

## Building Energy Smart Technologies (BEST) Center

#### Industrial Advisory Board Meeting, April 26-27, 2022, Boulder, CO

#### AGENDA

#### April 26, 2022 (SEEC Auditorium C120)

Morning Session		
8:00 am – 8:30 am	Registration and Breakfast	
8:30 am - 8:40 am	Welcome Note Keith Molenaar, Dean of College of Engineering	
8:40 am – 9:00 am	BEST Center Mission Moncef Krarti , Director of BEST Center	
9:00 am – 9:20 am	<b>Overview of NSF IUCRC Program</b> Crystal Leach, NSF-IUCRC Program Director	
9:20 am – 9:40 am	<b>Introduction to Evaluation Procedure (Airtable)</b> Mohamed Haroun, CCNY	
9:40 am – 10:00 am	Break (Poster Session)	
10:00 am – 12: 00 pm	Project Proposal Presentations	
10:00 am – 10:15 am	Evaluation of Field Methods for Assessment of Architectural Window Degradation, Prof. John Zhai and Dr. Robert Tenet (CUB)	
10:15 am – 10:30 am	Optimized Controllers for Adaptive Fenestration Systems, Dr. Ammar Dehwah, Prof. Moncef Krarti, and Prof. Michael McGehee (CUB)	
10:30 am – 10:45 am	Development of an AI-Enabled Control Framework for Optimal Electric Vehicle Charging Coordination and V2X Services, Prof. Ahmed Mohamed (CCNY)	
10:45 am – 11:00 am	Practical Design of Residential Dynamic Electricity Prices for Future Distribution Grids, Prof. Kyri Baker (CUB)	
11:00 am – 11:15 am	VisualizationTtool for Better Forecasting Electric Loads, Prof. Ronak Etemadpour (CCNY)	
11:15 am – 11:30 am	Urban Energy Forecast Systems Combined with Monitoring Urban Energy Production, Urban Energy Use and Urban Air Quality, Prof. Mark Arend (CCNY)	







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11:30 am – 11:45 a	am	Enabling smart and energy efficient office buildings based on dynamic occupancy estimation using RF infrastructure, Prof. Nicholas Madamopoulos (CCNY)
11:45 am – 12:00 p	m	Review and Finalize of Evaluation Forms

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12:00 pm – 1:00 pm   Lunch Break and Networking (Poster Session)
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# **Afternoon Session**

1:00 pm - 3:00 pm	Project Proposal Presentations (Center Faculty Members)
1:00 pm - 1:15 pm	Sustainable Heat Pump Systems for Electrified Transition in Winter Markets, Prof. Jorge Gonzalez (CCNY)
1:15 pm - 1:30 pm	Integrated and Smart Controls for Combined Heat Pump and Domestic Water Heater for Residential Buildings, Prof. Moncef Krarti and Prof. Kyri Baker (CUB)
1:30 pm - 1:45 pm	<i>Energy-reduction M&amp;V using Calibrated Simulation, IPMVP Option D</i> ; Mr. Duncan Prahl and Prof. Michael Bobker (CCNY)
1:45 pm - 2:00 pm	Cost-effective Way to Forecast Energy Use at Building to City Scale Using Real-Time Satellite Data, Prof. Prathap Ramamurthy (CCNY)
2:00 pm – 2:15 pm	<i>Flexible Insulated Panels for Retrofitting Existing Building Envelopes</i> , Prof. Moncef Krarti and Prof. Shawhin Roudbari (CUB)
2:15 pm – 2:30 pm	Making Reinforcement Learning Practical for Building Control using Surrogate Models, Prof. Gregor Henze (CUB)
2:30 pm – 2:45 pm	Review and Finalize Evaluation Forms
2:45 pm – 3:00 pm	Break (Poster Session)
3:00 pm – 5:00 pm	Closed Meeting (IAB Members at N224)
3:00 pm – 3:30 pm	Panel by Industry Representatives Moderator: Bill Green (RMH) Panelists: Julie Petrone (ABB), Herbert Els (WSP), Guolian Wu (AprilAire)
3:30 pm – 5:00 pm	Open Discussion with Faculty Members and Industry Representatives
5:00 pm – 7:00 pm	Dinner and Networking + Poster Session

Assignment for Researchers: Respond to Evaluation Form questions prior to 8 am (Mountain) Next day.









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#### April 27, 2022 (SEEC Conference Room, S228)

#### Morning Session

Overview of Proposals
Clarifications from Directors and Faculty Members
IAB Deliberation and Vote on Proposals
Review of Evaluation Forms
Break (Poster Session)
IAB and BEST Leadership Meeting
Evaluation form readout, vote on Bylaws, final remarks and wrap-up

12:00 pm – 1:00 pm Lunch Break and Adjourn

#### **Other Useful Information**

- Free Wifi Access: UCB Guest
- *Parking for the Meeting*: Lot 556 behind SEEC building (refer to the parking map below with the online payment option)
- *Main Event Location*: Auditorium (C120) located on the first floor of the SEEC building (refer to first floor map below)
- *IAB Closed-Door Meetings*: Rooms N224 and S228 located on the second floor of the SEEC building (refer to the second-floor map below)
- Center Website: best-iucrc.org

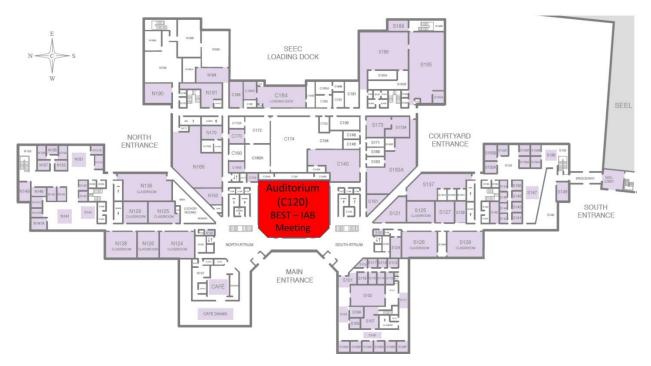






# Meeting Location: SEEC Building, East Campus, University of Colorado, Boulder, CO

April 26, Auditorium at SEEC Level 1 (C120)



April 27, Conference Room at SEEC Level 2 (N224 and S228)



University of Colorado Boulder

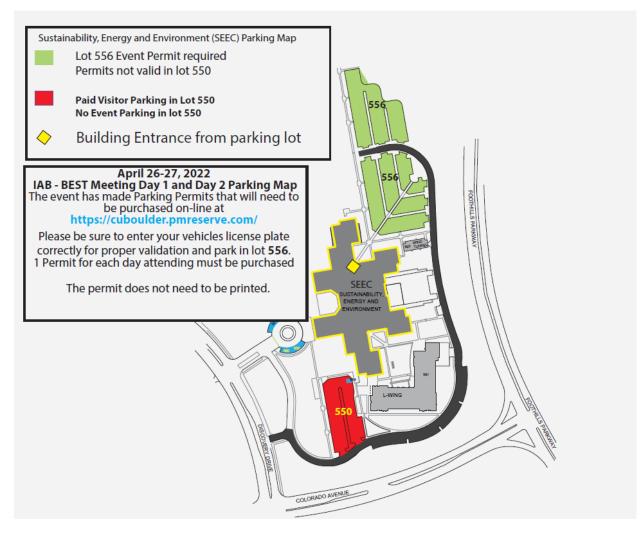






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## **Parking Location**



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