic.com

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Required No of Copies ASHRAE Design Guide for CLEANROOMS:

Invoicing Information:

The following information is mandatory for invoice issuing. One invoice can be issued per single or group registration.

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