



# Emerging MAC Technologies

Monday, September 23<sup>rd</sup>, 2013

Co-sponsored by:

Air Conditioning and Refrigeration Center [ACRC], University of Illinois,  
with the support of SAE MRB CRP, ICCC  
marking the 10 year anniversary of CTS,

25 years of ACRC and 100 years of Thermal Sciences at the University of Illinois

## Preliminary schedule:

8:00	Arrival and registration	
8:30	Opening	Pega Hrnjak
8:50	SAE CRP with the emphasis on MRB	Bill Hill
9:10	Mexichem refrigerant overview	Bob Low
	<b>Systems</b>	
9:30	Battery cooling systems	Andy Musser
9:55	Fundamentals of flash gas bypass in MAC systems	Hanfei Tuo
10:20	Location of refrigerant and oil in MAC systems	Shenghan Jin
10:45	<b>Q&amp;A – Panel discussion</b>	
11:05	Lunch	
11:40	Lab tour	
	<b>Heat exchangers</b>	
12:20	Distribution parameter and effect of developing flow	Chad Bowers
12:45	Refrigerant distribution in vertical headers	Yang Zou
13:10	Effect of oil on distribution in headers	Huize Li
13:35	<b>Q&amp;A – Panel discussion</b>	
13:55	Coffee break	
	<b>Compressors</b>	
14:15	Oil- refrigerant flow at compressor discharge	Scott Wujek
14:40	Compressor calorimetry and durability (open and hermetic)	Andy Musser
15:05	Ejectors in vapor compression systems	N. Lawrence, S. Elbel
15:30	<b>Q&amp;A – Panel discussion</b>	
15:50	Coffee break	
	<b>Other topics</b>	
16:10	Refrigerant leak measurements	Xinzhong Li
16:35	Brazing technologies for compact AI and other heat exchangers	Hui Zhao
17:00	Experience with heat pumps R744 and R445A	P. Hrnjak, A. Musser
17:25	<b>Q&amp;A – Panel discussion</b>	
17:45	Wrap-up and feed-back form	
18:00	End of the Workshop	
18:00-20:30	Barbeque	

## Workshop information

For more workshop information please visit our website at <http://creativethermalsolutions.com/bulletin.html> and click on “Emerging MAC Technologies Workshop” on the left.