



CCEFP Summit at the University of Minnesota

October 16-18, 2018

DAY 1: TUESDAY, OCTOBER 16: CCEFP Summit

6:00 PM Reception, dinner, and undergraduate poster show..... *Campus Club*

DAY 2: WEDNESDAY, OCTOBER 17: CCEFP Summit

7:30 AM Continental breakfast and welcoming remarks.....*ME 1130*

8:00 AM **Energy Conversion & Storage**

- Modeling and Optimization of Trajectory-Based HCCI Combustion
Professor Zongxuan Sun. Funding Source: NSF
- Understanding the Transient Nature of Wind Turbine Response to Create Advanced Controls to Improve the Efficiency of a Hydraulic Drivetrain Wind Turbine
Professor Kim Stelson. Funding Source: NSF
- Seamless Electric to Hydraulic Conversion
Professor Jim Van de Ven and Professor Eric Severson. Funding Source: CCEFP
- Liquid Piston Gas Compressor/Expander for Compressed Air Energy Storage (CAES) and CO₂ Sequestration
Professor Perry Li. Funding Source: NSF

10:00 AM *Break*

10:15 AM **Fluid Power Components & Surface Modification**

- Polymer-Enhanced Fluid Effects on Mechanical Efficiency of Hydraulic Pumps
Researcher Paul Michael and Professor Ashlie Martini. Funding Source: CCEFP
- Science of Pattern Coating onto Heterogeneous Surfaces Using a Hybrid Tool
Professor Tequila Harris. Funding Source: NSF
- High Efficiency Hydraulic Pump-Motors Employing Partial Stroke Piston Pressurization
Professor Tom Chase. Funding Source: NSF

12:00 PM **Lunch**

1:00 PM **Department of Energy Sponsored Projects**

- Thermochemical Recuperation for Dual Fuel Off-highway Engines **Professor William Northrop**
- Individual Electro-Hydraulic Drives for Off-Road Vehicles **Professor Andrea Vacca**
- Efficient, Compact, and Smooth Variable Propulsion Motor **Professor James Van de Ven**

3:00 PM **University of Minnesota Lab and Facility Tours**

6:30 PM **Networking Dinner**..... *Loring Bar & Restaurant*

DAY 3: THURSDAY, OCTOBER 18: CCEFP IEC MEETING

CCEFP industry collaborators are welcome to attend the closed-door IEC Meeting. Academic partners' attendance is optional.

7:30 AM	Continental breakfast, networking.....	ME 1130
8:00 AM	IEC Meeting Agenda <ul style="list-style-type: none">• Sustainability update<ul style="list-style-type: none">○ Funding, confirmed collaborators, government programs• Industry engagement<ul style="list-style-type: none">○ DOE TIR Program○ Fluid power research proposals○ Other CCEFP stakeholder initiatives	
12:00 PM	Adjourn and box lunches to go	

EVENT LOCATIONS

Department of Mechanical Engineering (ME)
University of Minnesota
111 Church Street SE
Minneapolis, MN 55455

ACCOMODATIONS

The Graduate Hotel
615 Washington Ave SE
Minneapolis, MN 55414
612-379-8888

DINNER LOCATIONS

Tuesday, October 16
[Campus Club](#)
University of Minnesota
403 Coffman Memorial Union
300 Washington Avenue SE
Minneapolis MN 55455

Wednesday, October 17
[Loring Bar & Restaurant](#)
327 14th Avenue SE
Minneapolis, MN 55414

GETTING TO and AROUND CAMPUS

The CCEFP Summit will be held on the University of Minnesota campus within walking distance to the Graduate Hotel and each dinner venue. To get to campus from the airport, take the Metro Transit Lightrail Blue Line to the US Bank Stadium Station, transfer to the Green Line, depart at the East Bank Station. Other options include Uber/Lyft or taxi or rental vehicle. On-campus parking is available for \$12/day at the following ramps: Washington Ave Ramp at 501 Washington Ave SE, Minneapolis, MN 55455; University Ave Ramp at 1926 University Ave SE, Minneapolis, MN 55455; Fourth Street Ramp at 1625 4th St SE, Minneapolis, MN 55455.

INTERNET ACCESS

UofM-Guest

Guests on campus may use the UofM-Guest network at no charge. Recent efforts have increased the bandwidth and capacity of this network, but the network has no encryption.

eduroam

Academic visitors from institutions that participate in the eduroam network may sign-in by using the full email address and affiliated password to login to eduroam.

EVENT CONTACTS

Alyssa Burger, CCEFP
612-964-3996 voice or text
alyssa@umn.edu

Mike Gust, CCEFP
612-839-5243 voice or text
mjgust@umn.edu