

ASHRAE Distinguished Lecturers

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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 10 Common Errors with Hydronic Radiant Heating and Cooling Systems - and How to Avoid Them.	Basic		
	2 Diversity, Equity, Inclusion and ASHRAE: Does it Really Matter?	Basic/Interm		
	3 Embedded Tube Radiant Systems to Maximize Energy Efficiency	Basic/Interm		ABELLON01
	4 Hydronic Piping with PEX: Pros and Pitfalls	Intermediate		
	5 Radiant Heating and Cooling Control Strategies	Basic/Interm		
	6 Specifying Radiant Heating and Cooling Systems	Intermediate		
	7 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			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Erich Binder EBCL 159 Douglasbank Drive SE Calgary AB T2Z1X7 CANADA Tel: 403-836-0832 Email: ebcl@shaw.ca	HONORARIUM None	LANGUAGES English	1 ASHRAE - How You Can Get involved		
			2 ASHRAE Cold Climate Building Design – Updates from 2019 Revisions to Cold Climate Building Design Guide	Basic/Interm	
			3 ASHRAE Hazardous Spaces Guide	Basic/Interm	
			4 Decarbonization a Canadian Solution? Decarbonization a Canadian Solution?	Basic/Interm	
			5 Decarbonization Initiatives - Industrial Sector	Basic/Interm	
			6 HVAC Building Pressurization Systems – Lessons Learned	Basic/Interm	
			7 HVAC Rules of Thumbs for Trouble Shooting	Basic/Interm	
			8 HVAC&R - A Risk Management System	Basic/Interm	
			9 Industrial Ventilation & Loss Prevention Engineering	Basic	
Hoy R. Bohanon, Jr., P.E. Hoy Bohanon Engineering PLLC 8236 Arbor Ridge Lane Clemmons, NC 27012 Tel: (336) 972-1626 Email: bohanoneng@gmail.com	HONORARIUM None	LANGUAGES English	1 Applying ASHRAE Standards to Existing Buildings	Basic	
			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	
			5 Commissioning, Operating and Maintaining Air-to-Air Energy Recovery Systems	Advanced	0920020139 BOHANON01
			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	
Jeff Boldt IMEG Corp. Tel: (608) 658-5750 Email: jeff.g.boldt@IMEGcorp.com	HONORARIUM None	LANGUAGES English	1 Acoustic Fundamentals & Building Acoustics	Basic	
			2 ASHRAE 90.1-2019	Basic	
			3 Building Moisture Management	Basic	

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Patrick Brooks SMACNA Chantilly VA Tel: (513) 767-1000 Email: pbrooks@smacna.org		1 Duct System Acoustics	Basic/Interm		
		2 Exhaust Duct Design	Basic/Interm		
		3 Fitting Selection	Basic/Interm		
		4 Supply Duct Design	Basic/Interm		
		5 System Effect	Basic/Interm		
HONORARIUM	LANGUAGES				
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Fabio M. Clavijo Tecnaire Ltda. Calle 145 15-59, Apt. 204 Bogota 110121 COLOMBIA Tel: 317640 Email: presidencia@tecnaire.com		1 ASHRAE STANDARD 55	Interm/Adv		
		2 ASHRAE STD 62.1	Interm/Adv		
		3 ASHRAE STD 90.1	Interm/Adv		
		4 Dehumidification- Basic Concepts	Intermediate		
		5 Dehumidification Processes	Advanced		
		6 ENERGY AUDITING PROCESS	Interm/Adv		
		7 Energy in Buildings - An HVAC Perspective for 21st Century	Intermediate		
		8 HVAC AND COVID-19 - SOLUTIONS AND TRENDS	Interm/Adv		
		9 HVAC DESIGN CONDITIONS FOR BUILDINGS IN TROPICAL EQUATORIAL REGION	Interm/Adv		
		10 Indoor Air Quality and Ultra-Violate (UVC) Technology	Interm/Adv		
HONORARIUM	LANGUAGES				
None.	English Spanish				
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Douglas C. Cochran 4347 Palisades Lane Mississauga Ontario L4W 3X7 Canada Tel: 647 2726754 Email: dccashrae@gmail.com		1 ASHRAE ABC's	Basic		
		2 Decarbonization. An introductory look into what this is and how ASHRAE is addressing it.	Intermediate		
		3 Low GWP refrigerants	Basic		
		4 Public Speaking	Basic		
		5 Running Effective Meetings	Basic		
		6 System selection	Basic		
		7 Building EQ	Intermediate		
		8 Cold climate	Basic		

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
Don Colliver 128 C E Barnhart Bldg Lexington KY 40546 Tel: (703) 483-0179 Email: dcolliver@uky.edu	1 Building Decarbonization Basics	Basic		
	2 Foundation and Pillars of Building Decarbonization	Basic		
	3 The Science Behind Climate Change and Decarbonization	Basic		
HONORARIUM None	LANGUAGES			
Drury Crawley, Ph.D. Bentley Systems, Inc. 4539 Albemarle Street Washington, DC 20016 Tel: (202) 422-6464 Email: dbcrawley@gmail.com	1 Big, Smart, and Everything: Data, Technology, Buildings, Cities, and the Iota	Intermediate	0920020229	Crawley03
	2 Building Performance Simulation: What's in the Black Box	Basic/Interm/Adv	0920020230	Crawley07
	3 EnergyPlus, DOE's New Generation Building Energy Simulation Program	Basic/Interm/Adv	0920020231	Crawley04
	4 Getting From AEDGs to Zero-Energy Buildings	Basic/Interm	0920020232	Crawley06
	5 Going Digital – Modeling Infrastructure Resilience for Sustainable Urban Development	Intermediate	0920020233	CRAWLEY09
	6 Impacts of Climate Change & Urbanization on Future Building Performance	Basic/Interm	0920020234	Crawley05
	7 Standard 189.1 - Structure, Requirements & Energy Savings	Basic/Interm/Adv	0920020235	Crawley01
	8 Trends: Buildings, Technologies and Tools	Basic/Interm		Crawley02
HONORARIUM \$250 donation to ASHRAE Research	LANGUAGES English			
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	Dalugoda001
	5 HVAC Water System Design	Intermediate		DALUGODA05
	6 Reducing Carbon Footprint of Buildings in Developing Economies	Advanced		Dalugoda04
	7 Sustainable HVAC Designs for Green Buildings	Advanced	0920020142	Dalugoda03
HONORARIUM None	LANGUAGES English			

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
K William Dean 97 Salisbury Drive Saskatoon S7H 3J3 Canada Tel: (306) 241 4039 Email: plantguy24@me.com	1 AN OWNER'S PERSPECTIVE ON BUILDING DECARBONIZATION	Basic		
	2 BOMA 360 PROGRAM – ASHRAE MEMORANDUMS OF UNDERSTANDING AT WORK	Basic		
	3 EXISTING BUILDING COMMISSIONING (EBCX)	Basic		
	4 INDOOR AGRICULTURE FACILITIES AND EQUIPMENT – TECHNICAL CHALLENGES AND OPPORTUNITIES	Basic		
	5 OPERATIONS GUIDANCE FOR COLD CLIMATE BUILDINGS	Basic		
	6 TEAM BUILDING – SPORTS LESSONS APPLIED TO LEADERSHIP	Basic		
	7 USING ASHRAE BUILDING EQ TO INFLUENCE BUILDING OWNERS	Basic		
HONORARIUM None	LANGUAGES			
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	LANGUAGES			
Pamela Duffy, P.E. Tel: N/A Email: pam.duffy.ashrae@gmail.com	1 5 Essential Soft Skills for Engineers	Basic		
	2 Ethical Dilemmas in our Modern World	Basic		
	3 Generations in the Workplace and What We Know about Gen Z (so far!)	Basic		
	4 How to Prioritize When " Everything is Important"			
	5 Productive from Anywhere: Practical Tips to Get Stuff Done	Basic		
	6 Remote Teamwork: How to Work Together When You're Not Together	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 Steady On the Throttle - Part Load Compressor Technologies and Applications			
		5 Understanding Air-Conditioning and Heat Pump Ratings	Basic		
		6 What's Loud - Understanding the Psychoacoustics of Hearing and Perception	Intermediate		
		7 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. Regional Managers & Associates 12609 Oulton Circle Orlando, FL 32832 Tel: (305) 505-2906 Email: angelica@regionalmanagers.com		1 Basic Air Conditioning Concepts for beginning Engineers and Architects	Basic		
		2 Basic Concepts Of Evaporative Cooling	Interm/Adv		
		3 Basic Psychrometrics for Industrial Refrigeration Professionals	Basic		
		4 Critical Applications	Basic/Interm/Adv		
		5 Displacement Ventilation	Basic/Interm/Adv		
		6 Latest Developments in the HVAC world	Basic/Interm/Adv		
		7 Psychrometrics of Displacement Ventilation	Advanced		
HONORARIUM	LANGUAGES				
None	English Spanish Portuguese				
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Rupesh Iyengar Services Consultants Bangalore India Tel: 919742342880 Email: rupesh_iyengar@yahoo.com		1 Combining Passive and Active Design Strategies to achieve Net Zero Energy buildings			
		2 How a well-coordinated MEPF Design combining HVAC, Electrical, Plumbing, Fire & Safety, IBMS and Low Voltage Parameters impact energy and water efficiency of buildings			
		3 Integrating HVAC Systems using IBMS Control Techniques			
		4 Resilient Buildings: Design Parameters to be considered for achieving long term Sustainability			
		5 Splitting Sensible and Latent Heat Loads to increase energy efficiency of buildings			
HONORARIUM	LANGUAGES				
None					
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Satish N Iyengar Services Consultants Bangalore India Tel: 919844242264 Email: harekrishnabangalore@yahoo.com		1 Alternative MEP and HVAC systems for energy efficient Buildings			
		2 MEP Systems integration over IBMS			
		3 Optimum Services Design involving HVAC, IBMS Parameters and its effect on the efficiency of buildings			
HONORARIUM	LANGUAGES				
None					

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
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			
	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 None	LANGUAGES English				
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				
Kishor Khankari, Ph.D. AnSight LLC 3814 Mill Pond Lane Ann Arbor, MI 48108 Tel: (734) 327-4079 Email: kishork@ansight.com	1	Airflow Management Best Practices for Data Centers	Basic/Interm/Adv	0920014296	KHANKARI04
	2	Airflow Management for Cleanroom Facilities	Basic/Interm	0920020151	AMCF19
	3	Airflow Management for Healthcare Facilities	Basic/Interm/Adv	0920020151	AMHCF19
	4	Airflow Management for Laboratory Facilities	Intermediate	0920014291	KHANKARI06
	5	Applications of Computational Fluid Dynamics (CFD) for Built Environment	Basic/Interm/Adv	0920014282	KHANKARI01
	6	Basics of Air Change Rates (ACH): Facts versus Fiction	Basic/Interm	0920020150	BACR19
	7	Design and Analysis of Natural Ventilation Systems	Basic/Interm/Adv	0920014283	KHANKARI02
	8	Stratified Air Ventilation Systems	Basic/Interm/Adv	0920014292	KHANKARI03
HONORARIUM None	LANGUAGES English Hindi Marathi				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
M. Dennis Knight, P.E. Whole Building Systems, LLC P.O. Box 1845 Mt. Pleasant SC 29464 Tel: (843) 437-3647 Email: dknight@wholebuildingsystems.com		1 ASHRAE Building Energy Quotient (bEQ)	Basic		
		2 ASHRAE Standard 62.1 – the IAQ Procedure and LEED	Basic/Interm		
		3 Building Information Modeling for the Mechanical Disciplines	Basic		
		4 Building Performance Analysis for Building Performance Rating Systems	Intermediate	0920004628	KNIGHT03
		5 Conducting A Commissioning Kick-Off Meeting	Intermediate	0920017332	
		6 Developing an Integrated Personal Management System to help Get Things Done	Basic	0920004588	KNIGHT02
		7 Health and Wellness In The Built Environment – An Introduction	Basic	0920017333	
		8 Integrated Building Design and Building Information Modeling	Intermediate	0920004589	KNIGHT01
HONORARIUM None	LANGUAGES English				
Stephan Kujak Trane Technologies 303 S Marina Drive Brownsville MN 55919 Tel: (608) 386-8067 Email: skujak@tranetechnologies.com		1 Flammable Refrigerants for Dummies	Intermediate		
		2 Is Residential Rooftop Photovoltaic Solar Power a Sustainable Solution?	Intermediate		
		3 The Future of Refrigerants	Basic		
HONORARIUM None	LANGUAGES English				
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 International Energy Efficiency Standards and Guidelines	Basic		
		5 Resilience in Building Design to Support a Resilient Society	Intermediate	0920017336	Lawrence05
		6 The 'Green Awakening': The Coming Carbon Economy & Determining Your Building's CO2 Footprint	Basic/Interm	0920020162	TGAW19
		7 The Integration of a Smart Grid and Smart Buildings	Intermediate		
		8 Thermal Comfort as Related to Energy Consumption: What is the Balance?	Basic	0920014298	LAWRENCE05
HONORARIUM None	LANGUAGES English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
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				
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 None	LANGUAGES English				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA
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 Chapters And Advocacy: Best Practices for Leadership in Action	Basic		
	6 Energy Efficiency in Commercial Buildings	Basic		
	7 How Long Will it Last? Addressing the Challenge of Sustainability	Basic		
	8 Why Buildings Matter and the Role of ASHRAE 90.1	Basic		
HONORARIUM \$250 Donation to ASHRAE Research	LANGUAGES 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	Basic		
	3 Holistic Thinking for Multidisciplinary Design Solutions	Basic		
	4 Introduction to the UN Sustainable Development Goals for Mechanical Engineers	Basic		
	5 Material Concerns in HVAC Equipment	Basic		
	6 Principles of Museum Environmental Design	Basic		
	7 The Carbon Context for Mechanical Engineers	Basic		
	8 The Feasibility of Natural Ventilation	Basic/Interm		
	9 The Fraternal Twins of Decarbonization and Resilience	Basic		
	10 Why Whole Life Carbon Assessment is Important	Basic		
HONORARIUM	LANGUAGES English			
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			

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Brian P. Monk, P.E.		1 Airborne Contaminant Control in Healthcare Environments	Intermediate		
United Technologies Corporation		2 Current Trends in Design & Installation of Filtration Systems For Building HVAC Security	Intermediate		
629 McCaffrey		3 Dehumidification and Air Quality in Indoor Pool Environments	Basic/Intern		
Montreal QC H4T 1N3		4 Design Concepts in DOAS: Balancing IAQ and Energy	Intermediate		
CANADA		5 Emergency Air Filtration and Air Pollution Control for Water Treatment Plants	Intermediate		
Tel: (514) 515-4822		6 Environmental and Emissions Filtration in Waste Water Treatment Facilities	Basic/Intern		
Email: brian.monk@carrier.utc.com		7 Filtration for High Performing Buildings	Basic/Intern		
HONORARIUM	LANGUAGES	8 Gas Phase Filtration for the Elimination of Corrosive, Odorous and Toxic Gases	Intermediate		
None	English	9 IAQ and Cognitive Functioning in High Performing Buildings	Intermediate	0920017341	MONK04
	French	10 IAQ in Airports	Basic/Intern		
		11 The Use of Gas-Phase Air Filtration and ANSI/ ASHRAE Standard 62.1	Basic/Intern		
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Ross Montgomery, P.E.		1 ASHRAE "Building EQ" Building Labeling Program and Energy related programs:	Intermediate	0920014510	MONTGOMERY02
QST		2 Building Commissioning in the Built Environment - Principles, Process, Procedures, and the Future	Intermediate	0920002610	MONTGOMERY01
11306 Wickersley Place		3 Energy Audits: The basics of setting up and executing energy audits in commercial buildings	Intermediate	0920020164	EAEHPD19
Tampa FL 33625		4 Filtering Ventilation Air for Sustainable Airflow Measurement	Basic/Intern		
Tel: (941) 737-1401		5 Testing Adjusting and Balancing (TAB) – HVAC	Intermediate	0920020165	Montgomery07
Email: rossmont@aol.com					
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		

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 Research	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 & Prodcutivity	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 None	LANGUAGES English German Danish				
Kathleen Owen Owen Air Filtration Consulting, LLC Cary NC 27511 Tel: (919) 656-5295 Email: kathleenowen@att.net	1	Air Filtration in Response to Airborne Pathogens	Basic		
	2	Air Filtration in Response to COVID19	Basic		
	3	How Air Filters Change with Use: Testing New and Used Filters	Basic		
	4	IAQ: Keep the Oxygen, Lose the Pollutants	Basic		
HONORARIUM None	LANGUAGES				

NAME	TOPICS	TOPIC CLASS	GBCI	AIA	
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	Achieving Zero – Energy and Building Carbon			
	2	Advanced Energy Design Guide for K-12 School Buildings: Achieving Zero Energy			
	3	Advances in Technology and the AEC Industry	Basic		
	4	Improving Building Performance	Intermediate		
	5	Passion and Performance	Basic		
	6	The Value of ASHRAE's bEQ	Intermediate		
HONORARIUM None	LANGUAGES English				
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			
	2	Net-Zero Energy Buildings - Nuances of Design, Construction, and Operation			
	3	Personal Thermal Comfort Systems - Concepts and Approaches			
HONORARIUM None	LANGUAGES None				
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 None	LANGUAGES English				

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Terry L. Rodgers 599 Union St S. Concord NC 28015 Tel: 704-942-1185 Email: TerryLee.Rodgers@am.JLL.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 None	LANGUAGES 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			
	2	Advanced Energy Design Guide Overview			
	3	Building Decarbonization	Basic/Interm	920024723	0920020207
	4	Building Decarbonization (Electrification) for Hydronic Systems	Interm/Adv		
	5	Chilled Water System Decisions	Intermediate	0920020201	CWSD19
	6	Chilled Water Systems for YEA Members: What the Baby Boomers and Gen Xers Have Done WRONG!!! (Part 1 & 2)	Basic		
	7	Ethics Case Studies	Basic		
	8	High Performance Chilled Water Systems	Intermediate	0920020204	HPCWS19
	9	The Advanced Energy Design Guide for Hospitals – Reducing energy consumption by 50%	Intermediate	0920020205	AEDGH5019
	10	Upgrading Existing Chilled Water Systems	Intermediate	0920020206	UECWS19
	11	Variable Primary Flow (VPF) Systems	Intermediate	920024719	0920020208
HONORARIUM None	LANGUAGES English				
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		
	6	Oversized air-conditioning systems and overcooled buildings in hot and humid climates	Basic/Interm		
	7	Sustainability and Resiliency - A paradigm shift in HVAC system design and operation during a pandemic and beyond	Basic/Interm/Adv		
HONORARIUM None	LANGUAGES English				

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	Basic/Interm/Adv		
	2 ASHRAE's Residential Ventilation Standards	Basic/Interm/Adv		
	3 Dr. Duct Tape	Basic/Interm/Adv		
	4 Smart Ventilation and IAQ Metrics	Basic/Interm/Adv		
	5 Ventilation: The Once and Future King	Basic/Interm/Adv		
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 Psuchrometry 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 Refridgeration System			
HONORARIUM	LANGUAGES			
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	Basic		
	2 Climate Change: How ASHRAE Members Can Prepare	Basic		
	3 Fixing the Great Indoors: HVAC and Indoor Air Quality	Basic		
	4 How Can Climate Change Impact Indoor Air Health?	Basic		
	5 Indoor Air Disasters: Stories of Recovery from Katrina, Hurricanes, Wildfires, and Other Disasters	Basic	0920020208	IAD19
	6 Ventilation Research: Is More Air Better for Us	Basic		
HONORARIUM None	LANGUAGES English			

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

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					
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	How Do We Get to a Decarbonized World	Intermediate		
		3	Living at Zero: A Look at Personal Decisions to Achieving a Zero Energy Home	Basic		
		4	On-site Renewable Energy: What to know and what are the myths?	Basic		
		5	Performance Based Procurement for Outstanding Energy Performance	Basic		
		6	The Advanced Energy Design Guide for Zero Energy Buildings	Basic		
		7	The Advanced Energy Design Guide for Zero Energy Multifamily Buildings	Intermediate		
HONORARIUM	LANGUAGES					
None	English					
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 ASHRAE Standard 90.1 & Standard 189.1: Smooth Path for Compliance	Basic		
	2 Ethics in the Built Environment	Advanced	0920020217	EBE19
	3 Net Zero Energy Buildings in 2050, Way to Go	Advanced		
	4 What do you recall: Foundations of Engineering Economy	Basic		
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@esdgglobal.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			
	3	ASHRAE Standard 189.1 – “Standards for the Design of High Performance Buildings; except Low-Rise Residential”	Intermediate		
	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	0920020242	SDHPB19
	9	What's Your EUI?	Intermediate		
HONORARIUM	LANGUAGES				
None	English				
			0920020259	SBOAS19	
			0920020240	WEUI19	