

URBAN REINVENTION AND RESILIENCE | MONDAY, OCTOBER 21

8:00 – 8:30AM

COFFEE & NETWORKING

8:30 – 8:45

WELCOME

Ed Bogucz, Executive Director, SyracuseCoE

Heidi Sheppard, Advisor for Technology Collaborations,

National Institute for Standards and Technology



8:45AM – 12:00PM

Sponsored by NYSERDA

INDUSTRIAL HEAT RECOVERY WORKSHOP

Peter Garforth, Principal, Garforth International, LLC

3.25 PDHs PENDING

3.25 LUs

3 CE HOURS

This workshop includes discussion on: Integrated industrial site energy planning; thermal recovery technologies; emerging thermal energy recovery technologies; developing central New York's globally competitive thermal and environmental industry cluster; and thinking beyond the boundaries: opportunities for optimizing energy savings and market opportunities for TEC Firms

12:00 – 1:30

Sponsored by New York Power Authority

LUNCH AND PLENARY PANEL ON NEW YORK STATE'S EMERGING CLEAN ENERGY ECONOMY

New additions to NYS energy leadership discuss financial, regulatory, and programmatic strategy to advance clean, reliable, sustainable energy infrastructure across NYS

Moderated by **Sherburne "Shere" Abbott**, Vice President of Sustainability Initiatives, Syracuse University

Richard Kauffman, Chairman of Energy and Finance for New York State; Chairman, NYSERDA

John Rhodes, President and CEO, NYSERDA

Audrey Zibelman, Chair, New York State Public Service Commission

1:30 – 2:45

PANEL: WORKING WITH A UNIVERSITY ON INDUSTRY-DRIVEN RESEARCH

Moderated by **Mark Weldon**, Executive Director, Syracuse University Corporate Development

A panel of industry and university leaders engage in an open and rousing discussion of experiences in building partnerships using results based approaches, setting tempo, managing scope, knowing when to walk away from a deal, and navigating the on-ramps of research engagement.

2:45 – 3:00

BREAK & POSTER VIEWING

3:00 – 4:00

PANEL: LICENSING UNIVERSITY INTELLECTUAL PROPERTY— "IP PITCH FEST"

Moderated by **Jim Muldoon**, SyracuseCoE Partner, Harris Beach PLLC

Presenters will offer rapid-fire pitches on multiple and specific opportunities for licensing intellectual property relevant to SyracuseCoE's core mission. Technology transfer officers from several upstate colleges and universities will be on hand to answer questions about the IP available.

4:00 – 5:00

PANEL: NYS LEADERSHIP FOR INVESTING IN RETROFITTING

Silda Wall Spitzer, Principal, NewWorld Capital

Pat Sapinsley, Build Efficiently/Watt Not

Lou Schick, Partner, NewWorld Capital

5:00 – 7:00

NETWORKING RECEPTION, STUDENT POSTER COMPETITION JUDGING & AWARDS

Student Poster Competition Sponsored by Lutron Electronics

1:30 – 5:00

INTRODUCTION TO CONSTRUCTION MATERIALS MANAGEMENT: LEAN STRATEGIES FOR SAFE, PROFITABLE JOBSITES

Brenda Griffin, Director, NYS Construction Materials Management Center

Kevin Stack, President, Northeast Green Building Consulting, LLC

This workshop is not included in other Symposium Programming. You MUST be registered for this workshop to attend.

AGENDA

- Roundtable Introductions
- LEAN and Construction Materials Management
- GRIP-IT Process
- Discussion and Wrap Up

TUESDAY, OCTOBER 22 | Convention Center at Oncenter

KEY

- P** PRODUCT ADVANCEMENT
- A** ANALYSIS AND RESEARCH
- R** REVITALIZATION EFFORTS

8:00 – 8:40AM
8:40 – 8:45

BREAKFAST & POSTER VIEWING
WELCOME
Ed Bogucz, Executive Director, SyracuseCoE

8:45 – 9:30

Featured Speaker: “How Human-Environment Interactions and Climate Change Influence Urban Ecosystems”
Nancy Grimm, Director, Central Arizona –Phoenix Long-Term Ecological Research Program

9:30 – 9:45

COFFEE BREAK & POSTER VIEWING

9:45 – 10:45

TRACK A TECHNOLOGY FOR URBAN RESILIENCE

P A

This track focuses on new and innovative technologies that enhance sustainable living and employment in an urban environment. Presentations include information about industry driven technologies, as well as location-based issues that can be addressed via advanced research and analysis.

WORKSHOP 1
ALTERNATIVE
ENERGY
TECHNOLOGIES
1 CE HOUR

“Enzymatic Hydrolysis of Old Corrugated Cardboard Fines with Surfactant,”
Bhavin Bhayani, SUNY ESF, Avatar Sustainable Technologies

“Analysis of Fluid/Structure Interaction of Wave-Energy Converters,”
Alessandro Anzani, CEO, WavElectric (Commercialization Assistance Program winner)

Moderator, Jim Olcott, P.E.
Service Group Manager, Energys, C&S Companies

“Current and Theoretical Sun-to-Wheels Energy Efficiency of Corn Ethanol and Solar PV as Transport Fuels,” *Ashok Sekar, Ph.D. Candidate, Golisano Institute for Sustainability, Rochester Institute of Technology*

“The End of Waste: Organic Feedstocks for Distributed Energy Generation,”
Thomas Trabold, Associate Professor and Co-Director, Golisano Institute for Sustainability, Rochester Institute of Technology

TRACK B ENERGY MANAGEMENT INNOVATIONS

R A

This track explores the processes, challenges, and breakthroughs in achieving greater energy efficiency and reduction in various systems. Speakers will discuss the latest research, community case studies, marketplace applications, and incentivized programs toward energy use reduction and cost saving efforts.

WORKSHOP 2
URBAN RESILIENCE
1 CE HOUR
1 LU

“Energy Reduction by Building Use Analysis,” *Steve McMahon, CEO, Cortland Research, LLC*

“End Use Energy Reduction for Urban Resilience,” *Brian Macrae, Synapse Partners, LLC and Meryl Corsun, Associate, Synapse Risk Management*

Moderator, Anthony Catsimatides, Principal,
Open Atelier Architects

“A Case in Biomimicry, LEED for Homes & Resilience,” *Kevin Stack, LEED Faculty and Josh Stack, Attorney & Counselor at Law, Northeast Green Building Consulting, LLC*

“Variation in Carbon, Water and Energy Flux Patterns in Syracuse, NY,” *Geoffrey Millard, Electronics Technician, SyracuseCoE*

TRACK C URBAN ECOSYSTEMS

R A

This track synthesizes communal desires and responsible action for enhancing the human-dominated urban landscape. Topics address storm water management, “eco-nomic” development, and ways to approach the human-nature relationship.

WORKSHOP 3
TAILORING THE
URBAN LANDSCAPE

1 CE HOUR
1 LU

Moderator,
Matthew Finn,
Design Manager,
King+King

“Flood Resistance to Flood Resilience: Mapping our Water Systems Through Landscape Architecture and Urban Design,” Kendra FitzRandolph, Master’s Candidate, Cornell University

“Reinventing Cities Through District Scale Sustainability : The GardenAerial Project,” Michael Philipson, President, Philipson Group and Co-Founder, Friends of the GardenAerial

“Toward Biophilic Urbanism in Buffalo, New York - A University / Not-For-Profit Collaboration,” Emanuel Carter, MRP, Associate Professor, Department of Landscape Architecture; Douglas Daley, P.E., Associate Professor, Department of Environmental Resources Engineering, State University of New York - College of Environmental Science and Forestry; and Renata Kraft, RLA, Director of Bioregional & Urban Design, Buffalo Niagara Riverkeeper

“The Impact of Climate Regime Shift on Long-term Spatiotemporal Trends of Hydrologic Variables—‘A Case Study of the Merrimack Watershed, NH-MA,’” Rouzbeh Berton, Ph.D. Candidate, Department of Civil and Environmental Engineering, Syracuse University

10:45 – 11:00

COFFEE BREAK & POSTER VIEWING

11:00AM – 12:00PM

TRACK A

TECHNOLOGY FOR URBAN RESILIENCE

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WORKSHOP 4
INDOOR
ENVIRONMENTAL
QUALITY

1 CE HOUR
1 LU

Moderator,
Yahya Al-Rayyes,
Vice President, Research
and Development,
Healthway Home Products

“‘Virtual Design’ Studio for Hot and Humid Climates in China,” Chen Yuan, School of Architecture and Urban Planning, Nanjing University, China

“Experimental Study of Different Hygroscopic Materials in Hot and Humid Climates: Influence on Building Energy Consumption and Interior Thermal Environment,” Yibiao Liu, School of Architecture and Urban Planning, Nanjing University, China

“Indoor Relative Performance of Activated Carbon and Non-AC Filtration Media at High and Low Challenge Concentrations: Possibilities and Limitations,” Kwang Hoon Han, Syracuse University

“Modeling of Particle Pollution via Resuspension from Human Walking for a Commercial Building,” Kyung Sul, Ph.D. Candidate, Clarkson University

TRACK B

ENERGY MANAGEMENT INNOVATIONS

WORKSHOP 5
INTEGRATED HEAT
RECOVERY: PART I

1 PDH PENDING
1 LU
1 CE HOUR

“Community Approaches to Industrial Energy Management,” Peter Garforth, Principal, Garforth International, LLC and Bruce Bremer, Former Head of Facilities, Toyota North America

This workshop will explore the creation of a win-win energy teaming approach to community-focused industrial energy management with a particular focus on:

- The potential for cost-effective heat recovery and other energy related benefits in industrial parks
- The potential to create enhanced environmental, reliability and economic solutions by combining the energy needs of industry and neighboring communities
- The steps each has to take that are critical for success

TRACK C

URBAN ECOSYSTEMS

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WORKSHOP 6
THE HUMAN
ELEMENT

1 CE HOUR
1 LU

“Finger Lakes Regional Sustainability Plan—Enhancing the Region’s Capacity for Sustainable Decision Making,” Aileen Meyer, Planning Department Manager, and Kevin Kelley, C&S Companies

“The Onondaga Lake Experience: Understanding Relationships of Place Attachment and Participation within an Urban Social Ecological Landscape,” Erica Tauzer, Master’s Candidate, State University of New York - College of Environmental Science and Forestry

Moderator, Neil B. Webb,
Regional Marketing Manager/
Director, O'Brien & Gere, Inc.
of North America

"Open Collaborative Lab," Yanelly Bailey, City University of New York Building Performance Lab

"Vision CNY Regional Sustainability Plan," David Bottar, Executive Director, Central New York
Regional Planning & Development Board

12:00 – 1:30

**Lunch Followed by Featured Keynote Speaker: "The Nexus of
Cities and the National Sustainability Agenda"**

Bob Perciasepe, Deputy Administrator, US EPA

Introduction by **Sherburne "Shere" Abbott,** Vice President of Sustainability Initiatives, Syracuse University

1:35 – 2:35PM

TRACK A

TECHNOLOGY FOR URBAN RESILIENCE

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WORKSHOP 7

DATA COLLECTION
AND APPLICATION

1 CE HOUR

1 LU

Moderator,
Bob DelZoppo, Assistant
Vice President, SRC

"Smart Energy and Water Grids for Sustainable and Resilient Urban Systems,"

Eric Williams, Golisano Institute for Sustainability, Rochester Institute of Technology

"A Sustainable Management of End-of-Life Lithium Ion Batteries," Xue Wang, Ph.D. Candidate,

Golisano Institute for Sustainability, Rochester Institute of Technology

"Community Ecology Inspires a New Approach to Assessing New Energy Impacts

of Household Electronics," Erinn Ryen, Ph.D. Candidate, Golisano Institute for Sustainability,
Rochester Institute of Technology

"Promotion of Biofuels in the Finger Lakes Region Through Development of an

Interactive, Web-Based Global Information System Tool," Jacqueline Ebner, Ph.D. Candidate,
Golisano Institute for Sustainability, Rochester Institute of Technology

TRACK B

ENERGY MANAGEMENT INNOVATIONS

WORKSHOP 8

INTEGRATED HEAT
RECOVERY: PART II

1 PDH PENDING

1 LU

1 CE HOUR

**"Community Approaches to Industrial Energy Management — Experiences from the City
of Guelph,"** Peter Garforth, Principal, Garforth International, LLC, and Ron Collins, Vice President
of Business Development and Partnerships, Guelph Municipal Utility

In this workshop on Community Approaches to Industrial Energy Management, Peter Garforth will moderate a panel highlighting the experiences of the City of Guelph, a mid-sized city in the Province of Ontario, Canada. In 2007, Guelph leaders enacted a comprehensive Community Energy Plan with a focus on implementing a carefully defined thermal strategy for the city and its major industries. Learn about the Guelph experience and the opportunities for integrating district thermal energy solutions with green infrastructure strategies for a win-win approach to community energy management.

TRACK C

URBAN ECOSYSTEMS

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WORKSHOP 9

GREEN
INFRASTRUCTURE
AND BIORETENTION
RESEARCH

1 CE HOUR

1 LU

Moderator, Matt Marko,
Vice President, CH2M Hill, Inc.

"The Oncenter Green Roof: Water Mass Balance on a Large Extensive Green Roof,"

Mallory Squier, Ph.D. Candidate, College of Engineering and Computer Science, Syracuse University

"Verify Retention Capacity of SyracuseCoE Green Roof Using Cesium Fluoride Tracer,"

Dimitar Todorov, Ph.D. Candidate, Department of Environmental Engineering, Syracuse University

"Green Infrastructure in Onondaga County and the Diffusion of Sustainable

Stormwater Management Technologies," Carli Flynn, Ph.D. Candidate, College of
Engineering and Computer Science, Syracuse University

"Center for Membrane Technology," Chris Bellona, Assistant Professor in the Department of Civil
and Environmental Engineering, Clarkson University

2:35 – 2:50

BREAK AND POSTER VIEWING

WORKSHOP 10
ENERGY EFFICIENCY
1 CE HOUR
1 CE HOUR

Moderator,
Hugh Henderson,
President, CDH Energy

“Replacing Steam Heat with Variable Refrigerant Flow Heat Pumps,” Ian Shapiro, President; Theresa Ryan, Project Coordinator; Dominick DeLucia, Project Engineer; and Florence Baveye, Energy Technician, Taitem Engineering

“Combined Heat and Power: The Pathway to a Secure Energy Future in NYS,” Herbert Dwyer, CEO/President, ASI Energy and Ed Wilson, Senior Energy Consultant, ASI Energy

“Pump Efficiency Meter: A New Approach to Pump Efficiency and Controls,” Thomas Devine, Project Manager Energy Services for the East Coast, GHD Consulting Services, Inc.

“Significant HVAC Energy Savings via Multi-Stage InDirect Evap Cooling,” Douglas L. Yost, Strategic Accounts Director, Coolerado Corporation

WORKSHOP 11
INNOVATIONS FOR
DISTRICT POWER
MANAGEMENT

Moderator, Tim LaBreche,
Associate Director,
Innovation Programs,
SyracuseCoE

“Recent Advances for Community-Scale Microgrids,” Brian Levite, Manager, Environmental Sustainability Solutions, Hitachi Consulting

“A Perspective on Municipal Electric Utilities in New York State,” Bob Lotkowitz, Director of Municipal Operations, Village of Skaneateles

“Emerging Solutions for Power Storage at the Municipal Level,” Brian Levite, Manager, Environmental Sustainability Solutions, Hitachi Consulting

“Research and Development in Smartgrid & Microgrid at Syracuse University,” Prasanta Ghosh, Professor, Electrical Engineering, L.C. Smith College of Engineering and Computer Science, Syracuse University

WORKSHOP 12

Moderator, Tom Rhodes,
Commissioner, Water
Environment Protection
Department, County of
Onondaga

Case Studies from National Green Infrastructure Model Communities

- Baltimore
- Lancaster, Pennsylvania
- Pittsburgh

4:00 – 4:30

Featured Speaker: “Earning the Green Dividend”
Joe Cortright, President and Principal Economist, Ipresa

4:30 – 5:15

Moderator, Matt Millea,
Deputy County Executive,
County of Onondaga, NY

**Closing Panel Discussion: “Four Cities
Discussing Urban Reinvention and Resilience”**

- Los Angeles
- New York City
- Onondaga County/Syracuse
- Portland

5:15 – 5:30

CLOSING REMARKS
Ed Bogucz, Executive Director, SyracuseCoE



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SPECIAL THANKS TO THE FOLLOWING STUDENT POSTER COMPETITION JUDGES AND THEIR EMPLOYERS

Tim Labreche, *SyracuseCoE*
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