UNT RCN-SEES-SHBE

**RCN-SEES: Predictive Modeling Network for Sustainable Human-Building Ecosystems (SHBE)**

## Call for Abstracts for Workshop on Physical Systems and Environment

This NSF-funded Research Coordination Network (RCN) in Science, Engineering and Education for Sustainability (SEES) announces its first workshop on one of its five themes: **Physical Systems & Environment.** Invited participants are requested to submit an abstract of about 500 words for engaging discussions and presentations describing how the network researchers should be collaborating in the following, but not limited to, aspects:

- Parametric modeling, BIM, and energy modeling
- Building equipment and systems for thermal and audio/visual comforts
- Cooling/heating/lighting/noise level control
- Energy consumption patterns influencing design and affected by microclimate
- Data validation and model interoperability problems
- Collaborating needs for inputs/outputs to/from other themes*
- Impact by climate change, water, resilience

### Important Dates

| | |
|---|---|
| RCN-SEES-SHBE Workshop (Invitation Only) | March 18-19 |
| Participants to Submit Abstract by | February 18 |
| Workshop RSVP Deadline | March 1 |

### Submit your RSVP and/or Abstract via email:

To Dr. Tingzhen Ming at Tingzhen.Ming@unt.edu

**Workshop Venue:**
Holiday Inn Denton
1434 Centre Place Dr.
Denton, TX 76205
940-383-4100 (Air Travel: DFW Int'l Airport)

**Host:** UNT

**Organizers:**
Yong Tao, UNT
Thomas Spiegelhalter, FIU
Marilys Nepomechie, FIU
Wei Yan, TAMU
Kuruvilla John, UNT
Yiding Cao, FIU
Stan Ingman, UNT
Derrick D'Souza, UNT

**March 18, 2014—Tuesday**
Arrive-Holiday Inn Denton
Afternoon Half Day Workshop
Steering Committee Meeting

**March 19, 2014—Wednesday**
All Day Workshop
Including breakout sessions and Roundtable discussion and conclusion

For more information about RCN-SEES-SHBE, search **ASME.ORG RCN-SEES-SHBE**

### Physical Systems & Environment (Theme I)

Building energy/water model (building monitoring data); Building envelope/materials model (BIM data); Indoor climate system/control (performance data); Livability (lighting and appliance data); Distributed power (solar, wind, CHP, biomass, etc. data); Passive features (daylight, green roof, solar chimney, shade, etc.); Outdoor microclimate models (local data).

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| *Theme II: Human Behaviors | Theme III: Social/Policy impacts | Theme IV: Life-Cycle Assessment & Business ecosystem | Theme V: Model Integration and Validation |

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**March 18-19, 2014**

**Holiday Inn Denton, Denton, TX**

**(Air Travel: DFW Int'l Airport)**

## Workshop on Theme I

## Preliminary Agenda*

| Tuesday, March 18, 2014 | |
|---|---|
| 11:00 am to 12:00 pm | Registration |
| 12:00 pm to 1:00 pm | Lunch |
| 1:00 pm to 1:30 pm | **Welcome and Overview** |
| 1:30 pm to 3:00 pm | **Session I: Model type:** Building energy/water model; Building envelope/materials model; Outdoor microclimate models. |
| 3:00 pm to 3:15 pm | Coffee Break |
| 3:15 pm to 5:00 pm | **Session II: Model type I/O interface:** Indoor climate system/control; Livability; Distributed power; Passive features.<br>**Data type:** Building monitoring data; BIM data; Indoor performance data; Lighting and appliance data; Distributed power data; Passive features data; Outdoor local data. |
| 5:00 pm to 6:00 pm | **Open reception, networking and mixer.** |
| 7:00 pm | **Dinner, Steering Committee Meeting** (after dinner) |

| Wednesday, March 19, 2014 | |
|---|---|
| 7:30 am to 8:00 am | Continental Breakfast |
| 8:00 am to 8:30 am | **Plenary session** |
| 8:30 am – 10:00 am | **Breakout sessions** |
| 10:00 am to 10:30 am | Coffee Break |
| 10:30 am to 12:00 pm | **Breakout sessions** |
| 12:00 pm to 1:30 pm | Lunch |
| 1:30 pm to 3:00 pm | **Round table discussion** |
| 3:00 pm to 3:15 pm | Coffee Break |
| 3:15 pm to 4:45 pm | **Summary and Conclusion** |