



## Energy Systems Technical Committee

# Minutes of the 2017 ACC Meeting

*By Scott Moura, Secretary*

Mar 24, 2017

The ASME Energy Systems Technical Committee (ESTC) held its bi-annual meeting on May 24<sup>th</sup>, 2017 from 5:00 PM to 6:30 PM. There were 40 people in attendance. This is quite remarkable, since the meeting time & location was changed at the last minute. The meeting focused on the following items.

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### 1. Introduction

Updating contact information of ESTC officers:

Chair	Dongmei “Maggie” Chen (UT Austin)
Vice Chair	Mahdi Shahbakhti (Michigan Tech.)
Secretary	Scott Moura (UC Berkeley)
Publicity Chair	Chris Vermillion (UNC-Charlotte)
Award Committee Chair	Stephanie Stockar (Penn State University)
Industry Liaisons	Dyche Anderson (Ford Motor Company)

Student Liaisons	Herschel Pangborn (Univ. of Illinois – Urbanan Champaign)
	Matthew Williams (Univ. of Illinois – Urbanan Champaign)

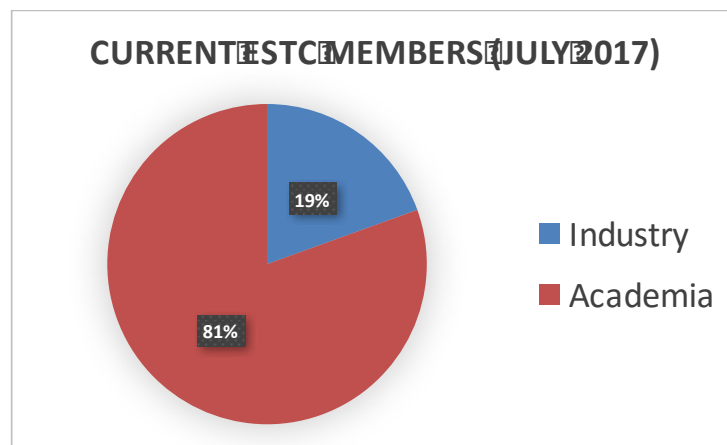
### 2. Approval of ESTS DSCC 2016 meeting minutes

The meeting minutes were approved.

### 3. Membership

By adding new members from 2015 DSCC meeting, there are 159 members in ESTC including 64 members in the LinkedIn group. 81% of the members are from academia and 19% are from industry. ESTC will encourage all the members to become member of [LinkedIn group](#), so

members can easily post discussion items and announce events related to energy systems. Here is the [weblink](#) to join the LinkedIn group.



#### 4. Invited Sessions' Activities

##### Invited Sessions at ACC 2017

Here is the list of the final invited sessions at ACC 2017:

- **Invited Session 1: Control & Energy Management of Building Systems**
  - Organizers: Donghun Kim (Purdue Univ), Mahdi Shahbakhti (Michigan Tech Univ), Jie Cai (Purdue Univ), Christopher Bay (Texas A&M)
- **Invited Session 2: Electrochemical Modeling and Diagnostics of Li-Ion Batteries**
  - Organizers: Nima Lotfi (SIU-Edwardsville), Simona Onori (Clemson), Qadeer Ahmed (Ohio State Univ), Satadru Dey (UC Berkeley), Scott Moura (UC Berkeley), Mahdi Shahbakhti (Michigan Tech Univ)
- **Invited Session 3: Control of Wind Energy Systems**
  - Organizers: Chris Vermillion (UNC Charlotte), Warren White (Kansas State)

##### Proposed Invited Sessions for DSCC 2017

A total of three sessions have been proposed:

- **Invited Session 1: Dynamics and Control of Renewable Energy Systems**
  - Organizers: John Hall (Buffalo), Warren White (Kansas State), and Chris Vermillion (UNC-Charlotte)
- **Invited Session 2: Energy Systems**

- Organizers: Stephanie Stockar (Penn State), Yaoyu Li (UT-Dallas), Bryan Rasmussen (Texas A&M), and Rasoul Salehi (Univ of Michigan)
- **Invited Session 3: Energy Systems**
  - Organizers: Satadru Dey (CU Denver), Rasoul Salehi (Univ of Michigan), Scott Moura (UC Berkeley)

## 5. CV Review for Ph.D. Candidates

Professor Neera Jain (Purdue University) organized a CV review session for Ph.D. candidates, which took place Thursday May 25. The event targeted PhD students who are 1-2 years away from graduation / entry into the job market. The event was organized as follows:

1. PhD students submit CVs by e-mail by April 15, 2017
2. Overview of what constitutes good CV
3. One-on-one coaching sessions between students and faculty/industry hiring managers

## 6. ES-TC best paper award

The award selection committee, led by Stephanie Stockar (Pennsylvania State University), selected the three best papers among the ES-TC papers at ACC 2017. The three award finalists included:



1. “Data predictive control for building energy management”
  - Authors: Achin Jain, Madhur Behl and Rahul Mangharam
  - Affiliation(s): University of Pennsylvania, University of Virginia, USA
2. “Time-Varying Newton Based Extremum Seeking for Optimization of Vapor Compression Systems”
  - Authors: Bryan Keating and Andrew Alleyne
  - Affiliation(s): University of Illinois Urbana-Champaign, USA
3. “Physically-based reduced-order capacity loss model: SEI layer growth and active material loss for graphite anode.”
  - Authors: X. Jin, A.P. Vora, V. Hoshing, and G. Shaver, T. Saha and O. Wasynczuk, S. Varigonda.
  - Affiliation(s): Purdue University, Cummins.

Finally, the award committee selected the best paper based on the quality of the oral presentations at ACC. Paper #1 was selected as the best paper of the ES-TC and Achin Jain (University of Pennsylvania) received the best paper award in the meeting.

## **7. Plan for ACC 2018**

The following sessions are currently being planned:

- Building Energy Systems
  - Organizers: Mahdi Shahbakhti, Stephanie Stockar
- Energy Storage
  - Organizers: Satadru Dey, Hector Perez, Nima Lotfi, Yasha Parvini, Scott Moura
- Automotive Energy Systems (joint with ATS TC)
  - Organizers: Saeid Bashash
- Microgrids
  - Organizers: Rasoul Salehi, Maggie Chen
- Oil & Gas
  - Organizers: TBD

## **8. Others**

- Dyche Anderson (Industry Liaison, Ford Motor Company) expressed that we should communicate invited session CFPs earlier, to allow for publication approval timelines that are typical in companies.
- Herschel Pangborn (Student Liaison, Univ of Illinois- Urbana Champaign) hopes to organize a Student Networking session at the 2017 DSCC. The goal is for students to build their networks across institutions. He is currently seeking assistance to help organize the event.
- The ES-TC has an opening for Student Liaison position since one of the current student liaisons is graduating. We encourage students to apply for this position. The student liaisons will work with conference organizers to plan networking programs such as industry job hunting, academic job preparation, etc.

We thank all who attended for a very productive meeting and continue to encourage anyone interested in Energy Systems to join us.