

VIRTUAL

**EDUCATION
AND BUSINESS
CONFERENCE**

11/30 – 12/4



Monday 11/30

10 a.m. – 11:30 a.m. PST ○

0.2 CEUs



Keynote

IWSH Presentation

IWSH – Our work and how we've continued to bring help to others during the pandemic. Also, "Unconventional" plumbing systems: How these projects differ from the typical plumbing.

Presented by Jed Scheuermann, Christopher Lindsay, Dain Hansen, Sean Kearny, and Randy Lorge

1 p.m. – 2 p.m. PST ○

0.1 CEUs



Understanding High and Low Hazard Cross-Connections

This seminar will provide attendees with information on the factors involved in classifying the hazard level of cross-connections in residential and commercial settings along with the proper selection of the backflow prevention assembly, device, or method needed to protect the water system.

Presented by Sean Cleary

6 p.m. – 7:30 p.m. PST ○

0.1 CEUs



GeoMicroDistricts: The Next Evolution in Ground Source Heat Pump Technology

This presentation will focus on delivering a better understanding of the evolution of the application of GeoExchange Technology. It will explore how wasted energy and thermal storage can be recouped, as well as how GeoMicroDistricts are designed.

Presented by Cary Smith, Sound Geothermal Corporation

9 a.m. – 10:30 a.m. PST

0.1 CEUs



2021 UPC Code Changes

The International Association of Plumbing and Mechanical Officials (IAPMO) recently released the 2021 Uniform Plumbing Code (UPC). This webinar will provide a thorough overview of the changes from the 2018 UPC to the 2021 UPC.

Presented by [Brian Rogers](#)

1 p.m. – 2 p.m. PST

0.1 CEUs



Introduction to UL 1738 Certified Flue Gas Venting

This presentation will discuss the differences between certified venting products and traditional plumbing products used for flue gas venting. An overview of the applicable standards currently used today and how they related to UL 1738 will also be provided.

Presented by [Matthew Tucci](#), Market Development Specialist - Flue Gas Venting IPEX USA LLC

6 p.m. – 7 p.m. PST

0.1 CEUs



Codes, Standards and Listings: New A2L Refrigerants

This presentation will discuss will explore the new A2L class of refrigerants and focus on the current status of the standards used in evaluating equipment using the new A2L refrigerants.

Presented [John Taecker](#), Senior Regulatory Engineer, UL LLC

Wednesday

12/2

10 a.m. – 11 a.m. PST

0.1 CEUs

The Water Demand Calculator and the Future of Plumbing System Sizing

The presentation will explain the advancement of the Hunter method for estimating peak water demand into the 21st Century. A Water Demand Calculator was designed to address the low probability of fixture use and the high probability of stagnation (i.e. no water flow) in residential dwellings. Benefits of using the WDC for estimating peak water demands include reduced construction costs, greater protection from health hazards due to prolonged stagnation and potential microbial (e.g., Legionella) contamination, reduced wait time for hot water delivery, and provision of safe sustainable plumbing systems that encourage water and energy conservation among a broad spectrum of end users. The presentation will also introduce new features in a recently released version (2.0) for multi-family applications.



Presented by [Dan Cole](#)

1 p.m. – 2 p.m. PST

0.1 CEUs

Rehabilitation of Industrial Building Drains using Trenchless Methods

This presentation consists of a case-study on the use of Cured-In-Place Pipe (CIPP) in the renovation of drainage piping on an industrial site located in Upstate NY (Friesland Campina, Delhi, NY). It will discuss the advantages of using innovative trenchless methodology in a process piping context as well as the challenges faced during the completion of that particular project.



Presented by [Carl Marc-Aurèle, P.Eng.](#),
[Formadrain Inc.](#)

3 p.m. – 4 p.m. PST

0.1 CEUs



Water Heaters Used as Disinfectors and Temperature Controllers

This will be a primer on a new class of water heaters that are able to control the outlet temperature to the same level of safety as a thermostatic mixing valves or temperature limiting valve. We will talk through the benefits of including these devices in your systems and updated standards & model code language.

Presented by [Conrad Jahrling](#)

6 p.m. – 7 p.m. PST

0.1 CEUs



2021 UMC Code Changes

The International Association of Plumbing and Mechanical Officials (IAPMO) recently released the 2021 Uniform Mechanical Code (UMC). This webinar will provide a thorough overview of the changes from the 2018 UMC to the 2021 UMC.

Presented by [Tim Collings](#)

Thursday 12/3

9 a.m. – 10:30 a.m. PST

0.1 CEUs



2021 UPC/UMC Gas Pipe

This presentation will cover the UMC chapter 13 and UPC chapter 12 Fuel gas piping code changes and basic sizing principles

Presented by [Tim Collings](#)

1 p.m. – 3 p.m. PST

0.2 CEUs



2021 UPC DWV Appendix C

Sizing plumbing systems using Appendix C of the UPC and incorporating the PSI system to illustrate designs.

Presented by [Steve Hart](#)

6 p.m. – 8 p.m. PST

0.2 CEUs



2021 UPC Water Systems Products and Standards

Updates on new/ revised water system product and standards

Presented by [Tom Palkon](#)

Friday 12/4

- 10 a.m. PST **○ President's Welcome, Call to Order of Business Session**
- 10:05 a.m. PST **○ Nomination report**
- 10:10 a.m. PST **○ CEO Report**
- 11:30 a.m. PST **○ Board Officers and Directors elections**
- 11:45 a.m. PST **○ Installation of Directors and Officers**
- 12 p.m. PST **○ Adjournment**

Our Instructors

Sean Cleary is a licensed master plumber from Scranton, Pennsylvania. Over the course of his 40-year career he has worked in all phases of the cross-connection, plumbing, and mechanical industries. He is a graduate of the United Association Instructor Training Program. Sean is a Past President of ASSE International and served as Chairman of the ASSE Cross-Connection Control Technical Committee for more than 10 years. Sean is employed by the International Association of Plumbing and Mechanical Officials (IAPMO) as the Vice President of Operations for the IAPMO Backflow Institute. The institute is considered the industry leader in cross-connection control training within the United States and on an international basis. Cleary is the Technical Editor for Backflow Prevention and Plumbing Standards magazine, co-author of the IAPMO Backflow Reference Manual, and has written articles for a number of plumbing and mechanical publications. Cleary also has given presentations on water and cross-connection issues for IAPMO, ASSE, ASPE, NEHA, IA, and a number of state plumbing inspector organizations.

Daniel Cole is Sr. Director of Technical Services at International Association of Plumbing and Mechanical Officials (IAPMO). He is a member of the American Society of Plumbing Engineers (ASPE) and received the ASPE Scientific Achievement Award in 2018. He has published several articles on Hunter's curve and the fixture unit methodology and chairs the Task Group for the development of the Water Demand Calculator. His research focus is on the plumbing investigations performed at the National Bureau of Standards (now NIST) with a particular interest in the work of Roy B. Hunter. As the secretariat for the Water Efficiency and Sanitation Standard (WE•Stand), he also has a focus on promoting water efficiency standards for the built environment.

Tim Collings is the Senior Inspector for Salt Lake City Corporation. He has been inspecting plumbing, mechanical and fire protection systems for Salt Lake City Corporation since August 1981. Tim taught in the plumbing apprenticeship program in Salt Lake City for 18 years. His instruction is supported by a solid background that combines professional experience with a wide variety of committee service.

Our Instructors

Dain Hansen has over 15 years of global policy, philanthropic, nonprofit and international charity experience. Dain began his career living in Australia working with indigenous and immigrant populations. Since that time, Dain worked on Capitol Hill for Senators and Congressmen on domestic and global environmental issues. Dain has worked with USAID, foundations and organizations from the WASH community on projects throughout the globe, including; Southeast Asia, the Middle-East, and Africa. Dain is currently based in Washington, D.C., and works with water-related charities, foundations, domestic and international policy makers, and governmental aid organizations. This engagement is done to further expand and provide assistance to developing nations to increase quality of life through training and vocational programs, standardization and governance in the demand-side water.

Steve Hart, Certified Building Official, is the senior plumbing plans examiner with Public Health-Seattle & King County (PHSKC). A licensed journeyman plumber for thirty years, he also holds a degree in business management. Steve is an enrolled tribal member of The Blackfeet Nation, and is one of few Native American certified inspector/ plans examiners in the United States, and the only Native American Certified Building Official in Washington State. He strives to share his knowledge with other Native Americans and individuals of color, who face barriers in gaining access to a profession in the trades. Steve is a member of Local 32 Plumbers & Pipefitters, and currently serves as Chair of the Northwest Washington Chapter of International Association of Plumbing and Mechanical Officials (IAPMO). He is an instructor, specializing in plumbing codes, designing and developing Plumbing Systems Illustrated, a program providing instruction in complex plumbing code concepts that engages all learning styles.

Conrad Jahrling is the Product Manager for Water Wellness at Watts. He previously managed development of standards and certification at ASSE International, and designed water closets, urinals, and flush valves at Sloan. He has served as a contributing member of ASME A112, CSA B45, and CSA B125 committees and on many ASSE standards working groups.

Our Instructors

Seán Kearney, Managing Director joined The IAPMO Group in 2015, and from that point has overseen development of the international Community Plumbing Challenge (CPC) program, which has grown into the flagship initiative of the IWSH Foundation today. Over the past five years, he has directed projects launched in India, South Africa, Indonesia, and the United States. Kearney worked for WorldSkills Foundation during its start-up period from 2013-15, during which time the CPC concept was established, alongside several other skills showcase projects and sustainability initiatives that lead to further project management experience in countries across Europe, Asia, Africa and South America. He is responsible for strategic and organizational leadership across the IWSH team, and further guidance in the design and delivery of other international programs and partnerships of The IAPMO Group.

Christopher Lindsay, Senior Director, Government Relations, brings over a decade of nonprofit and international development experience to IWSH. He began his career serving in the White House where he played a pivotal role analyzing and reporting trends on the thousands of nonprofits who partner with the government – representing billions of dollars. In this capacity, Christopher also worked to rebuild the United States’ refugee program in the years following the attacks of September 11th, helping populations in the most desperate circumstances. Later, he would work with corporations and high net worth families to structure their philanthropic activities on issues ranging from creating microfinance projects in Peru to rebuilding schools in Haiti following the 2010 earthquake. An outspoken advocate for clean water and sanitation, Christopher has worked with government ministries in sub-Saharan Africa, Asia and the MENA region to improve governance, develop human capital, and implement the mechanisms necessary to build supply chain capacity.

Randy Lorge is the Director of Workforce Training and Development for the International Association of Plumbing and Mechanical Officials (IAPMO). He has taught plumbing apprentices, journeyman, and inspectors plumbing code for over 20 years and has been a member of the IAPMO Training and Education Committee for 3 years. In addition, Lorge has been a lead member of the International Water, Sanitation, and Hygiene (IWSH) Foundation, which is IAPMO’s non-profit 501 (c)3. Charity for the past 5 years. He was awarded the IAPMO Industry Person of the Year in 2018. Lorge is also a master plumber in the State of Wisconsin.

Our Instructors

Carl Marc-Aurèle is a Chemical Engineer and Vice-President at Formadrain Inc. He is involved in all aspects of the business such as field operations, R&D and sales and has been in the Trenchless and No-Dig technologies field for 10 years and has hands-on experience. He is also co-chair of the Lateral Committee at the National Association of Sewer Service Companies (NASSCO) and will be presenting on behalf of the committee.

Tom Palkon is the Executive Vice President for IAPMO R&T Water Systems and ASSE International Executive Director. Over the past 23 years Tom has been very active in American National Standards (ANS) development activities with ASSE, IAPMO, CSA, and NSF International. Tom is a leading expert on product certification activities conforming to the ISO 17065 standard and the ISO 17025 standard for product testing laboratories. Tom has a bachelor's degree in Biology from the University of Illinois (Champaign/Urbana) and an M.B.A from Keller University.

Brian Rogers brings nearly 30 years of education, training and experience to his instruction. He completed a five-year plumbing apprenticeship with the Plumbers and Pipefitters Local 125 while working in his father-in-law's plumbing business. He then went to work as superintendent for one of eastern Iowa's largest mechanical contractors, working on large commercial, industrial, school and hospital projects. In 2000, Brian accepted a full-time plumbing instructor position at Plumbers and Pipefitters local 125 and held that position until 2007. Brian returned to the contracting side in 2007 as a service manager and project manager. Brian is IAPMO's Region 4 Field Manager, covering the Midwestern states of Missouri, Iowa, Nebraska, Kansas and Illinois. Brian is an IAPMO Certified Plumbing Inspector, and he has served on many of IAPMO committees throughout the years. Brian also involves himself by serving on local city and county plumbing boards. Brian holds a master license in plumbing, hydronics, refrigeration, and HVAC in addition to medical gas installer and backflow certifications.

Jed Scheuermann is a Master Plumber, with over 40 years' experience and has achieved a Bachelor (Education) degree and Instructor of Pipe Trades Certificate. As an educator, his passion is to effectively share trade knowledge. He is an active member of the IWSH team. Since 1989 Jed participated in numerous humanitarian missions, travelling to nearly 40 countries in the process. Jed is an avid writer & photographer having published many articles.

Our Instructors

Cary Smith worked as a Drilling Engineer and related fields in the Oil and Gas Industry from 1972 to 1997. During that time his specialty was advanced and high temperature drilling fluids and drilling optimization. He has worked in the GSHP industry since 1997 and has been involved in the design and implementation of over 40,000 tons (140 MW) of installed capacity in North America. He is also president and CEO of Sound Geothermal. SGT is a design engineering firm, manufacturer's representative, and distributor for ground source heat pump equipment and accessories. The company is active throughout the western United States and has projects in a total of 31 states. Cary pioneered many hybrid and district energy systems. His projects range from HUD housing to industrial facilities and University Campuses to NASCAR facilities. Cary is a founding member of TGED.

John Taecker has worked for UL for over 35 years. He has a BS in Mechanical Engineering from Cal Poly, San Luis Obispo, and is a California Registered Professional Engineer in Safety Engineering. He manages UL's code development activities, has served on various building, mechanical, plumbing and electrical model code development committees, and actively participates in all levels of the code development process for NFPA, ICC and IAPMO. He is a nationally recognized speaker on mechanical, plumbing, electrical, and building products and installations. He is a Professional Member of IAEE, ICC and IAPMO and serves on various committees.

Matthew Tucci is a flue gas venting market development specialist at IPEX USA. Matthew's primary focus, within IPEX, is the planning and implementation of market development activities such as educating market stakeholders, participating in code and standard committees and working with customers. Matthew has previously worked as an Application Engineer providing technical expertise for piping systems in the plumbing and industrial sectors. Matthew received his Bachelor's Degree in Industrial Chemical Engineering from Western University.