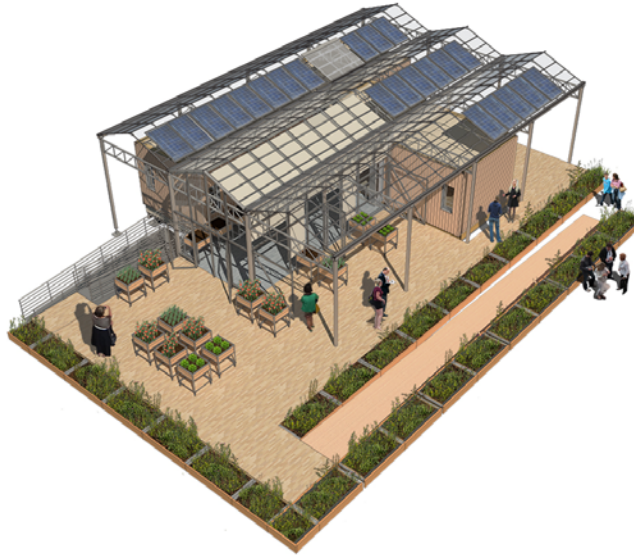


# ZERO NET ENERGY DESIGN WORKSHOP

Saturday, March 14, 2015, 10:00 am – 4:00 pm

Riverview Solar Technology Park, 600 Riverwalk Parkway, Tonawanda, NY

*Up to 5 AIA CEUs will be available – 4 CEUs are pending for NYS Engineers*



**WORKSHOP DESCRIPTION:** In the morning, a series of presentations will help attendees understand the issues and barriers that surround zero net energy building design. Attendees will also have the opportunity to tour the University at Buffalo GRoW Home (<http://grow.buffalo.edu/>), currently under construction for the 2015 U.S. Department of Energy Solar Decathlon competition (<http://www.solardecathlon.gov/>). In the afternoon, a design charrette will enable participants to develop the design for a small zero net energy home. Feedback on these designs will be provided by the facilitators and students from the University at Buffalo Solar Decathlon team. Attendees can choose to attend only the morning session, or choose to attend both the morning and afternoon sessions. After the workshop, a PDF of the presentations and a summary of the house designs will be emailed to all attendees.

Coffee and snacks will be provided in the morning, box lunches will be available in the afternoon.

## FACILITATORS:

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| 1. Martha Bohm<br>Assistant Professor of Architecture, B/a+p                     | 2. Kenneth MacKay, AIA<br>Clinical Associate Professor of Architecture, B/a+p |
| 3. Nicholas B. Rajkovich, PhD, AIA<br>Assistant Professor of Architecture, B/a+p | 4. Christopher Osterhoudt<br>Project Manager, UB Solar Decathlon Project      |

**PURPOSE:** This workshop is a fundraiser for the University at Buffalo (UB) Solar Decathlon team; all proceeds from the workshop will be used to support the 2015 competition entry for the Solar Decathlon. This workshop is cosponsored by the UB School of Architecture and Planning (B/a+p), the American Institute of Architects (AIA) Buffalo/ Western New York Chapter, and the ASHRAE Niagara Frontier Chapter.

**REGISTRATION:** Please email Nicholas Rajkovich at [rajkovic@buffalo.edu](mailto:rajkovic@buffalo.edu) or call (716) 829-6910 to register.

**DONATION:** The suggested donation is \$100.00 for the all day workshop, or \$50.00 to attend only the morning presentations/ tour. We are able to accept checks as a donation if they are made out to "UB Foundation, Inc." We will also be able to process credit card donations on site using forms provided by the UB Foundation. We ask that attendees please do not bring cash as their donation. All donations to the Solar Decathlon project are tax deductible.

# Agenda for the Zero Net Energy Design Workshop

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9:30 – 10:00	Coffee, Carbohydrates, and Check-in
10:00 – 10:10	Welcome and Workshop Overview (Nicholas B. Rajkovich)
10:10 – 11:50	Zero Net Energy Building Fundamentals (Nicholas B. Rajkovich)  Examples of Zero Net Energy Buildings (Martha Bohm)  Daylight, the Original Renewable Energy Source for Buildings (Kenneth MacKay)  The 2015 University at Buffalo Solar Decathlon House (Christopher Osterhoudt/ University at Buffalo Solar Decathlon Team)  Resources for Zero Net Energy Building Design (Nicholas B. Rajkovich)
11:50 – 12:00	Q&A
12:00 – 12:15	Break/ Pick up Boxed Lunches
12:15 – 12:30	Charrette Problem Introduction (Nicholas B. Rajkovich)  The design will be for a small zero net energy house for the Solar Decathlon competition. Several climate zones will be investigated (e.g., Florida, Arizona, Buffalo, and Minnesota) to identify differences in design for each climate. A simplified set of rules from the actual U.S. Department of Energy competition will be distributed to teams of two to four people.
12:30 – 2:45	Working Lunch/ Design Charrette
2:45 – 3:00	Break
3:00 – 3:45	Team Presentations/ Group Discussion
3:45 – 4:00	Wrap-up/ Closing Comments