Research Subcommittee Meeting

Monday, June 24, 2019

4:30 – 5:15 p.m.

Location

Lester Young, Marriott
Kansas City, MO

Subcommittee Chair

Sagar Rao

Attendees [10]

Willie Dupont (Sunenergy Consulting)
Anil Parekh (NRC)
Charlie Curcija (LBNL)
Iason Konstantzos (UNL)
Jason Theios (Guardian Industries)
Michael Bartko (NRC)
Eliot Benor
Sagar Rao (AEI)
Mahabir Bhandari (ORNL)
Christian Kohler (LBNL)
Sam Taylor

Introductions

Meeting started at 4:30 p.m., Sagar Rao agreed to be meeting secretary.

Review Agenda

Research Topic Acceptance Reports (RTAR)

"Visual Comfort Implications of Fenestration Selection in Commercial Buildings"
Jason Konstantzos of University of Nebraska Lincoln, Sagar Rao of Affiliated Engineers, Jacob Jonsson of Lawrence Berkley National Lab, and Peter Lyons/Peter Lyons & Associates

1. The contribution of the visual comfort provided by windows has not been well defined. The results from this research would be a good addition to the ASHRAE Handbook. TC 2.1 may be a potential co-sponsor.

Work Statements (WS)

"Update of U-factors, Solar Heat Gain Coefficients and Visible Transmittances of Standard Fenestration Units made from Representative Fenestration Frame and Glazing Systems in the Fenestration Chapter of the Handbook of Fundamentals."
Willie Dupont of Sunenergy Consulting, Bipin Shah of , Charlie Curcija of LBNL, and Chris Mathis

1. Research Liaison recommended that a new work statement be submitted, and Willie volunteered to author it.
2. Working Group constitution -

- Chair - Willie DuPont
- Members - Bipin Shah, Charlie Curcija, Chris Mathis

3. Willie to review existing documents and distribute the first draft by 08/01/2019.

Research Projects (RP)

TC 4.5 WS-1789: "Optical and Thermal Performance of Hollow Glass Blocks."
Aziz Laouadi of NRC

1. A new PES was constituted -

- Chair: Anil Parekh
- Members - Jacob Jonsson and Mahabir Bhandari

2. Research Liaison to distribute the bids to newly constituted PES
3. Charlie to forward PES list to Research Liaison

TC 4.5 WS-1710: "Effects of Dynamic Shading Devices on Daylighting and Energy Performance of Perimeter Zones."
Anil Parekh of National Resources Canada

1. PMS has voted and accepted deliverable by email ballot
2. Project Disposition form to be submitted by Anil Parekh by 07/15/2019

Long-Range Research Plan

Building Integrated Photovoltaics (BIPV)
Chris Gueymard of Solar Consulting Services, Peter Lyons of Peter Lyons & Associates, and Anil Parekh of National Resources Canada

1. An RTAR, which includes the effect of Solar Heat Gain and Daylighting, needs to be developed and submitted. TC 6.7 may be a potential co-sponsor.

New Business

Develop Revise the Shading Chart, (Keys Chart), in the Fenestration Chapter of the Handbook of Fundamentals
Michael Collins of University of Waterloo, Thanos Tzempelikos of Purdue University, and Peter Lyons of Peter Lyons & Associates

1. Mike Collins suggested that the existing table in the Handbook of Fundamentals needs to be revised based on current research.

Guidelines for Operating Manual and Automated Shading Systems
Tzempelikos of Purdue University, and Robert Hart of Lawrence Berkeley National Laboratory

1. Need to develop strategies and schedules for the operation of manually and automatic shading systems that optimize performance of those products for the whole building.

Develop Methodology to Calculate the Optical Properties and Solar Heat Gain of Fritt Glazing
Robert Hart and Charlie Curcija of Lawrence Berkeley National Laboratory

Adjournment

Meeting adjourned.

Respectively Submitted

Sagar Rao/Affiliated Engineers, Inc.