ASHRAE Distinguished Lecturers

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Last Updated: Wednesday, July 14, 2021

NAN	ЛΕ	TOPICS	TOPIC CLASS	GBCI AIA
Devin A. Abellon, P.	E.	Diversity, Equity, Inclusion and ASHRAE: Does	it Really Matter? Basic/Interm	
Uponor 25404 North 52nd Aven	ue	2 Embedded Tube Radiant Systems to Maximize	Energy Efficiency Basic/Interm	ABELLON01
Phoenix, AZ 85083-444	==	3 Hydronic Piping with PEX: Pros and Pitfalls	Intermediate	
Tel: (760) 902-4879 Email: <u>devin.abellon@u</u>	ponor.com	4 Radiant Heating and Cooling Control Strategies	Basic/Interm	
HONORARIUM	LANGUAGES	5 Specifying Radiant Heating and Cooling System	ns Intermediate	
None	English	6 The (un)Ethical Engineer: a study in principle an	nd practice Basic	
Roberto R. Aguilo, F		1 Cooling Loads Calculation	Intermediate	
Estudio Aguilo & Asocia Tres Arroyos 2421	dos	2 Protecting the Environment using Natural Refrig	perants Intermediate	
Buenos Aires, 1416		3 Refrigerant Flow Controls Methods in Industrial	Refrigeration Intermediate	
ARGENTINA Tel: (54911) 4148-211	1	4 Refrigerants	Intermediate	
Email: rraguilo@yahoo.	<u>com</u>	5 Supermarkets Refrigeration System & Sustainal	bility Intermediate	
HONORARIUM	LANGUAGES	6 The Refrigeration Processes in the Food Industr	ry Intermediate	
None	English Spanish	7 The Use of CO2 as Refrigerant	Intermediate	
William P. Bahnfleth Pennsylvania State Univ		Fundamentals of Ultraviolet Germicidal Irradiation Disinfection	on for Air & Surface Basic/Interm	0920014267 BAHNFLETH04
1426 South Pugh Street	t	2 HVAC and Airborne Infectious Diseases	Basic/Interm	0090003542 Bahnfleth06
University Park, PA 168 Tel: (814) 863-2076	302	3 HVAC and Risk from Airborne Hazards	Basic/Interm	0920017326 Bahnfleth07
Email: wbahnfleth@psu	<u>.edu</u>	4 Integrating Indoor Air Quality and Energy Efficie	ncy in Buildings Intermediate	0920014269 BAHNFLETH02
HONORARIUM	LANGUAGES	5 Thermal Energy Storage in the Era of Sustainab	pility Interm/Adv	0920014272 BAHNFLETH03
None	English	6 Variable Primary Flow Chilled Water Systems	Interm/Adv	0920014275 BAHNFLETH05

NAME Giovanni Barletta Emerson			TOPICS	TOPIC CLASS	GBCI	AIA
		1	ANALYSIS OF THE VARIABLES THAT HAVE AN IMPACT ON THE REFRIGERATION SYSTEM AND ON THE LIFECYCLE UNIT. *Available in Spanish	Basic/Interm		
Carrera 58 No. 99-46 Ap Barranquilla Colombia	1004	2	EVALUATION OF ARCHITECTURE ALTERNATIVES IN COMMERCIAL REFRIGERATION UNDER TEWI ANALYSIS. *Available in Spanish	Basic/Interm		
Tel: 5.73174E+11 Email: <u>Giovanni.Barletta</u>	@emerson.com	3	GOOD PRACTICES IN LEAK CONTROL USING DIRECT AND INDIRECT METHODS *Available in Spanish	Basic/Interm		
HONORARIUM	LANGUAGES					
Robert Bean, R.E.T., 2206, 901-10th Ave SW		1	An Introduction to Thermal Comfort: The Human Factors of Sensation, Perceptions and Responses	Basic		
Calgary AB T2R 0B5		2	Fundamentals of ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy	Intermediate		
Tel: 403.560.5769 Email: <u>k9cave@gmail.co</u>	<u>om</u>	3	Using Thermal Comfort Tools to Evaluate Discomfort Probabilities Due to Enclosure Design and Choices in HVAC Systems	Interm/Adv		
HONORARIUM	LANGUAGES	4	What Should Drive the Sustainability Bus - Indoor Environmental Quality or Energy?	Interm/Adv		
	English					
Erich Binder		1	ASHRAE - How You Can Get involved	Basic		
EBCL 159 Douglasbank Drive	SE	2	ASHRAE Cold Climate Building Design – Updates from 2019 Revisions to Cold Climate Building Design Guide	Basic/Interm		
Calgary AB T2Z1X7 CANADA		3	Cold Climate Building Design	Basic		
Tel: 403-836-0832		4	HVAC Building Pressurization Systems – Lessons Learned	Basic/Interm		
Email: ebcl@shaw.ca	LANGUAGES	5	HVAC Rules of Thumbs for Trouble Shooting	Basic/Interm		
HONORARIUM	English	6	HVAC&R - A Risk Management System	Basic/Interm		
None	Ligion	7	Industrial Ventilation & Loss Prevention Engineering	Basic		

NAN	NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Hoy R. Bohanon, Jr., P.E. Hoy Bohanon Engineering PLLC 8236 Arbor Ridge Lane Clemmons, NC 27012 Tel: (336) 972-1626		1 2 3	Applying ASHRAE Standards to Existing Buildings ASHRAE Building Energy Quotient (bEQ) Basic Requirements of ANSI/ASHRAE Standard 62.1-2019	Basic Basic Basic	0920020132 0920020128	Bohanon05 BOHANON09
HONORARIUM	mail.com LANGUAGES English	4 5	Better HVAC Design Using New Options in ANSI/ASHRAE Standard 62.1-2019 Commissioning, Operating and Maintaining Air-to-Air Energy Recovery Systems	Advanced Advanced	0920020139	BOHANON01
None	Liigiiəti	6 7	Concerned About Viruses at Home? What's an ASHRAE Member to Do? How to Implement Demand Control Ventilation & Comply with ASHRAE Standards	Basic Intermediate	0920020133	Bohanon02
		8 9	Perception and Acceptance of Commissioning Retro-Commissioning for Energy Savings	Basic Basic	0920020130	Bohanon03
		10 11	Using ASHRAE Standard 62.1-2016 Multiple Space Equations What Do You Need to Know About the ASHRAE IAQ Guide?	Intermediate Basic	0920020131	Bohanon06
Jeff Boldt IMEG Corp. Tel: (608) 658-5750 Email: jeff.g.boldt@IME	GCCOTP.COM LANGUAGES	1 2 3	Acoustic Fundamentals & Building Acoustics ASHRAE 90.1-2019 Building Moisture Management	Basic Basic Basic		
Patrick Brooks SMACNA Chantilly VA Tel: (513) 767-1000 Email: pbrooks@smacr	na.org LANGUAGES	1 2 3 4 5	Duct System Acoustics Exhaust Duct Design Fitting Selection Supply Duct Design System Effect	Basic/Interm Basic/Interm Basic/Interm Basic/Interm Basic/Interm		

NAME			TOPICS	TOPIC CLASS	GBCI	AIA
Fabio M. Clavijo		1	ASHRAE STANDARD 55	Interm/Adv		
Tecnaire Ltda. Calle 145 15-59, Apt. 204		2	ASHRAE STD 62.1	Interm/Adv		
Bogota 110121		3	ASHRAE STD 90.1	Interm/Adv		
COLOMBIA Tel: 317640		4	Dehumidification- Basic Concepts	Intermediate		
Email: presidencia@tecna	aire.com	5	Dehumidification Process	Advanced		
HONORARIUM	LANGUAGES	6	ENERGY AUDITING PROCESS	Interm/Adv		
None.	English Spanish	7	Energy in Buildings - An HVAC Perspective for 21st Century	Intermediate		
	opae.	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		
Douglas C. Cochran		1	Building EQ			
4347 Palisades Lane	1277	2	Cold climate			
Mississauga Ontario L4W Canada	3.7	3	Equipment Selection			
Tel: 647 2726754 Email: dccashrae@gmail.	com					
HONORARIUM	LANGUAGES					
Drury Crawley, Ph.D.		1	Big, Smart, and Everything: Data, Technology, Buildings, Cities, and the lota	Intermediate	0920020229	Crawley03
Bentley Systems, Inc.		2	Building Performance Simulation: What's in the Black Box	Basic/Interm/Adv	0920020230	Crawley07
4539 Albemarle Street Washington, DC 20016 Tel: (202) 422-6464 Email: dbcrawley@gmail.c		3	EnergyPlus, DOE's New Generation Building Energy Simulation Program	Basic/Interm/Adv	0920020231	Crawley04
	com	4	Getting From AEDGs to Zero-Energy Buildings	Basic/Interm	0920020232	Crawley06
HONORARIUM	LANGUAGES	5	Going Digital – Modeling Infrastructure Resilience for Sustainable Urban Development	Intermediate	0920020233	CRAWLEY09
\$250 donation to	English	6	Impacts of Climate Change & Urbanization on Future Building Performance	Basic/Interm	0920020234	Crawley05
ASHRAE Research		7	Standard 189.1 - Structure, Requirements & Energy Savings	Basic/Interm/Adv	0920020235	Crawley01
		8	Trends: Buildings, Technologies and Tools	Basic/Interm		Crawley02

NAME		TOPICS	TOPIC CLASS	GBCI	AIA
Chandana N. Dalugoda Chandana Dalugoda Consu 12/9, Maharagama Road Makuluduwa Piliyandala 10 SRI LANKA Tel: 94777785778 Email: chandana cnd@sltr HONORARIUM None	ultants 0300	1 Air Conditioning Systems for Tropical Humid Climates 2 Applied Psychometrics for Air Conditioning Systems 3 Cooling Load Calculations ASHRAE CLTD/SCL/CLF Method 4 HVAC Air System Designs 5 Reducing Carbon Footprint of Buildings in Developing Economies 6 Sustainable HVAC Designs for Green Buildings	Intermediate Basic Basic Intermediate Advanced Advanced	0920020143 0920020134 0920020139 0920020141	DALUGODA01 Dalugoda001 Dalugoda04 Dalugoda03
Julian R. de Bullet de Bullet Consulting 5993 Piney Grove Way Gainesville, VA 20155 Tel: (703) 483-0179 Email: julian@debullet.com HONORARIUM None	LANGUAGES English	1 Centrifugal Chiller Fundamentals 2 Chiller Plant Design Fundamentals 3 Condenser Water Heat Recovery 4 Constant Flow Chiller Plant Design 5 Green "Sustainable" HVAC Design 6 Optimal Air - A Cool Solution 7 Responsible Use of Refrigerants 8 Variable Flow Chiller Plant Design	Basic Basic Advanced Intermediate Intermediate Intermediate Advanced Advanced		
Kyle DelPiano 115 Jersey Ridge Rd Cary NC 27518 Tel: (561) 701-7556 Email: Kyle.Delpiano@xyle	eminc.com LANGUAGES	 Modern Pump Selection for System Efficiency Variable-Speed Pumping Control Strategies VRF & Hydronics Systems: A Strategic Comparison 			
Pamela Duffy, P.E. Tel: N/A Email: pam.duffy.ashrae@g	gmail.com	 Ethical Dilemmas with Social Media in HVAC Productive from Anywhere: Practical Tips to Get Stuff Done You, But Online: Managing Your Online Presence 	Basic Basic Basic		
HONORARIUM \$100 to the Pam and Ted Duffy Endowment Fund	LANGUAGES English				

NAME		TOPICS TOPIC CLASS	GBCI AIA
Thomas H. Durkin, P.I. 6740 Spirit Lake Dr. #101 Indianapolis IN 46220 Tel: 317-402-2292 Email: thdurkin46@gmail.		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	
Mark W. Fly, P.E., Fellow ASHRAE 7016 S Chestnut Avenue Broken Arrow Ok 74011 Tel: 918-633-7900 Email: mfly@cox.net HONORARIUM LANGUAGES		1 Acoustics Basics for HVAC &R Designers 2 Failure is the Option - How failure, perseverance, and positive attitude lead to Innovation and success 3 Inside the Box – Fan Characteristics and Applications 4 Understanding Air-Conditioning and Heat Pump Ratings 5 What's Loud - Understanding the Psychoacoustics of Hearing and Perception 6 What's Shakin' – Vibration Fundamentals and Human Perception Basic/Interm Basic/Interm Intermediate	

NAME		TOPICS		TOPIC CLASS	GBCI	AIA
Victor W. Goldschmidt, Ph.D.		1	Active Listening & Styles of Communication	Basic		
Dynamic Creativity Applica P.O. Box 423	ations	2	Air Conditioning: A Look Into the Past & a Guess into the Future	Basic		
Northport, MI 49670		3	Blessings and Curses of Computer Modeling	Basic		
Tel: (231) 386-9058 Email: <u>creating2@earthlin</u>	nk.net	4	Differing Perspectives into Global Warming	Basic		
HONORARIUM	LANGUAGES	5	Distinction between Leadership and Management and their Application	Basic		
None	English	6	Principles of Leadership & Change	Basic		
	Spanish	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		
Patricia T. Graef, P.E.	, Fellow ASHRAE	1	Business Ethics for the HVAC Professional	Basic		
Munters Corporation 17710 Nalle Road		2	The Logic of Dedicated Outside Air Systems and The Core Technologies That Make Them Effective	Basic/Interm		
N. Ft. Myers, FL 33917 Tel: (239) 218-8030 Email: pat.graef@att.net		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. E Purdue University, Ray W. 177 S. Russel Street West Lafayette, IN 47907 Tel: (765) 496-2201 Email: groll@purdue.edu HONORARIUM None	_	 Recent Research of Novel Compression Concepts for Heat Pumping, A/C Refrigeration Applications Update on Refrigerants: Past, Present and Future 	& Advanced Basic	
Charles E. Gulledge, II AC Corporation 301 Creek Ridge Road Greensboro, NC 27406 Tel: (336) 271-6323 Email: cgulledge@accorpo HONORARIUM None		 Design-Build-Operate-Maintain: What Could Possibly Go Wrong? Green Industrial HVAC Design Integrated Building Design Lean Integrated Project Delivery 	Basic/Interm Basic/Interm Basic/Interm Basic/Interm	0920020144 DBOM19 0920020148 GIHD19 0920020145 GULLEDGE01 0920020146 LIPD19
Sheila J. Hayter, P.E. NREL 1425 Normandy Rd Golden, CO 80401 Tel: (303) 384-7519 Email: sheila.hayter@nrel. HONORARIUM None	gov LANGUAGES English	1 Integrating Renewable Energy Systems into Buildings	Basic/Interm	
Jan L. M. Hensen Robijnring 30, 5629GK Eindhoven, Netherlands Tel: +31 6532 30 382 Email: <u>i.hensen@tue.nl</u> HONORARIUM	LANGUAGES	 Building Performance Simulation - challenges and opportunities Building Performance Simulation - mind the gap 		

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

NAN	ИΕ	TOPICS	TOPIC CLASS	GBCI	AIA
Ronald E. Jarnagin		Advanced Energy Design Guides – Going Beyond Minimum Standards	Basic		
355 Falconridge Street Richland, WA 99352		2 ASHRAE Headquarters Renovation – What Happens When Leaders try t it Right	o do Basic		
Tel: (509) 430-4113 Email: <u>ron.jarnagin@pn</u>	l.gov	3 ASHRAE's Building Energy Labeling Program, the Building Energy Quoti (bEQ)	ent Basic		
		4 Standard 90.1 – Past, Present and Future	Basic		
HONORARIUM	LANGUAGES	5 Sustaining ASHRAE Through Leadership	Basic		
None	English				
Julia A. Keen, P.E.,	Ph.D.	ASHRAE bEQ – Building Performance vs Building Certification & Rating	Basic		
Kansas State University 2062 Seaton Hall		2 ASHRAE's Impact in the Industry - Past, Present, and Future	Basic		
920 N 17th St		3 Distinctly Different – Skillsets for Women to Succeed in STEM Fields	Basic		
Department of Architect Manhattan, KS 66506	ural Engineering	4 Ethical Decision Making – An Exercise in Application	Basic		
Tel: (319) 230-8522		5 Millenials – How to Manage the next Generation	Basic		
Email: jkeen@ksu.edu HONORARIUM	LANGUAGES	6 Targeting Success – Improve Employee Satisfaction, Retention, and Pro	fit Basic	0920020149	TSIES19
None	English				
Prof Dr. Adel Khalil		1 Applications of Cryogenic Systems			
Cairo University, Faculty Of Engineering Tel:		Integration of Thermal and Electrical Energy Storage on Demand side for Energy Efficiency			
Email: adelkhk@yahoo.	<u>com</u>	3 Prospects of Solar Cooling			
HONORARIUM	LANGUAGES				

NAM	E	TOPICS	TOPIC CLASS	GBCI	AIA
Kishor Khankari, Ph.	D.	1 Airflow Management Best Practices for Data Centers	Basic/Interm/Adv	0920014296	KHANKARI04
AnSight LLC 3814 Mill Pond Lane		2 Airflow Management for Cleanroom Facilities	Basic/Interm	0920020151	AMCF19
Ann Arbor, MI 48108		3 Airflow Management for Healthcare Facilities	Basic/Interm/Adv	0920020151	AMHCF19
Tel: (734) 327-4079 Email: <u>kishork@ansight.</u>	<u>com</u>	4 Airflow Management for Laboratory Facilities	Intermediate	0920014291	KHANKARI06
HONORARIUM	LANGUAGES	5 Applications of Computational Fluid Dynamics (CFD) for Built Environment	Basic/Interm/Adv	0920014282	KHANKARI01
None	English	6 Basics of Air Change Rates (ACH): Facts versus Fiction	Basic/Interm	0920020150	BACR19
	Hindi Marathi	7 Design and Analysis of Natural Ventilation Systems	Basic/Interm/Adv	0920014283	KHANKARI02
	warathi	8 Stratified Air Ventilation Systems	Basic/Interm/Adv	0920014292	KHANKARI03
M. Dennis Knight, P.		ASHRAE Building Energy Quotient (bEQ)	Basic		
Whole Building Systems,		2 ASHRAE Standard 62.1 – the IAQ Procedure and LEED	Basic/Interm		
P.O. Box 1845 Mt. Pleasant SC 29464			Basic		
Tel: (843) 437-3647		3 Building Information Modeling for the Mechanical Disciplines		0000004000	KAHOLITOO
Email: dknight@wholebu	ildingsystems.com	4 Building Performance Analysis for Building Performance Rating Systems	Intermediate	0920004628	KNIGHT03
HONORARIUM	LANGUAGES	5 Conducting A Commissioning Kick-Off Meeting	Intermediate	0920017332	
None	English	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
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 Brownsville MN 55919		3 Review of Air Treatment or Cleaning Technologies	Intermediate		
Tel: (608) 386-8067 Email: skujak@tranetech	nologies.com	4 The Future of Refrigerants	Basic		
HONORARIUM	LANGUAGES				

NAM	1E	TOPICS	TOPIC CLASS	GBCI	AIA
Thomas M. Lawrenc	e, Ph.D., P.E.	1 ASHRAE Standard 189.1 and the International Green Construction Code	Intermediate	0920017334	LAWRENCE02
University of Georgia Driftmier Engineering Ce	enter	2 CO2 Monitoring for Outdoor Airflow and Demand-Controlled Ventilation	Intermediate		
Annex Room 106 Athens, GA 30602		3 High Performance Building Design – What the Future holds for the Direction for our Industry	Intermediate		
Tel: (706) 542-4322 Email: lawrence@engr.u	ugo odu	4 Resilience in Building Design to Support a Resilient Society	Intermediate	0920017336	Lawrence05
HONORARIUM	LANGUAGES	5 The 'Green Awakening': The Coming Carbon Economy & Determining Your Building's CO2 Footprint	Basic/Interm	0920020162	TGAW19
None	English	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		
Karine Leblanc US Air Conditionings Dis	stributors	1 10 leadership lessons to help you be that leader that everyone would follow for free			
16900 Chestnut St		2 Everyone Communicates, Few connect	Basic		
City of Industry, CA 9174 Tel: (310) 420-7066		3 How to use Emotional Intelligence to become a better person professionally and personally	Basic		
Email: karine@leblancus		4 It's not too late; learn how to live to your full potential and watch the results!			
HONORARIUM	LANGUAGES	5 Selling is like dating. Learn how to close without selling			
None	English French	6 Technical skills will get you the job, human skills will get more clients, increase your productivity and happiness			
Luke C.H. Leung, P.I	Ε.	1 21st Century Tall Building Design	Interm/Adv	0920014332	LEUNG01
Skidmore, Owings, & Me 224 S. Michigan Avenue		2 Healthy Built Environment – Pandemic and Beyond	Basic/Interm/Adv		LEUNG02
10th Floor Chicago, IL 60604		3 The New Carbon Standards: Net Zero Operational, Embodied, Whole Life and Upfront Energy (Carbon)	Interm/Adv		
Tel: (312) 360-4121 Email: <u>luke.leung@som.</u>	<u>com</u>	4 urj Khalifa – The Tallest Building in the World	Interm/Adv		
HONORARIUM	LANGUAGES				
None	English Chinese				

NAME	Ē	TOPICS	TOPIC CLASS	GBCI	AIA
Andrey Livchak, Ph.D.		1 Active and Passive Beams	Intermediate	0920017337	Livchak02
Halton Group Americas 103 Industrial Drive		2 Demand Controlled Ventilation for Commercial Kitchen Applications	Intermediate		
Scottsville, KY 42164		3 Energy Efficient Solutions for Commercial Kitchen Ventilation	Intermediate	0920014335	LIVCHAK01
Tel: (270) 237-5600 Email: <u>andrey.livchak@ha</u>	alton.com	4 Fundamentals of Thermal Displacement Ventilation	Intermediate	0920017338	LIVCHAK03
HONORARIUM	LANGUAGES				
None	English				
R. Christopher Mathis		1 A Window on the Future: The Role of Fenestration in Building Performance	Intermediate	0920017340	MATHIS02
MC2 Mathis Consulting Com P.O. Box 18055 Asheville, NC 28814 Tel: (828) 678-3500	ompany	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		
Email: <u>chris@mathiscons</u>	ulting.com	4 Building Science Lessons from the Honey Bee	Basic		
HONORARIUM	LANGUAGES	5 Energy Efficiency in Commercial Buildings	Basic		
\$250 Donation	English	6 Energy Efficiency in Residential Buildings	Basic		
to ASHRAE		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		
Erin McConahey		1 An Inclusion Mindset	Basic		
12777 West Jefferson Bou ₋os Angeles CA 90066	ulevard	2 Cutting Carbon and Circular Diets: Total Net Zero Carbon Consciousness			
Геl: 310-578-4400		3 Holistic Thinking for Multidisciplinary Design Solutions	Basic		
Email: <u>Erin.McConahey@</u>	arup.com	4 Introduction to the UN Sustainable Development Goals for Mechanical Engineers			
HONORARIUM	LANGUAGES	5 Material Concerns in HVAC Equipment			
	English	6 Principles of Museum Environmental Design	Basic		
		7 The Carbon Context for Mechanical Engineers			
		8 The Feasibility of Natural Ventilation	Basic/Interm		

NAME		TOPICS	TOPIC CLASS	GBCI AIA
Frank Mills 7 Fylde Ave Leyland, Lancashire PR26 (NITED KINGDOM Tel: +44 1772 424124 Email: famills@low-carbonc HONORARIUM		1 ASHRAE Cold Climate Design Guide 2 Design of Atrium Buildings 3 Energy Savings in Pubs, Restaurants, and Hotels 4 Hot Climate Design Guide 5 Natural Ventilation 6 Net Zero Energy Buildings 7 Net Zero Hospitals	Basic Intermediate Intermediate Basic Basic Intermediate Intermediate	
Brian P. Monk, P.E. United Technologies Corpo 629 McCaffrey Montreal QC H4T 1N3 CANADA Tel: (514) 515-4822 Email: brian.monk@carrier. HONORARIUM None		 Airborne Contaminant Control in Healthcare Environments Current Trends in Design & Installation of Filtration Systems For Building HVAC Security Dehumidification and Air Quality in Indoor Pool Environments Design Concepts in DOAS: Balancing IAQ and Energy Emergency Air Filtration and Air Pollution Control for Water Treatment Plants Environmental and Emissions Filtration in Waste Water Treatment Facilities Filtration for High Performing Buildings Gas Phase Filtration for the Elimination of Corrosive, Odorous and Toxic Gases IAQ and Cognitive Functioning in High Performing Buildings IAQ in Airports The Use of Gas-Phase Air Filtration and ANSI/ ASHRAE Standard 62.1 	Intermediate Intermediate Basic/Interm Intermediate Intermediate Basic/Interm Basic/Interm Intermediate Intermediate Basic/Interm Basic/Interm Basic/Interm	0920017341 MONK04
Ross Montgomery, P.E QST 5309 Deer Forest Place Parrish, FL 34219 Tel: (941) 737-1401 Email: rossmont@aol.com HONORARIUM	LANGUAGES English	 ASHRAE "Building EQ" Building Labeling Program and Energy related programs: Building Commissioning in the Built Environment - Principles, Process, Procedures, and the Future Energy Audits: The basics of setting up and executing energy audits in commercial buildings Testing Adjusting and Balancing (TAB) – HVAC 	Intermediate Intermediate Intermediate Intermediate	0920014510 MONTGOMERY0 2 0920002610 MONTGOMERY0 1 0920020164 EAEHPD19 0920020165 Montgomery07

NAME			TOPICS	TOPIC CLASS	GBCI	AIA
Christopher O. Muller		1	Achieving your Indoor Air Quality Goals: Which Filtration System Works Best?	Basic		
Purafil, Inc. 2654 Weaver Way Doraville, GA 30340 Tel: (770) 662-8545, X349 Email: cmuller@purafil.com HONORARIUM None		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		
	LANGUAGES	5	Application of Gas-Phase Air Filtration in Pharmaceutical, Biotechnology, and Life Science Manufacturing	Basic		
	English	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 623.1-2016	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		

NAN	ИE		TOPICS	TOPIC CLASS	GBCI	AIA		
			101163					
Daniel H. Nall, P.E.		1	Chilled Water Low Delta-T Syndrome		0920020168	CWLDT19		
80 Random Road Princeton, NJ 08540		2	Chiller Plant Low Delta-T Syndrome: What It Is and How to Avoid It	Advanced				
Tel: 917.273.0264		3	Close Approach and High Delta-T: Powerful Strategies for Energy Efficiency	Advanced				
Email: dannall@mindspring.com HONORARIUM LANGUAGE:	ring.com	4	Energy Efficient HVAC Strategies	Intermediate	0920014340	EEHS2017		
	LANGUAGES	5	Energy Policy: An Engineering Perspective	Advanced	0920017350	EPEP2018		
None	English	6	Free and Passive Cooling	Basic	CourseBP	FCPD2018		
		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
		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		

NAN	1E		TOPICS	TOPIC CLASS	GBCI	AIA
James L. Newman Newman Consulting Gro	up, LLC	1	Energy and Sustainability in Existing Buildings - Being "Green" and Saving Green with Energy Audits	Intermediate		
31134 Harmony Lane Farmington Hills, MI 483		2	Energy Auditing, Commissioning, IAQ, bEQ, Sustainability and Other Good Stuff (2 hours)	Basic/Interm		
Tel: (248) 626-4910 Email: jimn@newmanconsultin		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
### HONORARIUM \$125 Donation to ASHRAE	LANGUAGES English	4	How ASHRAE's Building Energy Quotient (bEQ) Label Drives High Performance and Energy Savings in Facilities	Intermediate		
	English	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
Bjarne W. Olesen, Pl	h.D.	1	Application of Radiant Heating and Cooling Systems in Buildings	Basic/Interm	0920017416	Olesen02
ICIEE-DTU Department of Civil Engi	neerina	2	Are women feeling colder than men in air-conditioning buildings	Basic		
Nils Koppels Alle		3	ASHRAE a global society for building technology: Past-Present-Future	Basic		
DTU, Building 402 Kongens, Lyngby DK-28 DENMARK	00	4	Can we take into account diversity when specifying requirements for the indoor environment?	Basic		
Tel: (454) 525-4117		5	Clean Cooling of Buildings	Basic		
Email: bwo@byg.dtu.dk HONORARIUM	LANGUAGES	6	How to meet the ventilation required in international standard in an energy efficient way	Basic/Interm		
nononamon.	English	7	Indoor Environment - Health, Comfort & Prodcutivity	Basic/Interm	0920017414	Olesen01
	German Danish	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	
Thomas H. Phoenix, Clark Patterson Lee	P.E., FASHRAE	1	Advanced Energy Design Guide for K-12 School Buildings: Achieving Zero Energy	Intermediate		
Clark Patterson Lee 328 E. Market St Suite 200 Greensboro, NC 27401 Tel: 336.232.5755 Email: tphoenix@clarkpatt		2	Improving Building Performance	Intermediate		
		3	Passion and Performance	Basic		
	atterson.com	4	The Value of ASHRAE's bEQ	Intermediate		
HONORARIUM	LANGUAGES					
	English					

NAME			TORICS	TOPIC CLASS	GBCI	AIA
7 4 7 (14)	_		TOPICS	TOPIC CLASS	GBCI	AIA
Rajan Rawal CEPT University		1 2	Adaptive Thermal Comfort - Theory and Practices Net-Zero Energy Buildings - Nuances of Design, Construction, and Operation	Basic/Interm		
K.L.Campus, Navarangpu 380 009 India	ra, Ahmedabad	3	Personal Thermal Comfort Systems - Concepts and Approaches	Basic/Interm		
Tel: +91 79 6831 0000 Email: rajanrawal@cept.a	c.in					
HONORARIUM	LANGUAGES					
Douglas T. Reindl, Ph		1	An Introduction to Ammonia Refrigeration Systems	Basic	0920014344	REINDL01
University of Wisconsin-M 432 North Lake Street	adison	2	ASHRAE Standard 15- A Review and Update	Basic/Interm	0920014345	REINDL02
Madison, WI 53706		3	Powering with Renewable Resources: Thermal Energy Storage	Basic/Interm		
Tel: (608) 262-6381 Email: <u>dreindl@wisc.edu</u>		4	Refrigerant Safety - Inside and Outside the Machinery Room	Basic/Interm		
HONORARIUM	LANGUAGES	5	Understanding Safety Relief Systems	Intermediate		
None	English					

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

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		
Richard H. Rooley Project Management Partr	nershin	1	Leadership and Management for Engineers – How to achieve profit – for whom?	Basic		
Greenways Church Lane	iolonip	2	Quality of the Internal Workplace and Worker Productivity: A Look beyond Engineering	Basic		
Stoke Poges, Bucks SL2 4	PB .	3	RCM (Reliability Centred Maintenance) in Maintenance and Design	Intermediate		
UNITED KINGDOM Tel: (44) 1753-648040		4	Sick Building Syndrome – Reality or Myth	Basic		
Email: richard@rooley.cor	_	5	Sublime chaos in construction: Each profession and trade as a strange and dominant attractor	Basic		
HONORARIUM None	LANGUAGES English	6	Worst Practise in Design and Operation	Basic		
David N. Schurk 12808 Queensbury Ln E53	22	1	Air Conditioning for the Environment of Care			
Houston TX 77024	55	2	Air-Cooled Chillers, Efficiency, Affordability and Life Cycle Cost Advantages for Healthcare			
Tel: 920-530-7677 Email: david.schurk@glob	alplasmasolutions.com	3	Air-Handling Systems for Hospitals			
		4	Curbing Hospital Energy Costs, Heat-Recovery Chillers for Healthcare			
HONORARIUM	LANGUAGES	5	Keeping Doc's Cool, Dry & Happy in the Operating RoomCan it be Accomplished?			
		6	Understanding the ASHRAE Advanced Energy Design Guide for Large Hospitals, Achieving 50% Energy-Savings			

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IVAIV	/IC		TOPICS	TOPIC CLASS	GBCI	AIA
Michael (Mick) Schwedler Trane		1	Advanced Energy Design Guide for K-12 School Buildings – Achieving Zero Energy	Basic		
3600 Pammel Creek Rd		2	Advanced Energy Design Guide Overview	Basic		
La Crosse WI 54601-75 Tel: 608-787-4339	99	3	Building Decarbonization	Basic/Interm		
Email: mschwedler@tra	ine.com	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		
Chandra Sekhar, Ph	ı.D.	1	Advanced room air distribution strategies for effective airborne infection control	Basic/Interm/Adv		
National University of Si Dept. of Building	ngapore	2	An overview of ASHRAE Standard 62.1	Basic/Interm		
4 Architecture Drive Singapore, 117566		3	Bedroom Ventilation – What do we know and what are the current standards telling us?	Basic/Interm		
SINGAPORE Tel: (65) 65163479		4	Emerging HVAC technologies for energy efficient healthy buildings in hot and humid climates	Basic/Interm/Adv		
Email: <u>bdgscs@nus.edu.sg</u>		5	Indoor Air Quality Audit in Buildings – System Zone Concept	Basic/Interm/Adv		
HONORARIUM	LANGUAGES English	6	Oversized air-conditioning systems and overcooled buildings in hot and humid climates	Basic/Interm		
None	Ligion	7	Sustainability and Resiliency - A paradigm shift in HVAC system design and operation during a pandemic and beyond	Basic/Interm/Adv		

NAN	ME		TOPICS	TOPIC CLASS	GBCI	AIA
Max H. Sherman, Ph.D. Lawrence Berkeley Laboratory		1	ASHRAE Is In The House: Past, Present and Future Initiatives in Residential Building Performance	Basic/Interm/Adv		
Cyclotron Rd MS 90-3074	,	2	ASHRAE's Residential Ventilation Standards	Basic/Interm/Adv		
Berkeley, CA 94720 Fel: (925) 917-0267		3 4	Dr. Duct Tape Smart Ventilation and IAQ Metrics	Basic/Interm/Adv Basic/Interm/Adv		
mail: mhsherman@lbl	.gov LANGUAGES	5	Ventilation: The Once and Future King	Basic/Interm/Adv		
None	English					
Rajinder Singh		1	Applied Psuchrometery for Air - Conditioning Engineers			
USA INSTITUTE OF 1 4/24-B Tilak Nagar	FECHNOLOGY	2	Best Practices for Operation and Preventive Maintenance of HVAC Systems in Green Buildings			
lew Delhi 110018 ndia		3	Use of Green Secondary Refrigerant (Ice Slurry) for Refrigeration and Air-Conditioning			
Tel: 9868246628 Email: <u>rajindersingh110</u>	2@gmail.com	4	Vapour Absorption Refridgeration System			
HONORARIUM	LANGUAGES					
lenry H. Slack, P.E.		1	After the Mold Rush: Solving Mold Problems	Basic		
39 Erie Ave. Decatur, GA 30030		2	Catching Your Breath; Is Your Outside Air Always Safe to Breathe?	Basic		
el: (404) 217-4229		3	Climate Change: How ASHRAE Members Can Prepare	Basic		
Email: <u>henry.h.slack@g</u>	ımail.com	4	Fixing the Great Indoors: HVAC and Indoor Air Quality	Basic		
HONORARIUM	LANGUAGES	5	How Can Climate Change Impact Indoor Air Health?	Basic		
None	English	6	Indoor Air Disasters: Stories of Recovery from Katrina, Hurricanes, Wildfires, and Other Disasters	Basic	0920020208	IAD19
		7	Ventilation Research: Is More Air Better for Us	Basic		

NAM	E		TOPICS	TOPIC CLASS	GBCI	AIA
Wei Sun, P.E.		1	Cleanrooms and HVAC Systems Design Fundamentals	Intermediate		
Engsysco, Inc. 1665 Highland Drive		2	Design of Pressurization Systems – Technologies in Room/Suite Pressure Control, Performance Evaluation and Design Practices	Intermediate		
Ann Arbor, MI 48108 Tel: (734) 274-4022		3	Fan Energy Conservation in Cleanrooms – Airflow Modeling and Demand Flow Control	Intermediate		
Email: wsun@engsysco.	LANGUAGES	4	HVAC Systems Design for Airborne Infection Control Spaces in Healthcare Facilities	Intermediate		
None	English	5	Laboratories and HVAC Systems Design Fundamentals	Intermediate		
		6	Primary, Secondary & Tertiary Air Handling Systems Design Strategies for Controlled Environments	Intermediate		
E. Mitchell Swann, P. MDC Systems, LLC	.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)	Intermediate		
1800 E. Lancaster Ave. Paoli, PA 19301		2	and you may ask yourself "How did I get here?" Forensic Engineering and Forensic Project Management	Intermediate		
Tel: (610) 640-9600, ex Email: swann@mdcsyste		3	Are We There Yet? What is "Substantial Completion"? (and how do we know when we get there?)	Basic/Interm		
HONORARIUM	LANGUAGES	4	Connecting Green Building Outcomes to Enterprise Sustainability Programs	Advanced		
Negotiable	English	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		

NAN	1E		TOPICS	TOPIC CLASS	GBCI	AIA
Om Taneja, FASHRAE, Ph.D., P.E. Associated Consulting Company		1	Facing the Realities and Challenges of Urbanization, Smart Cities, Smart Infrastructure & Smart Buildings for Greater Sustainability & Resilience	Intermediate		
118 Henderson Rd Kendall Park, NJ 08824	,	2	Leveraging Innovative Technologies for Life Cycle Operational Efficiency and Improved Indoor Environment Quality	Intermediate		
Tel: (908) 604-8689 Email: <u>taneja.om@gmai</u>	I.com	3	An Approach to Facilities Operational Improvements: Train O&M Staff and Provide Tools to Measure, Track & Adjust Equipment and Systems	Intermediate		
HONORARIUM	LANGUAGES	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	Intermediate		
None	English Arabic	5	Analytical, Performance & Prescriptive codes & Measure for Life Cycle assessment of Sustainability & Energy Efficiency Projects	Intermediate	0920020209	MASEP19
		6	Analytical, Performance & Prescriptive Measure for Life Cycle assessment of Facilities Projects	Intermediate		
		7	Bridging the Knowledge, Technology and personnel Gap for High Performance Buildings from Concept through Operations	Intermediate		
		8	Framework For Structured Transformation to Future of Facilities to Foster Innovation , Operational Excellence & Resilience -Bridging The Gap In Performance From Concept Though Operations	Intermediate		
		9	Geo-collaborative Infrastructure & associated skills development for smart cities Utilities, Mechanical and Electrical Systems	Intermediate		
		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	Intermediate		
		12	Improved Operations & Maintenance Measures for better Energy Performance and Environmental impact of HVAC & chiller plants	Intermediate		
		13	Myth or Reality Series on Astuteness in Technology Adoption, Building Automation System, Performance Contracting, Energy Efficiency Based Commissioning, Operations & Maintenance	Intermediate		
		14	Operations & Maintenance Measures for Improving Performance of HVAC Systems & chiller plants	Intermediate		
		15	Sustainability & Energy Efficiency - Bridging The Gap In Performance From Concept Though Operations	Intermediate		
		16	Sustainability & Energy Efficiency - Bridging The Gap In Performance From Concept Though Operations	Intermediate		
		17	Technologies for maintaining Safe, Healthy, Resilient and Comfortable occupancy in buildings' before, during and after potential viral, bacterial and environmental & Collateral incidents			

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

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

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