

ASHRAE Distinguished Lecturers

(DL information is subject to change frequently. Please access the search by DL name, topic, and region at www.ashrae.org/distinguishedlecturers for the most recent information)

Last Updated: #####

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Devin A. Abellon, P.E. Uponor 25404 North 52nd Avenue Phoenix, AZ 85083-4444 Tel: (760) 902-4879 Email: devin.abellon@uponor.com	1 Diversity, Equity, Inclusion and ASHRAE: Does it Really Matter?	Basic/Interm		
	2 Embedded Tube Radiant Systems to Maximize Energy Efficiency	Basic/Interm		ABELLON01
	3 Hydronic Piping with PEX: Pros and Pitfalls	Intermediate		
	4 Radiant Heating and Cooling Control Strategies	Basic/Interm		
	5 Specifying Radiant Heating and Cooling Systems	Intermediate		
	6 The (un)Ethical Engineer: a study in principle and practice	Basic		
HONORARIUM None	LANGUAGES English			
Roberto R. Aguilo, P.E. Estudio Aguilo & Asociados Tres Arroyos 2421 Buenos Aires, 1416 ARGENTINA Tel: (54911) 4148-2111 Email: raguilo@yahoo.com	1 Cooling Loads Calculation	Intermediate		
	2 Protecting the Environment using Natural Refrigerants	Intermediate		
	3 Refrigerant Flow Controls Methods in Industrial Refrigeration	Intermediate		
	4 Refrigerants	Intermediate		
	5 Supermarkets Refrigeration System & Sustainability	Intermediate		
	6 The Refrigeration Processes in the Food Industry	Intermediate		
	7 The Use of CO2 as Refrigerant	Intermediate		
HONORARIUM None	LANGUAGES English Spanish			
William P. Bahnfleth, Ph.D., P.E. Pennsylvania State University 1426 South Pugh Street University Park, PA 16802 Tel: (814) 863-2076 Email: wbahnfleth@psu.edu	1 Fundamentals of Ultraviolet Germicidal Irradiation for Air & Surface Disinfection	Basic/Interm	0920014267	BAHNFLETH04
	2 HVAC and Airborne Infectious Diseases	Basic/Interm	0090003542	Bahnfleth06
	3 HVAC and Risk from Airborne Hazards	Basic/Interm	0920017326	Bahnfleth07
	4 Integrating Indoor Air Quality and Energy Efficiency in Buildings	Intermediate	0920014269	BAHNFLETH02
	5 Thermal Energy Storage in the Era of Sustainability	Interm/Adv	0920014272	BAHNFLETH03
	6 Variable Primary Flow Chilled Water Systems	Interm/Adv	0920014275	BAHNFLETH05
HONORARIUM None	LANGUAGES English			

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Giovanni Barletta Emerson Carrera 58 No. 99-46 Apto 1604 Barranquilla Colombia Tel: 5.73174E+11 Email: Giovanni.Barletta@emerson.com	1 ANALYSIS OF THE VARIABLES THAT HAVE AN IMPACT ON THE REFRIGERATION SYSTEM AND ON THE LIFECYCLE UNIT. *Available in Spanish	Basic/Interm		
	2 EVALUATION OF ARCHITECTURE ALTERNATIVES IN COMMERCIAL REFRIGERATION UNDER TEWI ANALYSIS. *Available in Spanish	Basic/Interm		
	3 GOOD PRACTICES IN LEAK CONTROL USING DIRECT AND INDIRECT METHODS *Available in Spanish	Basic/Interm		
HONORARIUM	LANGUAGES			
Robert Bean, R.E.T., P.L.(Eng.) 2206, 901-10th Ave SW Calgary AB T2R 0B5 CANADA Tel: 403.560.5769 Email: k9cave@gmail.com	1 An Introduction to Thermal Comfort: The Human Factors of Sensation, Perceptions and Responses	Basic		
	2 Fundamentals of ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy	Intermediate		
	3 Using Thermal Comfort Tools to Evaluate Discomfort Probabilities Due to Enclosure Design and Choices in HVAC Systems	Interm/Adv		
	4 What Should Drive the Sustainability Bus - Indoor Environmental Quality or Energy?	Interm/Adv		
HONORARIUM	LANGUAGES English			
Erich Binder EBCL 159 Douglasbank Drive SE Calgary AB T2Z1X7 CANADA Tel: 403-836-0832 Email: ebcl@shaw.ca	1 ASHRAE - How You Can Get involved	Basic		
	2 ASHRAE Cold Climate Building Design – Updates from 2019 Revisions to Cold Climate Building Design Guide	Basic/Interm		
	3 Cold Climate Building Design	Basic		
	4 HVAC Building Pressurization Systems – Lessons Learned	Basic/Interm		
	5 HVAC Rules of Thumbs for Trouble Shooting	Basic/Interm		
	6 HVAC&R - A Risk Management System	Basic/Interm		
	7 Industrial Ventilation & Loss Prevention Engineering	Basic		
HONORARIUM None	LANGUAGES English			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Hoy R. Bohanon, Jr., P.E.		1 Applying ASHRAE Standards to Existing Buildings	Basic		
Hoy Bohanon Engineering PLLC 8236 Arbor Ridge Lane Clemmons, NC 27012 Tel: (336) 972-1626 Email: bohanoneng@gmail.com		2 ASHRAE Building Energy Quotient (bEQ)	Basic	0920020132	Bohanon05
		3 Basic Requirements of ANSI/ASHRAE Standard 62.1-2019	Basic	0920020128	BOHANON09
		4 Better HVAC Design Using New Options in ANSI/ASHRAE Standard 62.1-2019	Advanced		
HONORARIUM	LANGUAGES	5 Commissioning, Operating and Maintaining Air-to-Air Energy Recovery Systems	Advanced	0920020139	BOHANON01
None	English	6 Concerned About Viruses at Home? What's an ASHRAE Member to Do?	Basic		
		7 How to Implement Demand Control Ventilation & Comply with ASHRAE Standards	Intermediate	0920020133	Bohanon02
		8 Perception and Acceptance of Commissioning	Basic		
		9 Retro-Commissioning for Energy Savings	Basic	0920020130	Bohanon03
		10 Using ASHRAE Standard 62.1-2016 Multiple Space Equations	Intermediate	0920020131	Bohanon06
		11 What Do You Need to Know About the ASHRAE IAQ Guide?	Basic		
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Jeff Boldt		1 Acoustic Fundamentals & Building Acoustics	Basic		
IMEG Corp. Tel: (608) 658-5750 Email: jeff.g.boldt@IMEGcorp.com		2 ASHRAE 90.1-2019	Basic		
		3 Building Moisture Management	Basic		
HONORARIUM	LANGUAGES				
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Patrick Brooks		1 Duct System Acoustics	Basic/Interm		
SMACNA Chantilly VA Tel: (513) 767-1000 Email: pbrooks@smacna.org		2 Exhaust Duct Design	Basic/Interm		
		3 Fitting Selection	Basic/Interm		
		4 Supply Duct Design	Basic/Interm		
HONORARIUM	LANGUAGES	5 System Effect	Basic/Interm		
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NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Fabio M. Clavijo		1 ASHRAE STANDARD 55	Interm/Adv		
Tecnaire Ltda.		2 ASHRAE STD 62.1	Interm/Adv		
Calle 145 15-59, Apt. 204		3 ASHRAE STD 90.1	Interm/Adv		
Bogota 110121		4 Dehumidification- Basic Concepts	Intermediate		
COLOMBIA		5 Dehumidification Process	Advanced		
Tel: 317640		6 ENERGY AUDITING PROCESS	Interm/Adv		
Email: presidencia@tecnaire.com		7 Energy in Buildings - An HVAC Perspective for 21st Century	Intermediate		
HONORARIUM	LANGUAGES	8 HVAC AND COVID-19 - SOLUTIONS AND TRENDS	Interm/Adv		
None.	English	9 HVAC DESIGN CONDITIONS FOR BUILDINGS IN TROPICAL EQUATORIAL REGION	Interm/Adv		
	Spanish	10 Indoor Air Quality and Ultra-Violate (UVC) Technology	Interm/Adv		
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Douglas C. Cochran		1 Building EQ			
4347 Palisades Lane		2 Cold climate			
Mississauga Ontario L4W 3X7		3 Equipment Selection			
Canada					
Tel: 647 2726754					
Email: dccashrae@gmail.com					
HONORARIUM	LANGUAGES				
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Drury Crawley, Ph.D.		1 Big, Smart, and Everything: Data, Technology, Buildings, Cities, and the Iota	Intermediate	0920020229	Crawley03
Bentley Systems, Inc.		2 Building Performance Simulation: What's in the Black Box	Basic/Interm/Adv	0920020230	Crawley07
4539 Albemarle Street		3 EnergyPlus, DOE's New Generation Building Energy Simulation Program	Basic/Interm/Adv	0920020231	Crawley04
Washington, DC 20016		4 Getting From AEDGs to Zero-Energy Buildings	Basic/Interm	0920020232	Crawley06
Tel: (202) 422-6464		5 Going Digital – Modeling Infrastructure Resilience for Sustainable Urban Development	Intermediate	0920020233	CRAWLEY09
Email: dbcrawley@gmail.com		6 Impacts of Climate Change & Urbanization on Future Building Performance	Basic/Interm	0920020234	Crawley05
HONORARIUM	LANGUAGES	7 Standard 189.1 - Structure, Requirements & Energy Savings	Basic/Interm/Adv	0920020235	Crawley01
\$250 donation to	English	8 Trends: Buildings, Technologies and Tools	Basic/Interm		Crawley02
ASHRAE Research					

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Chandana N. Dalugoda Chandana Dalugoda Consultants 12/9, Maharagama Road Makuluduwa Piliyandala 10300 SRI LANKA Tel: 94777785778 Email: chandana_cnd@sltnet.lk	1	Air Conditioning Systems for Tropical Humid Climates	Intermediate	0920020143 DALUGODA01
	2	Applied Psychometrics for Air Conditioning Systems	Basic	0920020134
	3	Cooling Load Calculations ASHRAE CLTD/SCL/CLF Method	Basic	0920020139
	4	HVAC Air System Designs	Intermediate	0920020141 Dalugoda01
	5	Reducing Carbon Footprint of Buildings in Developing Economies	Advanced	Dalugoda04
	6	Sustainable HVAC Designs for Green Buildings	Advanced	0920020142 Dalugoda03
HONORARIUM None	LANGUAGES English			
Julian R. de Bullet de Bullet Consulting 5993 Piney Grove Way Gainesville, VA 20155 Tel: (703) 483-0179 Email: julian@debullet.com	1	Centrifugal Chiller Fundamentals	Basic	
	2	Chiller Plant Design Fundamentals	Basic	
	3	Condenser Water Heat Recovery	Advanced	
	4	Constant Flow Chiller Plant Design	Intermediate	
	5	Green "Sustainable" HVAC Design	Intermediate	
	6	Optimal Air - A Cool Solution	Intermediate	
	7	Responsible Use of Refrigerants	Advanced	
	8	Variable Flow Chiller Plant Design	Advanced	
HONORARIUM None	LANGUAGES English			
Kyle DelPiano 115 Jersey Ridge Rd Cary NC 27518 Tel: (561) 701-7556 Email: Kyle.Delpiano@xyleminc.com	1	Modern Pump Selection for System Efficiency		
	2	Variable-Speed Pumping Control Strategies		
	3	VRF & Hydronics Systems: A Strategic Comparison		
HONORARIUM None	LANGUAGES English			
Pamela Duffy, P.E. Tel: N/A Email: pam.duffy.ashrae@gmail.com	1	Ethical Dilemmas with Social Media in HVAC	Basic	
	2	Productive from Anywhere: Practical Tips to Get Stuff Done	Basic	
	3	You, But Online: Managing Your Online Presence	Basic	
HONORARIUM \$100 to the Pam and Ted Duffy Endowment Fund	LANGUAGES English			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Thomas H. Durkin, P.E., ASHRAE Fellow 6740 Spirit Lake Dr. #101 Indianapolis IN 46220 Tel: 317-402-2292 Email: thdurkin46@gmail.com		1 2-Pipe HVAC – Myths Debunked	Intermediate		
		2 Benefits of Technology Transfer – Six Steps to Winning a Technology Award	Basic		
		3 Energy Efficiency Relative to HVAC Design and Operations	Intermediate		
		4 Geothermal Central Systems	Intermediate		
		5 Heat Recovery Applications and Economics	Intermediate		
		6 Humidity Control	Basic		
		7 Low Temperature Heating Applications and Economics	Basic		
HONORARIUM	LANGUAGES English				
Mark W. Fly, P.E., Fellow ASHRAE 7016 S Chestnut Avenue Broken Arrow Ok 74011 Tel: 918-633-7900 Email: mfly@cox.net		1 Acoustics Basics for HVAC &R Designers	Basic/Interm		
		2 Failure is the Option - How failure, perseverance, and positive attitude lead to Innovation and success	Basic		
		3 Inside the Box – Fan Characteristics and Applications	Basic/Interm		
		4 Understanding Air-Conditioning and Heat Pump Ratings	Basic		
		5 What's Loud - Understanding the Psychoacoustics of Hearing and Perception	Intermediate		
		6 What's Shakin' – Vibration Fundamentals and Human Perception	Intermediate		
HONORARIUM	LANGUAGES				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
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Victor W. Goldschmidt, Ph.D.

Dynamic Creativity Applications
P.O. Box 423
Northport, MI 49670
Tel: (231) 386-9058
Email: creating2@earthlink.net

1	Active Listening & Styles of Communication	Basic		
2	Air Conditioning: A Look Into the Past & a Guess into the Future	Basic		
3	Blessings and Curses of Computer Modeling	Basic		
4	Differing Perspectives into Global Warming	Basic		
5	Distinction between Leadership and Management and their Application	Basic		
6	Principles of Leadership & Change	Basic		
7	Principles of Leadership & Group Dynamics	Basic		
8	Problem Solving and Creativity	Basic		
9	Problem Solving in Engineering	Basic		
10	Releasing Individuals' Own Creativity	Basic		
11	Sustainability and Implications in the Context of Power Plants	Basic		
12	Thinking Like an Engineer and Societal Challenges	Basic		
13	Training Session - Leadership Principles	Basic		
14	Training Session - Problem Solving: Principles & Practices	Basic		
15	Training Session - Strategic Planning	Basic		

HONORARIUM

None

LANGUAGES

English
Spanish

Patricia T. Graef, P.E., Fellow ASHRAE

Munters Corporation
17710 Nalle Road
N. Ft. Myers, FL 33917
Tel: (239) 218-8030
Email: pat.graef@att.net

1	Business Ethics for the HVAC Professional	Basic		
2	The Logic of Dedicated Outside Air Systems and The Core Technologies That Make Them Effective	Basic/Interm		
3	The New Legionella Standard: ANSI/ASHRAE 188-2015 'Legionellosis: Risk Management for Building Water Systems'	Basic/Interm		

HONORARIUM

LANGUAGES

English

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Eckhard A. Groll, Dr. Eng. Purdue University, Ray W. Herrick Labs 177 S. Russel Street West Lafayette, IN 47907 Tel: (765) 496-2201 Email: groll@purdue.edu	1 Recent Research of Novel Compression Concepts for Heat Pumping, A/C & Refrigeration Applications	Advanced		
	2 Update on Refrigerants: Past, Present and Future	Basic		
HONORARIUM None	LANGUAGES English			
Charles E. Gulledge, III, P.E. Environmental Air Systems, LLC 5809 Henson Farm Road Summerfield NC 27358 Tel: (336) 271-6323 Email: GulledgeChuck@gmail.com	1 Design for Manufacture and Assembly (DfMA) - Modular Off-Site	Basic/Interm		
	2 Design-Build-Operate-Maintain: What Could Possibly Go Wrong?	Basic/Interm	0920020144	DBOM19
	3 Green Industrial HVAC Design	Basic/Interm	0920020148	GIHD19
	4 Integrated Building Design	Basic/Interm	0920020145	GULLEDGE01
	5 Lean Integrated Project Delivery	Basic/Interm	0920020146	LIPD19
HONORARIUM None	LANGUAGES English			
Sheila J. Hayter, P.E. NREL 1425 Normandy Rd Golden, CO 80401 Tel: (303) 384-7519 Email: sheila.hayter@nrel.gov	1 Integrating Renewable Energy Systems into Buildings	Basic/Interm		
HONORARIUM None	LANGUAGES English			
Jan L. M. Hensen Robijnring 30, 5629GK Eindhoven, Netherlands Tel: +31 6532 30 382 Email: j.hensen@tue.nl	1 Building Performance Simulation - challenges and opportunities			
	2 Building Performance Simulation - mind the gap			
HONORARIUM None	LANGUAGES None			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Jorge E. Hernandez, P.E.		1 Basic Air Conditioning Concepts for beginning Engineers and Architects	Basic		
Regional Managers & Associates		2 Basic Concepts Of Evaporative Cooling	Interm/Adv		
12609 Oulton Circle		3 Basic Psychrometrics for Industrial Refrigeration Professionals	Basic		
Orlando, FL 32832		4 Critical Applications	Basic/Interm/Adv		
Tel: (305) 505-2906		5 Displacement Ventilation	Basic/Interm/Adv		
Email: angelica@regionalmanagers.com		6 Latest Developments in the HVAC world	Basic/Interm/Adv		
HONORARIUM	LANGUAGES	7 Psychrometrics of Displacement Ventilation	Advanced		
None	English				
	Spanish				
	Portuguese				
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Daniel Int-Hout, III		1 Connections	Basic		
Krueger		2 Methods of Effective Room Air Distribution	Intermediate		
1401 North Plano Road		3 Selecting VAV Products for Acceptable Environments	Intermediate		
Richardson, TX 75081		4 The Basics of Air Distribution	Basic/Interm		
Tel: (972) 497-0418		5 You Can't Afford Discomfort	Intermediate		
Email: daninhout@aol.com					
HONORARIUM	LANGUAGES				
None	English				
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Hank Jackson, P.E.		1 Beam Me Up Scottie! Transport Energy: Motors, Fans, & Pumps	Interm/Adv		
Sales O'Brien		2 Commissioning Critical Environment Facilities – Lessons Learned	Basic		
30 Morning Glory Lane		3 Green Buildings: Help or Hype?	Basic		
Weaverville, NC 28787		4 Introduction to Geothermal Heat Pump Systems	Basic		
Tel: (828) 691-0785		5 Just Do It! How to Get Started With an Energy Efficiency Survey	Basic/Interm		
Email: hjackson@juno.com		6 Overcoming Objections to Energy Efficiency Investments	Basic/Interm		
HONORARIUM	LANGUAGES	7 Transformers: Turning Existing Buildings Green	Basic		
None	English				

NAME		TOPICS		TOPIC CLASS	GBCI	AIA
Ronald E. Jarnagin 355 Falconridge Street Richland, WA 99352 Tel: (509) 430-4113 Email: ron.jarnagin@pnl.gov		1	Advanced Energy Design Guides – Going Beyond Minimum Standards	Basic		
		2	ASHRAE Headquarters Renovation – What Happens When Leaders try to do it Right	Basic		
		3	ASHRAE’s Building Energy Labeling Program, the Building Energy Quotient (bEQ)	Basic		
		4	Standard 90.1 – Past, Present and Future	Basic		
		5	Sustaining ASHRAE Through Leadership	Basic		
HONORARIUM	LANGUAGES					
None	English					
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Julia A. Keen, P.E., Ph.D. Kansas State University 2062 Seaton Hall 920 N 17th St Department of Architectural Engineering Manhattan, KS 66506 Tel: (319) 230-8522 Email: jkeen@ksu.edu		1	ASHRAE bEQ – Building Performance vs Building Certification & Rating	Basic		
		2	ASHRAE's Impact in the Industry - Past, Present, and Future	Basic		
		3	Distinctly Different – Skillsets for Women to Succeed in STEM Fields	Basic		
		4	Ethical Decision Making – An Exercise in Application	Basic		
		5	Millenials – How to Manage the next Generation	Basic		
		6	Targeting Success – Improve Employee Satisfaction, Retention, and Profit	Basic		0920020149 TSIES19
HONORARIUM	LANGUAGES					
None	English					
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Prof Dr. Adel Khalil Cairo University, Faculty Of Engineering Tel: Email: adelkhk@yahoo.com		1	Applications of Cryogenic Systems			
		2	Integration of Thermal and Electrical Energy Storage on Demand side for Energy Efficiency			
		3	Prospects of Solar Cooling			
HONORARIUM	LANGUAGES					

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Kishor Khankari, Ph.D.		1	Airflow Management Best Practices for Data Centers	Basic/Interm/Adv	0920014296 KHANKARI04
AnSight LLC		2	Airflow Management for Cleanroom Facilities	Basic/Interm	0920020151 AMCF19
3814 Mill Pond Lane		3	Airflow Management for Healthcare Facilities	Basic/Interm/Adv	0920020151 AMHCF19
Ann Arbor, MI 48108		4	Airflow Management for Laboratory Facilities	Intermediate	0920014291 KHANKARI06
Tel: (734) 327-4079		5	Applications of Computational Fluid Dynamics (CFD) for Built Environment	Basic/Interm/Adv	0920014282 KHANKARI01
Email: kishork@ansight.com		6	Basics of Air Change Rates (ACH): Facts versus Fiction	Basic/Interm	0920020150 BACR19
HONORARIUM	LANGUAGES	7	Design and Analysis of Natural Ventilation Systems	Basic/Interm/Adv	0920014283 KHANKARI02
None	English	8	Stratified Air Ventilation Systems	Basic/Interm/Adv	0920014292 KHANKARI03
	Hindi				
	Marathi				
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M. Dennis Knight, P.E.		1	ASHRAE Building Energy Quotient (bEQ)	Basic	
Whole Building Systems, LLC		2	ASHRAE Standard 62.1 – the IAQ Procedure and LEED	Basic/Interm	
P.O. Box 1845		3	Building Information Modeling for the Mechanical Disciplines	Basic	
Mt. Pleasant SC 29464		4	Building Performance Analysis for Building Performance Rating Systems	Intermediate	0920004628 KNIGHT03
Tel: (843) 437-3647		5	Conducting A Commissioning Kick-Off Meeting	Intermediate	0920017332
Email: dknight@wholebuildingsystems.com		6	Developing an Integrated Personal Management System to help Get Things Done	Basic	0920004588 KNIGHT02
HONORARIUM	LANGUAGES	7	Health and Wellness In The Built Environment – An Introduction	Basic	0920017333
None	English	8	Integrated Building Design and Building Information Modeling	Intermediate	0920004589 KNIGHT01
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Stephan Kujak		1	Flammable Refrigerants for Dummies	Intermediate	
Trane Technologies		2	Is Residential Rooftop Photovoltaic Solar Power a Sustainable Solution?	Intermediate	
303 S Marina Drive		3	Review of Air Treatment or Cleaning Technologies	Intermediate	
Brownsville MN 55919		4	The Future of Refrigerants	Basic	
Tel: (608) 386-8067					
Email: skujak@tranetechnologies.com					
HONORARIUM	LANGUAGES				
None	English				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Thomas M. Lawrence, Ph.D., P.E. University of Georgia Driftmier Engineering Center Annex Room 106 Athens, GA 30602 Tel: (706) 542-4322 Email: lawrence@engr.uga.edu		1 ASHRAE Standard 189.1 and the International Green Construction Code	Intermediate	0920017334	LAWRENCE02
		2 CO2 Monitoring for Outdoor Airflow and Demand-Controlled Ventilation	Intermediate		
		3 High Performance Building Design – What the Future holds for the Direction for our Industry	Intermediate		
		4 Resilience in Building Design to Support a Resilient Society	Intermediate	0920017336	Lawrence05
		5 The 'Green Awakening': The Coming Carbon Economy & Determining Your Building's CO2 Footprint	Basic/Interm	0920020162	TGAW19
		6 The Integration of a Smart Grid and Smart Buildings	Intermediate		
		7 Thermal Comfort as Related to Energy Consumption: What is the Balance?	Basic	0920014298	LAWRENCE05
		8 What ASHRAE is Doing to Become a Global Society	Basic		
HONORARIUM None	LANGUAGES English				
Karine Leblanc US Air Conditionings Distributors 16900 Chestnut St City of Industry, CA 91748 Tel: (310) 420-7066 Email: karine@leblancusa.com		1 10 leadership lessons to help you be that leader that everyone would follow for free			
		2 Everyone Communicates, Few connect	Basic		
		3 How to use Emotional Intelligence to become a better person professionally and personally	Basic		
		4 It's not too late; learn how to live to your full potential and watch the results!			
		5 Selling is like dating. Learn how to close without selling			
		6 Technical skills will get you the job, human skills will get more clients, increase your productivity and happiness			
HONORARIUM None	LANGUAGES English French				
Luke C.H. Leung, P.E. Skidmore, Owings, & Merrill 224 S. Michigan Avenue 10th Floor Chicago, IL 60604 Tel: (312) 360-4121 Email: luke.leung@som.com		1 21st Century Tall Building Design	Interm/Adv	0920014332	LEUNG01
		2 Healthy Built Environment – Pandemic and Beyond	Basic/Interm/Adv		LEUNG02
		3 The New Carbon Standards: Net Zero Operational, Embodied, Whole Life and Upfront Energy (Carbon)	Interm/Adv		
		4 urj Khalifa – The Tallest Building in the World	Interm/Adv		
HONORARIUM None	LANGUAGES English Chinese				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Andrey Livchak, Ph.D. Halton Group Americas 103 Industrial Drive Scottsville, KY 42164 Tel: (270) 237-5600 Email: andrey.livchak@halton.com		1 Active and Passive Beams	Intermediate	0920017337	Livchak02
		2 Emission Control for Commercial Kitchen Ventilation Systems			
		3 Energy Efficient Solutions for Commercial Kitchen Ventilation	Intermediate	0920014335	LIVCHAK01
		4 Fundamentals of Thermal Displacement Ventilation	Intermediate	0920017338	LIVCHAK03
		5 Restaurant ventilation design reducing spread of airborne contaminants			
HONORARIUM	LANGUAGES				
None	English				
R. Christopher Mathis MC2 Mathis Consulting Company P.O. Box 18055 Asheville, NC 28814 Tel: (828) 678-3500 Email: chris@mathisconsulting.com		1 A Window on the Future: The Role of Fenestration in Building Performance	Intermediate	0920017340	MATHIS02
		2 ASHRAE Is In The House: Past, Present and Future Initiatives in Residential Building Performance	Basic		
		3 Bringing ASHRAE 90.1 to the World: The Addition of Climate Zone 0	Basic		
		4 Building Science Lessons from the Honey Bee	Basic		
		5 Energy Efficiency in Commercial Buildings	Basic		
		6 Energy Efficiency in Residential Buildings	Basic		
		7 How Long Will it Last? Addressing the Challenge of Sustainability	Basic		
		8 Primary Energy in Commercial Buildings	Basic		
		9 Why Buildings Matter and the Role of ASHRAE 90.1	Basic		
HONORARIUM	LANGUAGES				
\$250 Donation to ASHRAE	English				
Erin McConahey 12777 West Jefferson Boulevard Los Angeles CA 90066 Tel: 310-578-4400 Email: Erin.McConahey@arup.com		1 An Inclusion Mindset	Basic		
		2 Cutting Carbon and Circular Diets: Total Net Zero Carbon Consciousness			
		3 Holistic Thinking for Multidisciplinary Design Solutions	Basic		
		4 Introduction to the UN Sustainable Development Goals for Mechanical Engineers			
		5 Material Concerns in HVAC Equipment			
		6 Principles of Museum Environmental Design	Basic		
		7 The Carbon Context for Mechanical Engineers			
		8 The Feasibility of Natural Ventilation	Basic/Intern		
HONORARIUM	LANGUAGES				
	English				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Frank Mills 7 Fylde Ave Leyland, Lancashire PR26 6RP NITED KINGDOM Tel: +44 1772 424124 Email: famills@low-carbondesign.com		1 ASHRAE Cold Climate Design Guide	Basic		
		2 Design of Atrium Buildings	Intermediate		
		3 Energy Savings in Pubs, Restaurants, and Hotels	Intermediate		
		4 Hot Climate Design Guide	Basic		
		5 Natural Ventilation	Basic		
		6 Net Zero Energy Buildings	Intermediate		
		7 Net Zero Hospitals	Intermediate		
HONORARIUM	LANGUAGES				
	English				
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Brian P. Monk, P.E. United Technologies Corporation 629 McCaffrey Montreal QC H4T 1N3 CANADA Tel: (514) 515-4822 Email: brian.monk@carrier.utc.com		1 Airborne Contaminant Control in Healthcare Environments	Intermediate		
		2 Current Trends in Design & Installation of Filtration Systems For Building HVAC Security	Intermediate		
		3 Dehumidification and Air Quality in Indoor Pool Environments	Basic/Interm		
		4 Design Concepts in DOAS: Balancing IAQ and Energy	Intermediate		
		5 Emergency Air Filtration and Air Pollution Control for Water Treatment Plants	Intermediate		
		6 Environmental and Emissions Filtration in Waste Water Treatment Facilities	Basic/Interm		
		7 Filtration for High Performing Buildings	Basic/Interm		
		8 Gas Phase Filtration for the Elimination of Corrosive, Odorous and Toxic Gases	Intermediate		
		9 IAQ and Cognitive Functioning in High Performing Buildings	Intermediate	0920017341	MONK04
		10 IAQ in Airports	Basic/Interm		
		11 The Use of Gas-Phase Air Filtration and ANSI/ ASHRAE Standard 62.1	Basic/Interm		
HONORARIUM	LANGUAGES				
None	English French				
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Ross Montgomery, P.E. QST 5309 Deer Forest Place Parrish, FL 34219 Tel: (941) 737-1401 Email: rossmont@aol.com		1 ASHRAE "Building EQ" Building Labeling Program and Energy related programs:	Intermediate	0920014510	MONTGOMERY02
		2 Building Commissioning in the Built Environment - Principles, Process, Procedures, and the Future	Intermediate	0920002610	MONTGOMERY01
		3 Energy Audits: The basics of setting up and executing energy audits in commercial buildings	Intermediate	0920020164	EAEHPD19
		4 Testing Adjusting and Balancing (TAB) – HVAC	Intermediate	0920020165	Montgomery07
HONORARIUM	LANGUAGES				
None	English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Christopher O. Muller Purafil, Inc. 2654 Weaver Way Doraville, GA 30340 Tel: (770) 662-8545, X349 Email: cmuller@purafil.com	1 Achieving your Indoor Air Quality Goals: Which Filtration System Works Best?	Basic		
	2 Air Quality Guidelines for Museums, Archives, and Libraries	Basic		
	3 Air Quality in Data Centers: People vs. the Machines	Basic/Interm		
	4 An Evaluation of Filtration and Air Cleaning Equipment Performance in Existing Installations with Regard to Acceptable IAQ Attainment	Intermediate		
	5 Application of Gas-Phase Air Filtration in Pharmaceutical, Biotechnology, and Life Science Manufacturing	Basic		
	6 Applying the IAQ Procedure of ASHRAE 62.1-2016 at K-12 Educational Facilities	Basic/Interm		
	7 ASHRAE Standard 62.1 and LEED: Using Enhanced Air Cleaning to Integrate IAQ and Energy Conservation	Advanced		MULLER01
	8 Beyond Ozone: Cleaning Outdoor Air for IAQ	Intermediate		
	9 Clearing the Air: Advances in Gas-Phase Air Filtration Technology, Standards, and Applications	Basic		
	10 Demonstration of ASHRAE IAQ-Procedure Effectiveness for Improved IAQ and Greater Energy Efficiency	Basic/Interm		
	11 Does Control of Indoor CO2 Levels Negatively Impact IAQ?	Intermediate		
	12 Improving Building IAQ Reduces HVAC Energy Cost	Basic		
	13 Moving Closer to Net Zero Buildings with the IAQ Procedure of ASHRAE Standard 62.1-2016	Basic/Interm		
	14 Proper Design and Use of Gas-phase Air Filtration System for the Control of Environmental Tobacco Smoke	Intermediate		
	15 Protecting Against Chemical Agents of War: Applying Internal Filtration	Intermediate		
	16 Specialized Filtration Required for Museums	Intermediate		
	17 Survival in the Digital Age: Reliability Concerns for Data Center IT Equipment and Effects on Mission Critical Facilities and Operations	Basic/Interm		
	18 The Control of Nitrogen Oxides from Motor Vehicle Exhaust for Improved Air Quality	Intermediate		
	19 The Role of Filtration and Air Conditioning in Sustaining Acceptable IAQ through Ventilation Replacement	Basic/Interm		
	20 There's No Such Thing as a Free Ride: The Real Costs of Free Cooling	Intermediate		

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Daniel H. Nall, P.E. 80 Random Road Princeton, NJ 08540 Tel: 917.273.0264 Email: dannall@mindspring.com		1 Chilled Water Low Delta-T Syndrome		0920020168	CWLDT19
		2 Chiller Plant Low Delta-T Syndrome: What It Is and How to Avoid It	Advanced		
		3 Close Approach and High Delta-T: Powerful Strategies for Energy Efficiency	Advanced		
		4 Energy Efficient HVAC Strategies	Intermediate	0920014340	EEHS2017
		5 Energy Policy: An Engineering Perspective	Advanced	0920017350	EPEP2018
		6 Free and Passive Cooling	Basic	CourseBP	FPCPD2018
		7 HVAC for "Passive House" Buildings	Basic	0920020166	HVPHB19
		8 Hydronic System Design for Condensing Boilers	Advanced	0920020167	HDCB19
		9 Innovative Systems for Energy and Water Conservation: Four Corporate Headquarters	Intermediate	0920017352	ISEWC2018
		10 LEED v4 Energy and Atmosphere Credits	Basic	0920017353	L4EAC2018
		11 Making Buildings Resilient to Natural Disasters and Acts of Terror	Basic	0920017354	MBR2018
		12 Natural Ventilation Design for Commercial Buildings using Computational Fluid Dynamics	Intermediate	0920017355	NVCFD2018
		13 Sustainable Infrastructure for Green Communities	Interm/Adv	0920017356	SIGC2018
		14 The 2016 New York City Energy Conservation Code	Basic	0920017357	N16YECC
		15 The Advanced Energy Design Guide for Zero Energy K12 Schools	Intermediate	0920020171	AEDGK1219
		16 The Advanced Energy Design Guide for Zero Energy Office Buildings	Advanced	0920020169	AEDGZB19
		17 The Advanced Energy Design Guides	Basic	0920017358	TAEDG2018
		18 The Building Envelope	Intermediate	0920017359	BENV2018
		19 The Impact of Outdoor Air Ventilation	Intermediate	0920014342	IOAV2017
		20 Thermally Active Structures for Green Buildings	Interm/Adv	0920017409	TASGB2018
		21 Underfloor Air Distribution	Intermediate	0920017411	UAD2018
		22 Water Conservation in HVAC Design	Intermediate	0920017412	WCE2018
HONORARIUM	LANGUAGES				
None	English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
James L. Newman Newman Consulting Group, LLC 31134 Harmony Lane Farmington Hills, MI 48331-3136 Tel: (248) 626-4910 Email: jimn@newmanconsultinggroup.us	1	Energy and Sustainability in Existing Buildings - Being "Green" and Saving Green with Energy Audits			
	2	Energy Auditing, Commissioning, IAQ, bEQ, Sustainability and Other Good Stuff (2 hours)			
	3	Green & Sustainable Practices & ASHRAE Standards – How to Design a Healthier, More Profitable Building w/Better Coordination with Owners and their Teams	Intermediate	0920020172	GSPA19
	4	How ASHRAE's Building Energy Quotient (bEQ) Label Drives High Performance and Energy Savings in Facilities	Intermediate		
	5	Indoor Air Quality, Productivity, Health, Energy Conservation and Legal Liability: How to Avoid Problems, OR How Much Does a Lawsuit Cost Compared to Good IAQ	Intermediate		
	6	Transforming an Existing Building Into a High-Performing Facility	Intermediate	0920020174	TEBHP19
HONORARIUM \$125 Donation to ASHRAE	LANGUAGES English				
Bjarne W. Olesen, Ph.D. ICIEE-DTU Department of Civil Engineering Nils Koppels Alle DTU, Building 402 Kongens, Lyngby DK-2800 DENMARK Tel: (454) 525-4117 Email: bwo@byg.dtu.dk	1	Application of Radiant Heating and Cooling Systems in Buildings	Basic/Interm	0920017416	Olesen02
	2	Are women feeling colder than men in air-conditioning buildings	Basic		
	3	ASHRAE a global society for building technology: Past-Present-Future	Basic		
	4	Can we take into account diversity when specifying requirements for the indoor environment?	Basic		
	5	Clean Cooling of Buildings	Basic		
	6	How to meet the ventilation required in international standard in an energy efficient way	Basic/Interm		
	7	Indoor Environment - Health, Comfort & Productivity	Basic/Interm	0920017414	Olesen01
	8	International Standards for the Indoor Environment - Where are we and do they apply worldwide?	Basic/Interm	0920017417	
	9	The European Approach to Decrease Energy Consumption in Buildings	Basic		
	10	The influence of occupant behaviour on indoor environment and energy use in buildings	Basic/Interm	0920017415	
HONORARIUM	LANGUAGES English German Danish				
Thomas H. Phoenix, P.E., FASHRAE Clark Patterson Lee 328 E. Market St Suite 200 Greensboro, NC 27401 Tel: 336.232.5755 Email: tphoenix@clarkpatterson.com	1	Advanced Energy Design Guide for K-12 School Buildings: Achieving Zero Energy	Intermediate		
	2	Improving Building Performance	Intermediate		
	3	Passion and Performance	Basic		
	4	The Value of ASHRAE's bEQ	Intermediate		
HONORARIUM	LANGUAGES English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Rajan Rawal CEPT University K.L.Campus, Navarangpura, Ahmedabad 380 009 India Tel: +91 79 6831 0000 Email: rajanrawal@cept.ac.in	1 Adaptive Thermal Comfort - Theory and Practices	Basic/Interm		
	2 Net-Zero Energy Buildings - Nuances of Design, Construction, and Operation	Basic/Interm		
	3 Personal Thermal Comfort Systems - Concepts and Approaches	Basic/Interm		
HONORARIUM	LANGUAGES			
Douglas T. Reindl, Ph.D., P.E. University of Wisconsin-Madison 432 North Lake Street Madison, WI 53706 Tel: (608) 262-6381 Email: dreindl@wisc.edu	1 An Introduction to Ammonia Refrigeration Systems	Basic	0920014344	REINDL01
	2 ASHRAE Standard 15- A Review and Update	Basic/Interm	0920014345	REINDL02
	3 Powering with Renewable Resources: Thermal Energy Storage	Basic/Interm		
	4 Refrigerant Safety - Inside and Outside the Machinery Room	Basic/Interm		
	5 Understanding Safety Relief Systems	Intermediate		
HONORARIUM	LANGUAGES			
None	English			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Terry L. Rodgers 599 Union St S. Concord NC 28015 Tel: 704-942-1185 Email: trodgers@primaryintegration.com		1 ASHRAE Standards Development Process	Basic		
		2 Characteristics of Cultures of Excellence	Basic		
		3 Commissioning Data Centers	Basic		
		4 Commissioning of Facilities Management Processes	Intermediate		
		5 Commissioning Team Roles & Responsibilities	Basic	0920020173	CTRR19
		6 Design Reviews Save Money and Improve Quality	Basic		
		7 Designing for the Worst Case	Intermediate		
		8 Differentiating Critical vs Non-Critical	Basic		
		9 Document Control and Retention Programs	Basic		
		10 Effective Communication	Basic		
		11 Embedding O&M Best Practices in the Owners Project Requirements	Basic		
		12 Emergency Preparedness for Critical Facilities	Intermediate		
		13 Enterprise Migration to Colocation Data Centers	Intermediate		
		14 Equipment Startup and Checkout	Basic		
		15 Existing Building Commissioning	Intermediate		
		16 Facilities Management Staffing & Training	Basic		
		17 Implementing Computerized Maintenance Management Systems (CMMS)	Basic		
		18 Integrated Training Program Development	Basic		
		19 Integrating Facility Staff and Building Management Systems (BMS)	Intermediate		
		20 Integrating IT and Facilities Management Through Work-Flow Processes	Intermediate		
		21 Integrity (How to Respond When Things Go Wrong)	Basic		
		22 Managing Building Monitoring & Control Systems	Intermediate		
		23 Managing Critical Operations Via Facility Management Firms	Basic		
		24 Operating & Maintenance Costs and Determining Equipment Lifespan	Intermediate		
		25 Optimizing Staff Resources	Intermediate		
		26 Performance Based Training Programs	Basic		
		27 Reliability vs Complexity	Basic		
		28 Service Level Agreements	Basic		
HONORARIUM	LANGUAGES English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
	29 Site Assessments	Basic		
	30 Site-Specific Industry Best Practices	Basic		
	31 Stranding and Recovering Capacity (and Assets)	Intermediate		
	32 The Inefficient Pursuit of Energy Efficiency	Basic		
	33 The Value of Corporate Standards	Basic		
	34 The Value of Factory Witness Testing	Basic		
	35 The Value of Good Specifications	Basic		
	36 The Value of Institutional Knowledge	Basic		
	37 True Innovation - Solid State Switching	Intermediate		
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Richard H. Rooley Project Management Partnership Greenways Church Lane Stoke Poges, Bucks SL2 4PB UNITED KINGDOM Tel: (44) 1753-648040 Email: richard@rooley.com	1 Leadership and Management for Engineers – How to achieve profit – for whom?	Basic		
	2 Quality of the Internal Workplace and Worker Productivity: A Look beyond Engineering	Basic		
	3 RCM (Reliability Centred Maintenance) in Maintenance and Design	Intermediate		
	4 Sick Building Syndrome – Reality or Myth	Basic		
	5 Sublime chaos in construction: Each profession and trade as a strange and dominant attractor	Basic		
	6 Worst Practise in Design and Operation	Basic		
	HONORARIUM LANGUAGES None English			
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David N. Schurk 12808 Queensbury Ln E533 Houston TX 77024 Tel: 920-530-7677 Email: david.schurk@globalplasmasolutions.com	1 Air Conditioning for the Environment of Care			
	2 Air-Cooled Chillers, Efficiency, Affordability and Life Cycle Cost Advantages for Healthcare			
	3 Air-Handling Systems for Hospitals			
	4 Curbing Hospital Energy Costs, Heat-Recovery Chillers for Healthcare			
	5 Keeping Doc's Cool, Dry & Happy in the Operating Room...Can it be Accomplished?			
	6 Understanding the ASHRAE Advanced Energy Design Guide for Large Hospitals, Achieving 50% Energy-Savings			
HONORARIUM LANGUAGES				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA	
Michael (Mick) Schwedler Trane 3600 Pammel Creek Rd La Crosse WI 54601-7599 Tel: 608-787-4339 Email: mschwedler@trane.com		1 Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy	Basic			
		2 Advanced Energy Design Guide Overview	Basic			
		3 Building Decarbonization	Basic/Interm	920024723	0920020207	
		4 Chilled Water System Decisions	Intermediate	0920020201	CWSD19	
	HONORARIUM	LANGUAGES	5 Chilled Water Systems for YEA Members Part 1	Basic	0920020202	CWSDYEA1
		English	6 Chilled Water Systems for YEA Members Part 2	Basic	0920020203	CWSDYEA2
			7 Chilled Water Systems for YEA Members: What the Baby Boomers and Gen Xers Have Done WRONG!!!	Basic		
			8 Ethics Case Studies	Basic		
			9 High Performance Chilled Water Systems	Intermediate	0920020204	HPCWS19
			10 The Advanced Energy Design Guide for Hospitals – Reducing energy consumption by 50%	Intermediate	0920020205	AEDGH5019
			11 Upgrading Existing Chilled Water Systems	Intermediate	0920020206	UECWS19
			12 Variable Primary Flow (VPF) Systems	Intermediate	920024719	0920020208
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Chandra Sekhar, Ph.D. National University of Singapore Dept. of Building 4 Architecture Drive Singapore, 117566 SINGAPORE Tel: (65) 65163479 Email: bdgscs@nus.edu.sg		1 Advanced room air distribution strategies for effective airborne infection control	Basic/Interm/Adv			
		2 An overview of ASHRAE Standard 62.1	Basic/Interm			
		3 Bedroom Ventilation – What do we know and what are the current standards telling us?	Basic/Interm			
		4 Emerging HVAC technologies for energy efficient healthy buildings in hot and humid climates	Basic/Interm/Adv			
		5 Indoor Air Quality Audit in Buildings – System Zone Concept	Basic/Interm/Adv			
	HONORARIUM	LANGUAGES	6 Oversized air-conditioning systems and overcooled buildings in hot and humid climates	Basic/Interm		
	None	English	7 Sustainability and Resiliency - A paradigm shift in HVAC system design and operation during a pandemic and beyond	Basic/Interm/Adv		

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
Max H. Sherman, Ph.D. Lawrence Berkeley Laboratory 1 Cyclotron Rd MS 90-3074 Berkeley, CA 94720 Tel: (925) 917-0267 Email: mhsherman@lbl.gov	1	ASHRAE Is In The House: Past, Present and Future Initiatives in Residential Building Performance			
	2	ASHRAE's Residential Ventilation Standards			
	3	Dr. Duct Tape			
	4	Smart Ventilation and IAQ Metrics			
	5	Ventilation: The Once and Future King			
HONORARIUM None	LANGUAGES English				
Rajinder Singh PUSA INSTITUTE OF TECHNOLOGY 24/24-B Tilak Nagar New Delhi 110018 India Tel: 9868246628 Email: rajindersingh1102@gmail.com	1	Applied Psychrometry for Air - Conditioning Engineers			
	2	Best Practices for Operation and Preventive Maintenance of HVAC Systems in Green Buildings			
	3	Use of Green Secondary Refrigerant (Ice Slurry) for Refrigeration and Air-Conditioning			
	4	Vapour Absorption Refrigeration System			
HONORARIUM None	LANGUAGES English				
Henry H. Slack, P.E. 139 Erie Ave. Decatur, GA 30030 Tel: (404) 217-4229 Email: henry.h.slack@gmail.com	1	After the Mold Rush: Solving Mold Problems			
	2	Climate Change: How ASHRAE Members Can Prepare			
	3	Fixing the Great Indoors: HVAC and Indoor Air Quality			
	4	How Can Climate Change Impact Indoor Air Health?			
	5	Indoor Air Disasters: Stories of Recovery from Katrina, Hurricanes, Wildfires, and Other Disasters		0920020208	IAD19
	6	Ventilation Research: Is More Air Better for Us			
HONORARIUM None	LANGUAGES English				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Wei Sun, P.E. Engsysco, Inc. 1665 Highland Drive Ann Arbor, MI 48108 Tel: (734) 274-4022 Email: wsun@engsysco.com		1 Cleanrooms and HVAC Systems Design Fundamentals	Intermediate		
		2 Design of Pressurization Systems – Technologies in Room/Suite Pressure Control, Performance Evaluation and Design Practices	Intermediate		
		3 Fan Energy Conservation in Cleanrooms – Airflow Modeling and Demand Flow Control	Intermediate		
		4 HVAC Systems Design for Airborne Infection Control Spaces in Healthcare Facilities	Intermediate		
		5 Laboratories and HVAC Systems Design Fundamentals	Intermediate		
		6 Primary, Secondary & Tertiary Air Handling Systems Design Strategies for Controlled Environments	Intermediate		
HONORARIUM	LANGUAGES				
None	English				
E. Mitchell Swann, P.E. MDC Systems, LLC 1800 E. Lancaster Ave. Paoli, PA 19301 Tel: (610) 640-9600, ext.19 Email: swann@mdcsystems.com		1 “Can’t We All Just Get Along?” – Keeping Your Eye on the Prize Despite Getting Poked in it (Alternative Dispute Resolution in Construction)	Intermediate		
		2 ...and you may ask yourself “How did I get here?” Forensic Engineering and Forensic Project Management	Intermediate		
		3 Are We There Yet? What is "Substantial Completion" ? (...and how do we know when we get there?)	Basic/Interm		
		4 Connecting Green Building Outcomes to Enterprise Sustainability Programs	Advanced		
		5 Design – Build and the Standard of Care: Under which Standard? Under whose Care?	Intermediate		
		6 Design Build – Executing the Project (based on the ASHRAE Design Build Survival Guide)	Basic/Interm		
		7 Design Build for Green Buildings – Integrated Delivery of an Integrated Idea	Basic/Interm		
		8 Don't let your BIM go "BOOM"! Dealing with the potential liability issues of BIM	Basic/Interm		
		9 Green Design and Sustainability – Un-definable Success in a Defined World	Intermediate		
		10 Jedi Mind Tricks for IPD (First, you've got to want to...)	Basic/Interm		
HONORARIUM	LANGUAGES				
Negotiable	English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
Om Taneja, FASHRAE, Ph.D., P.E. Associated Consulting Company 118 Henderson Rd Kendall Park, NJ 08824 Tel: (908) 604-8689 Email: taneja.om@gmail.com	1	Facing the Realities and Challenges of Urbanization, Smart Cities, Smart Infrastructure & Smart Buildings for Greater Sustainability & Resilience			
	2	Leveraging Innovative Technologies for Life Cycle Operational Efficiency and Improved Indoor Environment Quality			
	3	An Approach to Facilities Operational Improvements: Train O&M Staff and Provide Tools to Measure, Track & Adjust Equipment and Systems			
	4	An approach to Improved Indoor Air Quality and Operations of Buildings: Adopt Smart Buildings Technologies and Train Operations and Maintenance Staff for Required Competencies			
	5	Analytical, Performance & Prescriptive codes & Measure for Life Cycle assessment of Sustainability & Energy Efficiency Projects		0920020209	MASEP19
	6	Analytical, Performance & Prescriptive Measure for Life Cycle assessment of Facilities Projects			
	7	Bridging the Knowledge, Technology and personnel Gap for High Performance Buildings from Concept through Operations			
	8	Framework For Structured Transformation to Future of Facilities to Foster Innovation , Operational Excellence & Resilience -Bridging The Gap In Performance From Concept Though Operations			
	9	Geo-collaborative Infrastructure & associated skills development for smart cities Utilities, Mechanical and Electrical Systems			
	10	Global Trends in Collaborative Infrastructure Development to Foster Sustainable Built Environment			
	11	Improved Operations & Maintenance Measures for better Energy Performance and Environmental impact of HVAC & chiller plants			
	12	Improved Operations & Maintenance Measures for better Energy Performance and Environmental impact of HVAC & chiller plants			
	13	Myth or Reality Series on Astuteness in Technology Adoption, Building Automation System, Performance Contracting, Energy Efficiency Based Commissioning, Operations & Maintenance			
	14	Operations & Maintenance Measures for Improving Performance of HVAC Systems & chiller plants			
	15	Sustainability & Energy Efficiency - Bridging The Gap In Performance From Concept Though Operations			
	16	Sustainability & Energy Efficiency - Bridging The Gap In Performance From Concept Though Operations			
	17	Technologies for maintaining Safe, Healthy, Resilient and Comfortable occupancy in buildings' before, during and after potential viral, bacterial and environmental & Collateral incidents			

HONORARIUM

None

LANGUAGES

English
Arabic

NAME		TOPICS		TOPIC CLASS	GBCI	AIA
Stephanie Taylor, M.D., M. Arch. Taylor Healthcare Commissioning, Inc PO Box 593 Stowe VT 05672-0593 Tel: (860) 501-8950 Email: MD@taylorcx.com		1	Engineers are the Physicians of the Future	Basic		
		2	Health as a Building Performance Metric	Basic		
		3	Healthcare-associated Infections and Hospital Indoor Air Quality	Basic		
		4	Learn to love Microbes	Basic		
		5	The Impact of the Built Environment on Cognitive Functioning and Worker Productivity	Basic		
HONORARIUM	LANGUAGES					
None	English					
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Paul Torcellini NREL(National Renewable Energy Laboratory) 15013 Denver West Parkway Golden CO 80401 Tel: +1 (303) 384-7528 Email: Paul.Torcellini@nrel.gov		1	Creating a World of Zero Energy Buildings	Basic	0920020211	CWZEB1
		2	On-site Renewable Energy: What to know and what are the myths?	Basic		
		3	Performance Based Procurement for Outstanding Energy Performance	Basic		
		4	The Advanced Energy Design Guide for Zero Energy Buildings	Basic		
HONORARIUM	LANGUAGES					
None	English					
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Terry E. Townsend, P.E. Townsend Engineering, Inc. P.O. Box 23526 Chattanooga, TN 37422 Tel: (423) 855-1184 Email: terry@townsend-engineering.com		1	Advanced Energy Conservation & IEQ Design Guidance & Applications	Basic		
		2	ASHRAE: Leading the World to an Independent & Sustainable Future	Basic		
		3	Building Performance – Tools, Metrics & Protocols for Global Applications	Basic		
		4	Energy Goals and Integrated Design	Basic		
		5	Solutions for Existing Buildings having Performance + IEQ Problems	Basic		
		6	Steps to Making Existing Commercial Buildings More Efficient, Healthy and Comfortable	Basic	0920017431	TOWNSEND01
		7	Sustainable Applications That Work	Basic		
		8	What's Hot in Sustainability?	Basic		
HONORARIUM	LANGUAGES					
None	English					

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Samir R. Traboulsi City Stadium Blvd. SALAME CENTER P.O.BOX 15 5400 Beirut LEBANON Tel: 00961 3 382960 Email: traboulsi.samir@gmail.com	1 Ethics & the Built Environment	Basic	0920020217	EBE19
	2 Net Zero Energy Buildings in 2050, Way to Go	Basic		
	3 Net Zero Energy: Part 1	Basic		NZEP1
	4 Net Zero Energy: Part 2	Basic		NZEP2
	5 Net Zero Energy: Part 3	Basic		NZEP3
HONORARIUM	LANGUAGES			
Paolo Tronville, Ph.D. Corso Mediterraneo 140 Torino, TO 10129 ITALY Tel: +390110904477 Email: paolo.tronville@polito.it	1 HVAC Air Filter System Design Tools: What is Available and How to Use Them	Intermediate		
	2 Introduction to Particulate Matter (PM) Measurement for General Ventilation Applications	Intermediate		
	3 Standardization Activity in the Field of Air Cleaning Equipment	Intermediate		
	4 Understanding Air Filter Test Report Data	Intermediate		
HONORARIUM	LANGUAGES			
	English			
	Italian			
James Vallort Mortenson 1621 18th Street, Suite 400 Denver CO 80202 Tel: (630) 846-9574 Email: jvallort@esdglobal.com	1 Achieving a Green Data Center: More than a Good Design Is Needed	Intermediate		
	2 Building Automation System Master Planning - Take Control of Your Facility's Future	Basic		
	3 Critical Facilities New Construction Commissioning and Existing Building Commissioning	Basic		
	4 Intelligent Buildings – Technology is changing what is possible in the built environment	Intermediate		
	5 Primary Heating/Cooling Plant Strategies & How to Maximize the Energy & Financial Savings	Advanced		
HONORARIUM	LANGUAGES			
	English			
Timothy G. Wentz University of Nebraska-Lincoln 8012 Dougan Circle Lincoln NE 68516 Tel: (402)-770-3973 Email: tim.wentz@windstream.net	1 A Human Behavior Approach to Net Zero Energy Buildings			
	2 Back to the Future: Our Industry in 2030	Basic		
	3 The Ethics of Disputes: Managing the Construction Claim Process	Basic		
	4 The Ethics of Money: Bidding, Payment Applications and Change Orders	Basic		
	5 The Interface Between Risk and Ethics	Basic		
HONORARIUM	LANGUAGES			

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
Theresa Weston The Holt Weston Consultancy, LLC 2015 Westover Hills Blvd. Richmond VA 23225 Tel: (804) 241-6246 Email: Holtweston88@gmail.com	1	ASHRAE Standard 90.2-2018 and the Pathway to High-Performance Residential Buildings			
	2	Defining and Assessing Resilience			
	3	Women and STEM: Enhancing Innovation and Sustainability through Diversity			
HONORARIUM	LANGUAGES				
Marwa Zaatari 56 Thorndike Street Brookline MA 02446 Tel: 512-203-2204 Email: mzaatari@enverid.com	1	Air Cleaning (Particulate Filtration, Portable and In-Duct Air Cleaners, Coil Cleaning) and Airborne Infectious Diseases			
	2	ASHRAE Standard 62.1 IAQP			
	3	Basic Requirements of ASHRAE Standard 62.1			
	4	Going Beyond the Minimums			
	5	How to Implement Demand Control Ventilation and Comply with ASHRAE Standards			
	6	V in HVAC – Energy Efficient HVAC Systems Design			
	7	V in HVAC - Energy Savings using the Indoor Air Quality Procedure			
HONORARIUM	LANGUAGES				
	English				
Douglas F. Zentz Ferris State University 20616 Madison Avenue Big Rapids, MI 49307-9755 Tel: (231) 591-3052 Email: zentzd@ferris.edu	1	Applied Psychrometrics			
	2	ASHRAE Standard 189 AIA-CES-UBGI Version	Intermediate		
	3	ASHRAE Standard 189.1 – "Standards for the Design of High Performance Buildings; except Low-Rise Residential"		0920020242	SDHPB19
	4	Doing More With Less	Advanced		
	5	How to Communicate Technically in a Professional World with Technical Information	Interm/Adv		
	6	HVAC and Energy Efficiency	Intermediate		
	7	Sustainable Building Operation via Standard 189.1	Basic		
	8	Sustaining ASHRAE Through Leadership, Mentoring Our Future	Intermediate	0920020259	SBOAS19
	9	What's Your EUI?	Intermediate	0920020240	WEUI19
HONORARIUM	LANGUAGES				
None	English				