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<th>Time</th>
<th>Education</th>
<th>Process</th>
<th>Government / Community</th>
<th>Private Sector</th>
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<tr>
<td>7:00 AM</td>
<td>Registration 7:00 - 7:30</td>
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<td>8:00 AM</td>
<td>DC-01 Sustainable Design Through CM at Risk &amp; Design Build (Ohio School Facilities Commission)</td>
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<td>DC-02 People, Presence Place: Co-Creating High-Performance Buildings (NIBI)</td>
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<td>DC-03 Economic, Legal and Tax Benefits of Green Buildings (Duffy &amp; Duffy Cost Segregation Services, Brecker &amp; Eckler, Key Bank)</td>
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<td>DC-04 Case Study: Attaining LEED for Existing Buildings: O&amp;M Platinum Requires Behavioral Change (Heapy Engineering)</td>
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<td>9:00 AM</td>
<td>Vendor Setup 8:30 - 11:00</td>
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<td>DC-05 Getting to LEED Platinum in an Ohio Public School (GP Leading Design)</td>
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<td>DC-06 Confluences and Connections: A Sustainable Masterplan for COSI’s Campus (COSI, SMITH GreenHealth Consulting, DesignGroup)</td>
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<td>DC-07 The Akron Zoo’s Path to Net-Zero Energy (Go Sustainable Energy)</td>
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<td>DC-08 Hilton Columbus Downtown Strategies for Achieving LEED Gold in a Hospitality Project (HOK, Heapy, Turner, Moody Nolan, TEC)</td>
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<td>10:00 AM</td>
<td>Lunch and Exhibits 11:30 - 1:00</td>
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<td>DC-09 Fun with BIM, ASHRAE and the Current Alphabet Soup (Sustainability and BIM: Staying out of Jeopardy) (Columbus State Community College)</td>
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<td>DC-10 What Defines Sustainable Laboratories (NIBI, HAWA)</td>
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<td>DC-11 Greening of the City of Powell (Dovetail Solar and Wind)</td>
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<td>DC-12 Open Letter to My Owner, with Love, Your LEED AP (MS Consultants): LEED Specific CF (BD+C, ID+C)</td>
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<td>12:00 PM</td>
<td>Show Floor Open 11:00 - 3:00</td>
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<td>1:00 PM</td>
<td>Optional Show Floor Hours 3:00 - 7:00</td>
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<td>DC-13 Site Responsive Design: Providing a Sensory Experience for Emotionally Disturbed Children through Sustainable Site and Stormwater Systems (DesignGroup, MS/KKG, EMH&amp;I)</td>
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<td>DC-14 BIM and Energy Modeling: How to Determine the Best Sustainable Solution During Design (IHL Engineers)</td>
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<td>DC-15 Design Innovation Case Study: Battelle Darby Creek Environmental Center (DesignGroup)</td>
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<td>DC-16 Achieving a LEED Gold with a Fully Integrated Building Envelope (TREMC0 Roofing &amp; Building Maintenance)</td>
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<td>3:00 PM</td>
<td>1/2 hour Break</td>
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<td>4:00 PM</td>
<td>Happy Hour (sponsored by Tremco) 5:30 - 7:00</td>
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DesignColumbus 2012 Education Day & Trade Show
COSI – Columbus
Monday, April 16

7:00 am to 3:00 pm
Registration

8:00 am to 9:30 am

- **DC-01**
  - **Sustainable Design Through CM at Risk & Design Build**
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW
  - Innovation comes through collaboration, which in turn is facilitated by an integrated project team. In the past, Ohio was hindered by a non-collaborative project delivery method. With the enactment of HB 153 in June 2011 and administrative rules that went into effect at the beginning of 2012, Ohio public authorities now have alternative project delivery methods that enable a more closely integrated project team. These alternative delivery models include construction manager at risk and design-build. Learn about the new options available for public construction in Ohio and how they can be used to create a more sustainable environment. Understand the contractual relationships and processes for a successful project.
    - Understand the changes to public construction caused by the enactment of HB 153 and the new administrative rules.
    - Learn about the project delivery method options available to Ohio public authorities.
    - Learn how these new delivery methods help create a more innovative and integrated project team.
    - Understand the contractual relationships and processes for the new delivery methods.
  - Craig Weise, Construction Reform Program Director
    - AIA, CCM, PMP, LEED AP
    - Craig Weise is the Program Director responsible for leading the State of Ohio construction reform efforts to develop administrative rules and contract documents for alternative delivery methods including design-build and construction management at risk. Previously Mr. Weise was the State Architect with the Department of Administrative Services and held various positions at the Ohio School Facilities Commission. Prior to public service, Mr. Weise worked as an architect in Wisconsin.
  - Jon Walden, Contract & Compliance Manager
    - Jon Walden serves as the Manager of Contracts and Compliance for the Ohio School Facilities Commission. In that role, Jon manages the quality construction, EDGE compliance, and facility maintenance and operations within OSFC. Jon has 17 years in combined public and private legal experience, including a prior position as Associate Assistant Attorney
General, where he represented OSFC, the Ohio State University and other public agencies in public construction matters. Previously Jon served as Senior Contracts Manager for the Commission and a law clerk for then Supreme Court Justice Deborah Cook. He is a graduate of the University of Michigan and The Ohio State University Law School. Esquire

- DC-02
  - People, Presence, Place: Co-Creating High-Performance Buildings
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
  - High performance buildings hit on all cylinders: from environment, to context and program. Globally, achieving sustainable performance and significant energy reduction is hindered by a multitude of issues driven by unique climate conditions, varying code requirements, cultural pressures, natural resource limitations, and soft governmental policies. Delivering high-performance buildings across international borders requires many powerful resources work in concert, with the team at the epicenter. Analyzing our design experience in three world regions Asia, the Middle East, Europe/UK reveals the considerations and unique solutions required to deliver energy reduction around the world. The learnings gleaned from working in these regions point to the following themes: the power of the team, the power of policy, and the power of knowledge. The lessons learned have the power to improve our local building performance.
    - Re-focus efforts on energy reduction as a primary sustainable driver.
    - Choosing aggressive policy drives greater building performance results.
    - Understand and leverage EUI (energy use intensity) to actually consume less energy.
    - Identify the power of a collaborative team is borderless, multi-disciplined, morphs over time and is proven globally.
  - Kathleen Kelly, Principal, NBBJ
    - A Principal at NBBJ, Kathleen has spent her 19 year career designing Science buildings. With 30 research buildings in her portfolio, Kathy is a key proponent of sustainable and regenerative design at NBBJ. Throughout her years as an architect, her experience has spanned a variety of project types, but always with a view to environmental sensitivity. As a part of NBBJ’s Science and Education practice, Kathy is focused on devising sustainable research environments for the future and the environmental performance of buildings. She takes a holistic approach, looking for opportunities to push each project towards a positive outcome for both the human experience and the ecosystem we inhabit. Kathy is a member of the American Institute of Architects and a LEED Accredited Professional.
Andy Snyder, Senior Associate, NBBJ

- An advocate of high-performance design, Andy is a designer in the Columbus studio of NBBJ. Andy believes that great design improves the human condition and is significant of its place and time. His work across markets & geographies explores the intersection of healing, research & education environments. His interests in sustainability extend from environmental responsibility and energy reduction, to improving human experience and value creation. Andy graduated with honors from Cornell University, where he received the Polk and Eschewitz Prizes.

- DC-03
  - Economic, Legal and Tax Benefits of Green Buildings
  - 1.5 GBCI CE and 1.5 AIA/CES LU
  - What are the economic, legal, and tax benefits of green buildings? Learn how energy efficiency can boost R.O.I. and increase profitability and save income taxes. Join an expert panel that includes a Green CPA, a Green Attorney, and a Green Commercial Banker who will discuss construction tax planning and the costs and benefits of energy efficiency and how to maximize the profit in the sustainability equation.
    - Learn how to link technology, operations, finance, value engineering, and life cycle analysis to achieve energy efficiency, cost savings, and the growing demand for green space.
    - Educate your company and your clients on obtaining bank financing for green buildings and qualifying energy efficient building construction and improvements and renovations.
    - Become aware of the legal aspects of LEED and green buildings relating to architectural and construction contracts, warranty issues, and the sale/lease of LEED certified/green buildings.
  - Craig Miller CPA, CGFM, Vice President, Duffy+Duffy Cost Segregation
    - Mr. Miller is Vice President and Client Manager at Duffy+Duffy Cost Segregation Services and Duffy+Duffy Energy Tax Savings. Mr. Miller is a CPA and a Certified Government Financial Manager (CGFM), and he provides continuing education for Cost Segregation, Construction Tax Planning, and EPAct Sec. 179D for the Ohio and Michigan CPA Societies, and has been featured in a Nationwide Webcast and Teleconference with National Business Institute. Mr. Miller has published columns in several professional journals and newsletters, and is an Adjunct Faculty Instructor of Accounting and Finance at two Ohio colleges.
  - Joseph Paterniti, VP, Senior Business Banker, Key Bank
Joe Paterniti is a Vice President, Senior Relationship Manager with Key Bank in their Business Banking Division. Joe provides consulting in cash flow optimization, development, real estate, construction, and implementation of lending strategies that allow business to increase opportunities, prosper and get results. With over 12 years in the financial industry in Public, Non Profit and Private sectors, some highlights include: Owner/Operator of a M&A / Cash flow management company, Owner/Operator of a Economic Development organization that participated in the Management of the ED department of 36 communities in Ohio. He also serves on the Board of the U.S. Green Building Council.

- DC-04
  - Case Study: Attaining LEED for Existing Buildings: O&M PLATINUM Requires Behavioral Change
    - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
    - This seminar details the progression of a LEED for Existing Buildings: Operations and Maintenance (LEED-EB: O&M) project where the certification goal transformed from what initially was believed to be a nearly unachievable GOLD level to actually become LEED PLATINUM. Insight on the overall implementation and documentation process and the organization’s internal behavioral change/transformation will be presented. This transformation of a conservative-minded firm’s project occurred through the LEED Team’s determined efforts using a process that focused on guiding employees to think and act beyond the norm. Although eco-negativity was not very prevalent, with over 140 employees all needing to be on the same page, effecting common ground at such a higher environmental plane was challenging (and sometimes comical). Attendees will certainly benefit from the insight on how “easy” it is to become LEED Platinum.
      - Attendees will assess the people and cost savings benefits of pursuing LEED for Existing Buildings: Operations and Maintenance certification.
      - Attendees will review the advantages of using sustainable/green principles to guide building operations.
      - Participants will evaluate an actual LEED for Existing Buildings: O&M project and a recommended path toward achieving such certification for their own building(s).
      - Attendees will gain insight on the overall implementation and documentation process and the organization’s internal behavioral change / transformation.
  - Ryan Hoffman, LEED & Energy Services Manager, Heapy Engineering
    - As Manager of Heapy Engineering’s LEED & Energy Services Group, Ryan has full responsibility for the technical aspects as well as the planning, scheduling and delivery of Heapy Engineering’s LEED and Energy Services
projects. Ryan’s direct oversight of Energy Conservation and LEED Services projects includes: LEED Program Management, Energy Modeling, Energy Master Planning, Energy Auditing, Utility Analysis, and implementation projects involving all of the above. Ryan is also versed in the ASHRAE 90.1 Appendix G Energy Modeling process, ENERGY STAR, and other energy legislation. Ryan is a frequent lecturer on LEED and Green Building concepts and has educated over 500 people in the area of LEED and Sustainability. Speaker Credentials:

- University of Dayton Bachelor of Mechanical Engineering
- LEED Accredited Professional (LEED AP BD+C, O+M)
- Association of Energy Engineers – Certified Energy Manager (CEM)
- ASHRAE – Building Energy Assessment Professional (BEAP)

9:30 am to 10:00 am
Break

10:00 am to 11:30 am

- DC-05
  - Getting to LEED Platinum in an Ohio Public School
  - Stakeholder involvement in innovation
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
  - London Middle School boasts many unique design features. This includes being infused with sustainable features (from prairie grass, to flooring materials, to clerestory windows) that enhance the district’s bottom line and contribute to their educational mission, delivering a bright, open, airy learning environment. Allison Beer McKenzie, Director of Sustainability for SHP Leading Design, will lead the discussion, starting with the initial sustainable conversation through the design and delivery of this project including the buy-in process from the owner.
    - Evaluate the benefits and potential pitfalls of striving for LEED Platinum certification.
    - Discuss the importance of engaging all project stakeholders in the design process to ensure that owner goals are being met.
    - Analyze the importance of collaboration between the design and construction teams in the LEED certification process.
    - Explore sustainable design strategies that are common and achievable in Ohio.
Allison Beer McKenzie, AIA, LEEP AP, Architect, Director of Sustainability; SHP Leading Design

- Allison has facilitated numerous Eco-Charrette processes over the past three years, helping guide SHP’s projects toward their LEED goals through moderation and project support. Allison has shown her leadership in sustainable design as a member of the Cincinnati US Green Building Council (USGBC) Board of Directors and the past Chair of the American Institute of Architect’s (AIA) Cincinnati Committee on the Environment (COTE). As an expert on sustainable design, Allison routinely shares her knowledge regionally and nationally, speaking at conferences such as Greenbuild and NeoCon. You can also follow Allison online through her blog Building My Green Life at www.buildingmygreenlife.com.

Eric Steva, AIA, LEED AP, Project Manager/Senior Project Architect, SHP Leading Design

- With over 20 years of architectural design experience, Eric has provided design solutions for a variety of clients. As a Project Manager and Project Architect for SHP Leading Design, Eric’s responsibilities have ranged from individual projects to building programs over $100M. His work includes a number of LEED projects, ranging from Silver to Platinum. Eric is actively involved with the AIA, serving as AIA Kentucky President in 2009 and on the AIA Kentucky/Indiana Convention Committee in 2011, and was recently honored with the AIA Kentucky Distinguished Service Award.

DC-06

Confluences and Connections: A Sustainable Masterplan for COSI’s Campus

- Project Site Factors
- 1.5 GBCI CE and 1.5 AIA/CES LU/HSW
- Master planning provides a road map for future development. When the process of creating a master plan involves the larger community, what emerges can be surprising. This session will share the process used by COSI to arrive at a sustainable master plan for the 17 acre campus and explore the ways in which that plan shapes a design process and ensures that overarching goals are met.
  - Learners will discuss design approaches suggested by the master plan
  - Learners will identify specific challenges and potential solutions to greening a campus of this size
  - Learners will analyze the guidelines that appear in the plan based on their prior experience
  - Learners will be exposed to logic models that enhance the design process

Sharon Tinianow, Director of Sustainability Initiatives, COSI

- Sharon Tinianow holds a master’s degree in Ecological Teaching and Learning from Lesley University. She has served as COSI's Director of Sustainability Initiatives for the past three years. Her work includes
developing institutional sustainability goals, managing projects, and communicating results to COSI Team, members and the community. In addition, she leads COSI's Energy and Environment area of focus by developing strategic partnerships that result in new exhibits and programs. Tinianow has presented extensively at conferences on informal science learning and sustainability.

- Jerry Smith, FASLA, EDAC, LEED AP, Principal, SMITH\GreenHealth Consulting
  - Jerry Smith is a Principal at SMITH\GreenHealth Consulting in Columbus – integrating nature and design research into healthy environments and sustainable sites. Jerry serves on the Technical Core Committee and the Human Health & Well-being Sub-Committee of the Sustainable Sites Initiative and was on the 2010 Board of Directors of the U.S. Green Building Council of Central Ohio. Jerry is also the landscape architecture representative on the Environmental Standards Council of The Center for Health Design, serves on the Steering Committee of the Green Guide for Health Care and the Advisory Board of the Therapeutic Landscapes Network. Jerry holds degrees in Botany, Architecture and a Masters in Landscape Architecture and is a Fellow in the American Society of Landscape Architects.

- Erik Burdock, Director of Experience Design
  - Erik Burdock has more than 15 years of exhibit development experience with both permanent and traveling exhibitions, and was integral in developing the permanent exhibit base for COSI. His responsibilities also include identifying strategies for project managers to use in the coordination of the internal design/development team with outside contractors, including researchers, designers, fabricators, engineers and artists. Mr. Burdock has a Bachelor of Fine Arts degree in Industrial Design from Columbus College of Art & Design.

- Mike Bongiorno AIA, LEED AP BD+C, Principal, DesignGroup
  - Michael is a principal and senior designer at DesignGroup, an AIA Gold medal architecture and design firm in Columbus. Michael’s focus is on work that supports and enhances the fabric of the city and furthers a fundamental belief that great design is the essential building block to vibrant, healthy communities. His work has garnered numerous awards in Ohio, Indiana, and Illinois. His current projects include the Columbus Museum of Art Expansion, Battelle Darby Creek Metro Park Nature Center, McConnell Arts Center of Worthington and the award winning Grange Insurance Audubon Center. He serves on the board of directors of both the Columbus Center for Architecture and Design and AIA Columbus. Michael is a cum laude graduate of Pratt Institute School of Architecture in New York City and has lived and traveled extensively
abroad. He recently authored the article “Columbus, City of Design?” on ColumbusUnderground.com, making the argument for Columbus to pursue the designation of a UNESCO City of Design.

- DC-07
  - The Akron Zoo's Path to Net-Zero Energy
    - Project systems and Energy impacts
    - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
    - The AIA, ASHRAE, US-DOE, and other organizations have clearly stated that net-zero energy new construction will be attained within two decades. As new buildings only represent a small percentage of the overall building stock, many existing buildings must be retrofit to approach net-zero energy as well. Go Sustainable Energy conducted a net-zero campus energy assessment for the Akron Zoological Park. The path to net-zero energy includes aggressive energy efficiency combined with renewable energy installations. Analysis focuses on major implementation constraints, particularly on limited usable space for renewable energy generation. The presentation will contain descriptions of the most impactful energy efficiency recommendations and planned renewable energy installations. Finally, we will discuss how this methodology may be applied to other commercial facilities and campuses both from a retrofit and a new-construction perspective.
      - Identify the different definitions of "net-zero energy"
      - Understand the obstacles associated with achieving net-zero energy in new construction or existing buildings
      - Better compare the cost effectiveness of energy efficiency vs renewable energy investments
      - Apply net-zero energy principles to their own facilities or designs.
    - Gregory Raffio, Engineer, Go Sustainable Energy
      - Greg Raffio, PE, LEED AP BD+C, received his Master of Science in Mechanical Engineering from the University of Dayton. At UD, he worked with the Industrial Assessment Center and co-founded the Building Energy Center (BEC). Greg published his graduate thesis on residential energy efficiency, net-zero energy design, and existing building retrofits. Greg is both a published author and technical editor. He has presented at conferences, trainings, seminars, and universities. Typical presentation topics include net-zero energy, energy efficiency, renewable energy, energy modeling, and sustainability. He is both passionate and tactful in presentations, tailoring the technical level to the crowd.
    - Peter Kleinhenz, Engineer, Go Sustainable Energy
Peter Kleinhenz, PE, received his Master of Science in Mechanical Engineering from the University of Dayton. Pete has been commissioning LEED buildings for over three years, where he has studied many building systems and has helped to teach facility personnel about efficient building operations. Between his professional and graduate studies, he has completed over 90 energy audits of commercial and industrial facilities. As a graduate assistant at UD, he was the lead student of the Industrial Assessment Center, where he led and trained a team of energy engineers.

• DC-08
  • Hilton Columbus Downtown – Strategies for Achieving LEED Gold in a Hospitality Project
    • 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
    • The project design and construction team will present the sustainable design strategies and process for the Hilton Columbus Downtown project, a full-service convention hotel currently under construction across from the Greater Columbus Convention Center. The course will analyze design challenges related to site, massing and orientation, materials, HVAC systems, lighting design and plumbing fixture selection while striving to balance sustainable goals with program requirements, first cost limitations, and end-user guest experience. Energy modeling, carbon tracking and lighting design for the project will be reviewed. The project team will share the solutions developed in order to construct a hotel in an urban environment and the process of coordinating LEED construction activities.
    • Analyze site, massing and materials design challenges in balancing a project’s sustainable goals with program requirements and guest experience.
    • Develop lighting design strategies (from fixture selection to controls design) to maximize energy efficiency without sacrificing lighting quality.
    • Identify the challenges of modeling a complex hospitality project’s energy use while balancing the owner’s requirements for both first cost limitations and energy and water savings goals.
    • Coordinate LEED construction credit documentation and overcome obstacles of hotel construction in an urban environment.
  • Ardra Zinkon, IALD, MIES, LEED Green Associate, Director of Lighting Design, Tec Inc. Engineering & Design
    • Ardra graduated from The Ohio State University with a degree in Theatre with an emphasis in Lighting Design. She has been past president of the Columbus IES section, served on the IALD Energy & Sustainability Committee, and serves on the IES Progress Report Committee and the IES

- Michael Senger, PE, LEED AP BD+C, ID+C, Mechanical Engineer, Heapy Engineering
  - Michael has been with Heapy Engineering since 2005 as a Sustainable Design Engineer and Mechanical Engineer. His energy analysis experience includes ASHRAE Standard 90.1 Energy Cost Budget Method, Energy Code permit applications, and Life Cycle Cost Analysis. He has been involved with Sustainable and HVAC Design on many projects including Hospitality Facilities, Educational Facilities, Office Buildings, Healthcare Facilities and Laboratories. Michael became LEED Accredited in 2005, and was selected for the LEED-CL Pilot Exam in 2006. Michael has also served as member of the Board of Directors, including a term as Chapter Secretary, for the USGBC Cincinnati Regional Chapter.

- Heather Cassady, LEED AP BD+C, Project Engineer & Sustainability Manage, Turner Construction Company
  - A career professional of Turner Construction Company with 10 years of experience, Heather is a Construction Engineering graduate of the University of Akron. Heather has been instrumental in the coordination and documentation for the Hilton Columbus Downtown project’s attempted LEED Gold certification. Her project portfolio includes The Lazarus Building Renovation, Research Building 3 Nationwide Children’s Hospital, U.S. Courthouse and Federal Building in Cleveland Ohio, the Dolan Science Center at John Carroll University, the Physical Science Center at the Ohio State University, and the Hillcrest Hospital West Wing Bed Tower in Cleveland Ohio.

11:30 am to 1:30 pm
Lunch

11:30 am to 3:00 pm
Exhibits
2:00 pm to 3:30 pm

- **DC-09**
  - **Fun with BIM, ASHRAE and the Current Alphabet Soup**
  - **(Sustainability and BIM: Staying out of Jeopardy)**
  - 1.5 GBCI CE and 1.5 AIA/CES LU
  - This presentation is a participatory event designed not only to convey current and future trends in sustainability and BIM, but also to demonstrate an effective method of updating and motivating colleagues and clientele.
    - Attendees will develop a greater understanding of current LEED® and BIM requirements and applications.
    - Attendees will test their current knowledge of sustainability and BIM principles and practices utilizing a unique, yet familiar, gaming format.
    - Attendees will be able to develop information and concepts via an interactive, rather than passive, method to increase knowledge and understanding.
    - Attendees will gain immediate feedback to measure their current knowledge levels in the complex topics of sustainability and BIM.
  - Dr. Margaret E. Owens, Ph.D., Assistant Professor for Construction Management, Columbus State Community College
    - Margaret has many years experience in the built community, and serves as the BIM Certificate team leader for the Construction Sciences and Engineering Technology Department. She has played an active role in Habitat for Humanity and as a liaison to local career centers for students considering a career in the industry.
  - Dean M. Bortz, MA, CSI, CDT, Assistant Professor for Construction Management, Columbus State Community College
    - Dean has been a member of CSI for many years in several chapters. He currently serves as the faculty advisor for the CSCC Student CSI Chapter, as well as CMGT program co-coordinator. He was honored in 2010 with the national CSI Student Liaison Award.

- **DC-10**
  - **What Defines Sustainable Laboratories?**
  - Project systems and Energy impacts
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
  - What defines sustainable laboratories? Through the design process utilized with Research Building 3 (RB3) for Nationwide Children’s Hospital Research Institute, the design team investigated interrelated sustainable features that we believe make the biggest impact to researchers and the work investigated in their laboratories. The impact features include: energy efficiency, water conservation, efficient space utilization, lighting and operating costs. Through sharing of the
RB3 story, one will understand energy reduction provides the overarching link to addressing all the high impact areas of our sustainable focus. Our analytical process of defining energy reductions best value, led the team through an investigation of multiple systems combined with developing a load reduction strategy and enclosure evaluation, delivered energy savings of 30%. The resultant energy savings drove correspondent reduction in our other sustainable areas of interest noted above.

- Identify interrelated sustainable features generating the most value to laboratory users.
- Apply an energy reduction focused design strategy which will drive several other sustainable reductions throughout the project.
- Design an envelope enclosure that enhances the mechanical strategies.
- Measure the additional energy savings delivered by air censoring.

Kathleen Kelly, Principal, NBBJ
- A Principal at NBBJ, Kathleen has spent her 19 year career designing Science buildings. With 30 research buildings in her portfolio, Kathy is a key proponent of sustainable and regenerative design at NBBJ. Throughout her years as an architect, her experience has spanned a variety of project types, but always with a view to environmental sensitivity. As a part of NBBJ’s Science and Education practice, Kathy is focused on devising sustainable research environments for the future and the environmental performance of buildings. She takes a holistic approach, looking for opportunities to push each project towards a positive outcome for both the human experience and the ecosystem we inhabit. Kathy is a member of the American Institute of Architects and a LEED Accredited Professional.

Ronald Turner, Principal, HAWA Incorporated
- Mr. Turner joined HAWA Incorporated in 1996, is a Mechanical Engineer and Principal with the firm. He is responsible for the design and on-site construction observation and construction review of HVAC, plumbing and fire protection systems. Prior to joining HAWA, Mr. Turner worked seven years in the construction industry where he was responsible for on-site construction. Five of those years were spent with an HVAC and Temperature Controls Contractor. His HVAC and temperature controls responsibilities included: designing projects, scheduling labor, construction coordination, final inspection and development of the punch lists. Mr. Turner was the Project Manager and Lead Mechanical Engineer on Nationwide Children’s Hospital Research Building III. He has worked for a variety of clients including universities, Fortune 500 corporations and regionally based public institutions. Mr. Turner is a LEED accredited professional.
James Porter, Associate, HAWA Incorporated

- Mr. Porter has twelve years of Mechanical Engineering experience and is an Associate with HAWA Incorporated. His responsibilities include designing heating, ventilation, and air conditioning systems, and plumbing and fire protection for renovation projects and new facilities. He regularly assumes the role of project manager on his project where his strong organizational skills are an asset. His clients span corporate, health care facilities, research labs, and educational disciplines with a focus on energy modeling and sustainable design. He also is a LEED AP BD+C. Mr. Porter was the Energy Modeling and Mechanical Engineer on the Nationwide Children’s Hospital Research Building III project.

- **DC-11**

  - **Greening the City of Powell**
  - Project systems and Energy impacts
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
  - The City of Powell is moving towards completion of a 6 point green energy project. The project includes a combination of energy efficiency component retrofits, and a 80kw Solar Photovoltaic component that allows the City to significantly reduce its overall energy consumption and become a producer of green energy. The project will have a positive return to the resident taxpayer in terms of both dollars saved and a cleaner environment, as well as provide a boost to the Ohio economy as a whole. From the City’s perspective, the project serves two major purposes: The first purpose moves them towards completing goals set down under the Central Ohio Green Pact resolution of 2007, and being part of the economic recovery for Ohio and the nation as a whole. The second major purpose is that it assists Powell in becoming a major emergency response center in this southern portion of Delaware county, able to generate their own power through the photovoltaic system, in any extended emergency situation where the grid is down. The Project included retrofitting all the lights with LED, adding light sensors, a new Solar Pavilion in a city park, a solar structure to cover the city’s Police cars. Building Energy modeling and a programmable thermostat retrofit were also a part of the project.
    - Quantifying the Energy savings
    - Innovative use of the solar structures
    - Lightings impact on the project
    - Modeling and managing the cities energy usage

- David Cohen, Regional Manager, Dovetail Solar & Wind

  - NABCEP Technical Sales Certified, MBA Otterbein University, BSBA The Ohio State University

- Eric Fischer, Development Planner, City of Powell

  - B.A., B.S., Economics, The Ohio State University
DC-12

- Open Letter to My Owner, with Love, Your LEED AP
  - Stakeholder involvement in innovation
  - 1.5 GBCI LEED-Specific CE (BD+C, ID+C) and 1.5 AIA/CES LU/HSW/SD
  - Our letter to the owner describes what LEED APs desire their building owners to know about LEED certification, and the owner’s role in the certification process. Our crucial points will help the LEED application and certification go smoothly and be successful. These points are developed from ms consultants’ experiences in certifying commercial and public projects throughout Ohio, Florida, and the Midwest. Each point is explained through existing project experiences and directly linked to LEED credits for New Construction and Commercial Interiors. Topics include the owners’ motivation to go LEED, formulating the project strategy for success including costs, owners’ engagement in developing a LEED project, what the expectations of energy efficiency are under LEED, the owners’ role in recycling, willingness of the owner to be the enforcer, and thinking about public outreach and education. Building owners, LEED APs, and everyone involved in LEED certification will gain from this presentation of ms consultants’ experiences.
    - Understand the motivation as an owner to go LEED and how this shapes the LEED certification process.
    - Insight into formulating the project strategy considering project costs verses LEED credits and levels of certification.
    - Understand where the owners’ engagement and enforcement is important to obtain LEED credits and certification.
    - Learn how measures towards LEED energy credits define the project’s energy efficiency.
    - Consider the advantages of public outreach and education.

- Eric Elizondo, Technical Service Manager, ms consultants, inc
  - Eric Elizondo is a member of the American Institute of Architects, the National Council of Architectural Registration Boards, the US Green Building Council-Central Ohio Chapter. He has been a Registered Architect since 2001 and a LEED Accredited Professional since 2006. Current LEED AP BD+C Credential. He earned a Bachelor of Architecture Degree and a Master of Architecture Degree from Kent State University. His thesis focused on Sustainability, Architecture and Design. He served as a Design Studio Professor for two years at Kent State. He was elected to serve on the first USGBC-COH Board of Directors, he currently serves as the Co-Chair of the Finance Committee for the US Green Building Council-Central Ohio Chapter, serves on the Board of Directors and is

- Melissa Berardi, Project Designer, ms consultants, inc
  - With 10 years of design and production in commercial and retail clients, Melissa Berardi is experienced in all aspects of architecture from design concepts through construction administration. Melissa has been a sustainable design leader in over 550,000 square feet of LEED Registered and Certified space located across the country from Austin, Texas to Orlando, FL. Today, Melissa works for ms consultants focusing on execution of the LEED program for the current client portfolio with 19 active registered LEED projects in both NC& CI. Melissa is actively involved with the USGBC – Central Ohio Chapter participating on the Finance committee. Melissa’s educational background is a Bachelors of Science from the School of Architecture at The Ohio State University.

- Jason Christoff, PE, ms consultants, inc
  - With an emphasis on commercial/retail architecture and engineering services, Jason’s experience at ms consultants consists of managing the scope, schedule, and budget of both small and large multidiscipline design projects. With over ten years experience in mechanical engineering, he has developed a special interest in LEED, sustainable design and energy conservation. Currently, Jason is Project Manager for a multi-unit retail banking rollout program with 19 certified and registered bank branches. Jason graduated with a Bachelors of Science in Mechanical Engineering from Ohio University and is a registered Professional Engineer.

- Dan Barringer, Architect, ms consultants, inc.
  - LEED AP ID+C; With over 17 years as an NCARB registered architect, Dan Barringer is experienced in all aspects of architecture from design concepts through construction administration. Dan Barringer’s professional experience includes employment with Skidmore, Owings & Merrill, Ellerbe Becket, SEH, URS and Lápiz Design where he developed his knowledge of sustainable design in architecture. Today, Dan Barringer works for ms consultants focusing on LEED commercial and public projects. Dan Barringer is actively involved with the USGBC – Central Ohio Chapter (Treasurer 2010-2011). Dan Barringer’s educational background is centered in the American Midwest, with a Bachelors of Science from the School of Architecture and Urban Design at the University of Wisconsin – Milwaukee and a Masters in Architecture from the University of Minnesota.
3:30 pm to 4:00 pm
Break

4:00 pm to 5:30 pm

- DC-13
  - Site Responsive Design: Providing a Sensory Experience for Emotionally Disturbed Children through Sustainable Site and Stormwater Systems.
  - 1.5 GBCI CE and 1.5 AIA/CES LU/HSW
  - Using the Alum Crest / Clearbrook School for Emotionally Disturbed (ED) Students as a case study, we will explore the innovative ways a school can be designed for a specialized population and still meet and exceed LEED expectations for site and stormwater design. This case study offers a unique opportunity to discuss how design can positively impact decisions for the users, building, site and community. Systems that will be discussed and explained in detail will include: Archeological Analyses, Infiltration Pit Testing, A Zero Discharge Stormwater Design with Infiltration Pit Chambers, Bio-retention, Bioswales, Sensory/Rain Gardens and Planters, Expression of the stormwater design architecturally. Attendees will discover ways to design the site and stormwater system in a more unified way and how to apply these strategies on their own projects.
    - In this session, we will discuss how and why multiple and innovative design systems came together for the project site and building.
    - In this session, you will gain a detailed understanding of the types of systems we applied to the site and building.
    - In this session, we will explain how the systems helped to create a more integrative school building and site for the unique needs of the emotionally disturbed students.
    - In this session, you will be able to understand when and how to apply the systems to your own projects.
  - Jocelyn Krosky, LEED AP BD+C, Associate, DesignGroup
    - With over 10 years of experience, Jocelyn has focused on and contributed to projects in the educational, library, workplace, and civic markets. Working in close collaboration with multidisciplinary teams, Jocelyn applies her creative talent to each project and pushes it past standard solutions to achieve a higher level of design that addresses both the aesthetic, functional, and sustainable needs and desires of the Owner. Her desire is to deliver the best in client service and her design abilities and interpersonal skills will translate the vision of the client to a functional, sustainable, and elegant design. Jocelyn holds a Bachelor of Architecture from the University of Cincinnati and is a LEED accredited
professional. For over 14 years, Jocelyn has been involved with the Exploring Architecture Programs for high school students; where students get to see, learn and experience firsthand what architects do on a daily basis through learning sessions, building tours, and design challenges. Bachelor of Architecture, University of Cincinnati. LEED AP, BD+C

- Michael Pistiolas, Senior Landscape Architect, MSI | KKG
  - Michael has more than ten years professional experience on a wide range of projects from urban design and streetscape enhancements to campus planning projects, with a focus on education and healthcare campuses. Mr. Pistiolas is involved in all phases of a project from design development through construction documentation, and is an office leader in the construction administration process. Bachelor of Art in Environmental Studies, Denison University. Masters of Landscape Architecture, The Ohio State University. RLA. LEED AP BD+C. CDT.

- Christopher Fleming, Senior Project Manager, EMH&T
  - Chris is a 1994 graduate of the University of Cincinnati where he earned his bachelor's degree in civil engineering. He is a registered professional engineer in Ohio and certified in Leadership in Energy and Environmental Design. He is a leader in his field and a founding member of EMH&T's NextGenerationGreen program, dedicated to educating on and implementing LEED and sustainable practices. Chris has also performed training seminars for pavement design and rehabilitation, stormwater detention calculations, stormwater quality design and site utility design. He is a registered provider for the American Institute of Architects continuing education program and is currently performing seminars on Green site design. Chris is an active member of the American Institute of Architects Columbus branch and serves on its public affairs committee. He is a board member of the Center for Architecture and Design, which is a not-for-profit group promoting good design in Central Ohio. He is also a board member of the Columbus Early Learning Center, a not-for-profit organization that has been providing early childcare and education in Columbus for over 100 years. He sits on the facility committee for each board. Bachelor of Civil Engineering, University of Cincinnati. PE, Ohio. LEED AP.
• DC-14
  o BIM and Energy Modeling: How to Determine the Best Sustainable Solution During Design
    o Project systems and Energy impacts
    o 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
    o Designers can determine the benefits of sustainable strategies early on in the design process by using energy modeling with BIM/Revit to make and help inform design decisions. Using real-life examples, Mr. Lonnemann and Mr. El-Sayed will demonstrate how BIM and energy modeling affects building design. Through this advanced approach, the focus will be on implementation and benefits. Find out how it can be best incorporated into a project and how to make it work for you. In addition, not only will they address current challenges, they will address the future outlook of the technology as well.
      ▪ Identify current BIM and energy modeling tools
      ▪ Demonstrate the process of converting BIM to energy results
      ▪ Illustrate real world examples of the benefits of the energy modeling process
      ▪ Summarize and evaluate outcomes and challenges of this technology
  o Robert Lonnemann, PE, LEED AP, CEM, Principal, KLH Engineers
    ▪ A member of KLH Engineers since 1985 and a principal since 1996, Robert Lonnemann serves as senior vice president of mechanical engineering. He is registered as a Professional Mechanical Engineer in more than 35 states, a LEED Accredited Professional as well as a Certified Energy Manager. He is the Principal in Charge of KLH Energy Solutions; drawing on his experience of over 25 years of energy efficient designs of mechanical systems.
  o Mohammed El-Sayed, PE, LEED AP BD+C, CEM, CEA, MSc Environmental Health & Safety, Mechanical Engineer, KLH Engineers
    ▪ A member of the firm since 2007, Mr. El-Sayed is a LEED Accredited Professional as well as a Certified Manager. Because energy savings is a passion of his, Mr. Elsayed manages the KLH Energy Solutions Department. His responsibilities include project supervision, energy audits, energy modeling, LEED consulting, and more. He is also involved in the design of efficient mechanical systems as well as monitoring energy incentives and current best practices.

• DC-15
  o Design Innovation Case Study: Battelle Darby Creek Environmental Center
    o 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
    o Principal and Senior Designer at DesignGroup, Michael Bongiorno AIA LEED AP BD+C, will discuss design innovations employed on the Battelle Darby Creek Environmental Center. The project is a unique educational/interpretive building
and site located in The Battelle Darby Metro-Park on the west side of Columbus. The building is designed to accommodate school groups in a classroom setting, a large meeting space, interpretive displays, and other features supporting the educational needs for Metro Parks. The center will support Metro Park’s vision to encourage visitors by cultivating their knowledge of the diverse ecosystem found within the Battelle Darby Creek Watershed. This includes the re-introduction of bison, native prairies, creeks, wetlands and forests. The building will support sustainability practices and will utilize this feature as an education tool for the public. The building will be one of the locations for the 2012 Eco-Summit.

- Will demonstrate how the facility will cultivate knowledge of the diverse ecosystem found within the Battelle Darby Creek Watershed.
- Will demonstrate how the building will support sustainability practices and will utilize this feature as an education tool for the public.
- Understand design challenges of site, massing and materials in balancing a project’s sustainable goals with program requirements and visitor experience.
- Understand the challenges of developing a conditioned building within a park setting that minimizes it’s visual and ecological footprint.

- Mike Bongiorno, AIA, LEED AP BD+C, Principal, DesignGroup
  - Michael is a principal and senior designer at DesignGroup, an AIA Gold medal architecture and design firm in Columbus. Michael’s focus is on work that supports and enhances the fabric of the city and furthers a fundamental belief that great design is the essential building block to vibrant, healthy communities. His work has garnered numerous awards in Ohio, Indiana, and Illinois. His current projects include the Columbus Museum of Art Expansion, Battelle Darby Creek Metro Park Nature Center, McConnell Arts Center of Worthington and the award winning Grange Insurance Audubon Center. He serves on the board of directors of both the Columbus Center for Architecture and Design and AIA Columbus. Michael is a cum laude graduate of Pratt Institute School of Architecture in New York City and has lived and traveled extensively abroad. He recently authored the article “Columbus, City of Design?” on ColumbusUnderground.com, making the argument for Columbus to pursue the designation of a UNESCO City of Design.
• DC-16
  o Achieving LEED Gold with a Fully Integrated Building Envelope
  o 1.5 GBCI CE and 1.5 AIA/CES LU/HSW/SD
  o Project Profile: Major Renovation of Tremco HQ Office Building in Beachwood OH. The presentation outlines the design philosophy and considerations in achieving 72 points for LEED Gold status under the LEED NC 2009 program. Each awarded point and how it was achieved will be outlined. There will be discussions on the implemented processes, pre and post construction waste management, the many building integrated systems for both energy & water conservation and consumption, life-cycle considerations, and the ongoing measurement & verification.
    ▪ Identify principles & components of Fully Integrated Building Envelopes and how they contribute to the LEED program.
    ▪ Understand how on-site sorting, material recycling & reuse, and new material selection contribute to LEED.
    ▪ Learn about four types of sustainable roof systems; vegetated, reflective high performance, single-ply and rooftop photovoltaic systems.
    ▪ Recognize building components that increase energy efficiency, reduce operating costs and how they impact LEED certification.
  o Mark G. Anderson, AIA, LEED BD+C, GRP, Sustainable Market Development Manager
    ▪ Professional Qualifications: Construction Industry, 28 years; including Roofing Industry, 19 years • Roof Consultants Institute • Advanced Wind and Drainage Design • Advanced Building Envelope Analysis • Advanced Concrete, Coatings and Sealant Analysis • Accredited Professional by USGBC for Leadership in Energy & Environmental Design • Accredited Green Roof Professional as designated by GRHC (GRP) • ASTM Green Roof Systems Sub-Committee member • Licensed MasterSpec specification writer • Guest Speaker for USGBC, GRHC, AIA & CSI National and Regional Conventions • Certified Continuing Education (AIA HS&W approved) Seminar Provider. Professional Affiliations: US Green Building Council (USGBC) • Green Roof for Healthy Cities (GRHC) • American Institute of Architects (AIA) • American Society of Testing Materials (ASTM) • Construction Specification Institute (CSI) • Roof Consultants Institute (RCI) • National Roof Contractors Association (NRCA). Education: University of Nebraska • B.A. Architecture, 1989 • B.S. Construction Engineering, 1985.

5:30 pm to 7:00 pm
Happy Hour