## **SYRACUSE CENTER OF EXCELLENCE**

# **The 12th Annual Symposium**

## on Environmental & Energy Systems

## WEDNESDAY, OCTOBER 10th-Syracuse University's Hendricks Chapel

7:30 pm Syracuse University Lecture Series: "350: The Most Important Number in the World," Bill McKibben, environmentalist,

author, and founder of 350.org

THURSDAY, OCTOBER 11th-Oncenter Complex 800 South State Street

7:30 - 8:30 a.m. **Registration & Networking Breakfast** 

Welcome and Introduction

Edward Bogucz, Executive Director, SyracuseCoE

8:45 - 9:45 a.m. Keynote: "Regenerative Design and Development – Re-membering the Patterns of Life," Bill Reed, Regenesis &

Integrative Design Collaborative, Sponsored by C&S Companies

AIA Credits: 0.75\_HSW/SD/LU & GBCI Approved Course: 0.5 CE Hour

10:00 - 11:00 a.m. **Session 1** 

8:30 - 8:45 a.m.

**TRACK A: Sustainability Indicators** 

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hours

"12 Traits for Sustainable Communities," Peter Arsenault, Greening USA

"Sustainability Dashboard Presentation," TBD

TRACK B: Energy Modeling of Advanced Buildings

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

"Parametrics Enhanced Energy Modeling, Intelligence for Achieving Low Energy and Net Zero Buildings,"

Joseph Disanto, SAIC

"A Green Building Case Study to Demonstrate the Features of Virtual Design Studio," Yixing (Ethan) Chen,

Syracuse University

"Prediction and Improvement of Energy Efficiency of Building HVAC Systems," Caihua Liang, Southeast University

TRACK C: Harnessing Technology: Commercializing University Scholarship

AIA Credits: 1\_LU & GBCI Approved Course: 1.0 CE Hour

Moderator: Mark Weldon, Syracuse University

"Shipley Center," Matt Draper, Clarkson University

"Blue Highway," Laila Kobrossy Audi, Blue Highway

"NSF: I-CORPS Program," Tim Labreche, SyracuseCoE

11:00 - 11:15 a.m. Coffee Break and Poster Viewing

11:15 a.m. - 12:15 p.m. **Session 2** 

TRACK A: Innovative Approaches to Resiliency at the Community-Scale

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

Moderator: Frank Caliva, Strategic Communications, LLC

"Transforming Vacant Land: A Sustainable Reuse Strategy for Urban Communities," Aaron Lehman,

**Atlantic States Legal Foundation** 

"Biomimicry at the Ecosystem Scale: Building in Nature's Image," Kevin Stack, Northeast Green Building

Consulting, LLC

"SUNY Oswego Case Study, Collaboration in Action," Jodi Smits Anderson, DASNY

TRACK B: Indoor Environmental Quality

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

"Effects of Ventilation on Perceived Indoor Quality and Human Performance," Jingjing (Sabrina) Wang,

Syracuse University

"Effects of 4 GUI Dashboards on Energy Use with a Personalized Environmental Control System (PECS),"

Alan Hedge, Cornell University

"Dynamics of Clothing Thermal Insulation and Evaporative Resistance and its Implications to Personal

"Comfort and Environmental Engineering," Jintu Fan, Cornell University

#### TRACK C: Talent: Regional Brain Gain and Student Entrepreneurship

Moderator: Bruce Kingma, Syracuse University

Lee Davis, O'Brien and Gere

Alessandro Anzani, WavElectric

Chris Grant, Waterport

#### 12:15 - 1:30 p.m.

## Lunch and Keynote: "Fields, Factories, and Workshops: Green Economic Development on the Smaller-

**MetroScale,"** Catherine Tumber, Author, Journalist and Historian; Gateway Cities Fellow, Massachusetts Institute for a New Commonwealth

AIA Credits: 0.5\_HSW/SD/LU & GBCI Approved Course: 0.5 CE Hour

#### 1:30 - 2:30 p.m.

#### Session 3

#### TRACK A: Accelerating Green Infrastructure Solutions

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

Moderator: Matt Millea, Onondaga County

"The Green Roof at SyracuseCoE: In Anticipation of the Perfect Storm," Dimitar Todorov, Syracuse University, Utica College

"Effective Evalutation and Implementation of Green and Sustainable Practices in a Water Infrastructure Project - A Case Study of the Metropolitan Water Board Terminal Project," I. Holly Rosenthal, Metropolitan Water Board

"A Vision for Wireless Monitoring of Green Infrastructure in Syracuse," Dave Chandler, Syracuse University

#### TRACK B: Indoor/Outdoor Air Quality

AIA Credits: 1\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

"Varitations in Carbon Dioxide Emisisions in Syracuse," Geoff Millard, SyracuseCoE/SUNY ESF

"Case Study: A Novel Integration of Dynamic Ventilation with Air Cleaning for Energy - Efficient Reduction of Indoor Formaldehyde Exposure in an Office," KwangHoon Han, Syracuse University

"Geosolar Exergy Storage Technology (GEST): A Vision for Rapid, Large-Scale Substitution of Fossil Fuels with Renewable Energy Sources in Buildings," Lowell Lingo, DFI Enterprises, Inc.

#### TRACK C: Market Drivers: Public-Private Partnership

Moderator: Edward Bogucz, SyracuseCoE

"Cluster-based Innovations: Advanced Manufacturing for Thermal and Environmental Control Systems,"

John Dimillo, NuClimate

Jim Pettiford, Fulton Cos.

Rich Dausman, Cryomech

#### 2:30 - 2:45 p.m.

#### **Coffee Break and Poster Viewing**

### 2:45 - 4:00 p.m.

### **Session 4**

#### TRACK A: Sustainable Community Development Case Studies

AIA Credits: 1.25\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour

"A Community (Re)Connected," Chad Rogers, King+King Architects

"Sustainable Urban Renewal: The Story Behind Washington Station," Eugenia Brieva, QPK Design

"Communities of Practice: Another Perspective on Sustainable Communities," Daniella Leiffer and Nora Sherman, CUNY Institute for Urban Systems Building Performance Lab

"Lime Hollow and OCM BOCES Partner for the Future," Glenn Reisweber, Lime Hollow Nature Center

#### TRACK B: Constructing Energy Efficient, Advanced Buildings

AIA Credits: 1.25\_HSW/SD/LU & GBCI Approved Course: 1.0 CE Hour & PIE Approved Course: 1 PDH

"Materials: A Holistic Conversation," Peter Larson, Ashley McGraw Architects

"Description of Experience Gained in 40 Years Doing 350 Houses," Bruce Brownell, Adirondack Alternate Energy

"Emerging Low-Cost and High-Impact Building Energy Improvements," Ian Shapiro, Taitem Engineering

#### TRACK C: Public Investments: Federal and State Funding Opportunities

Moderator: Ed Reinfurt, Empire State Development

Jeff Peterson, NYSERDA

Megan Daly, ESDC (Invited)

Thomas McGrath, senior investment advisor, New York State Common Retirement Fund (Invited)

#### 4:15 - 5:00 p.m.

Closing Keynote: "Social Innovation Business for Smart Cities," Fumitoshi Emura, Smart Infrastructure Systems

Business Division, Hitachi, Ltd.

5:00 - 7:00 p.m. **Networking Reception** 

Student Poster Competition - Sponsored by O'Brien & Gere and SRC

FRIDAY, OCTOBER 12th- SyracuseCoE Headquarters 727 E. Washington Street

**Post-Conference Workshops** 

8:00 a.m- 8:30 a.m Registration

**Registration and Coffee** 

8:30 a.m. - 12:30 p.m.

Regenerative Design and Development - Re-membering the Patterns of Life

Bill Reed, Regenesis

AIA Credits: 3.0 HSW/SD/LU & GBCI Approved Course: 3.0 CE Hour

8:30 a.m. - 11:30 a.m.

Green Infrastructure Maintenance Techniques

Sean Skehan, CH2M Hill

Amy Samuels, Onondaga Environmental Institute

AIA Credits: 2.5\_HSW/SD/LU & GBCI Approved Course: 3.0 CE Hour

**LEED Buildings Tour** 

AIA Credits: 2.5\_HSW/SD/LU & GBCI Approved Course: 6.0 CE Hour

1:00 - 3:30 p.m.

Center of Membrane Technologies for Sustainable Water and Wastewater Treatment

Health and Indoor Environmental Quality

Yahya Al- Rayyes, MPH, CES, CMRS, CIEC, OSHA Authorized General Industry Trainer, Vice President of R&D

HealthWay Home Products, Inc.

Peter Nielsen, Professor, Department of Civil Engineering, Aalborg University, Aalbork Denmark

Bob Baker, Fellow, ASHRAE, OPMP, BBJ Environmental Solutions

## SATURDAY, OCTOBER 13th- Marshall Hall: Nifkin(Alumni) Lounge, SUNY ESF Campus

7:30 p.m.

"What Do We Do When the Lifeboats are Burning? Songs of community and courage in a time of melting ice."

Libby Roderick, Folk Singer and Songwriter

Kathleen Dean Moore, Nature Writer Jeanne Shenandoah, Onondaga Nation

Robin Kimmerer, Professor, Director for Center for Native People, SUNY ESF Oren Lyons, Traditional Faithkeeper of the Turtle Clan, and a Member of the

Onondaga Nation Council of Chiefs of the Six Nations of the Iroquois Confederacy