

October 2008 Review Meeting
October 28-29, 2008
Purdue University

Monday, October 27, 2008

Opportunity for informal dinner appointments with CTRC students, at Member request.

Tuesday, October 28, 2008 - Burton D. Morgan Center

7:30	Continental Breakfast (Room 102, Burton D. Morgan Center)
8:00	Welcome, Introductions, Meeting Overview (Room 121, Morgan Center)
8:10	Center Update (Garimella)
8:50	STATUS & HIGHLIGHTS OF CTRC PROJECTS AND FEEDBACK (~ 15 min presentation, 10 min discussion & feedback on LIFE forms)
8:50	Boiling heat transfer in microchannels using surface treatment (Jones, McHale)
9:15	Miniature-scale linear compressors for electronics cooling (Bradshaw)
9:40	Acoustically enhanced heat transfer (Tomford)
10:05	BREAK
10:20	Control of cooling fan noise by radiation efficiency control (Shin)
10:45	Thermal contact resistance between silicon and organic interface materials (El-Atwani)
11:10	Electromechanical transport of nanofluids: Microfluidic pumping and heat transfer enhancement. (Liu)
11:35	Electrowetting (Kumari, Annapragada)
12:00	Introduction of Posters
12:10	Group Picture
12:20	LUNCH and Student Poster Session (Room 102, Morgan Center)
1:50	Two phase liquid jet impingement cooling (West)
2:15	Characterization of composite heat spreaders (Huang)
2:40	Thermal and electrical characterization of CNT vias (Xiong)
3:05	Thin-film evaporation in cold plates and heat pipes (Dhavaleswarapu)
3:30	Break
3:45	IAB Discussion - Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis
6:30	DINNER - TBA

Wednesday, October 29, 2008 - Burton D. Morgan Center

7:30 Continental Breakfast

8:00 New Projects

8:00 Thermoelectric power generation from waste heat in electronic systems
(Sands/Fisher, Purdue)

8:15 Flow regime-based predictive model for flow boiling in microchannels
(Garimella, Purdue)

8:30 Assessment of alternative waste heat recovery opportunities (Sr. Garimella,
Georgia Tech)

8:45 Performance Enhancement in Polymeric TIMs: Hierarchical Nested Channels
and Improved Interfacial Adhesion (Subbarayan, Purdue)

9:00 Graphene-based thermal interface materials (Chen/Ruan/Fisher, Purdue)

9:15 BREAK

9:30 Discussion of Industry Feedback (via LIFE Forms)

10:00 Industrial Advisory Board Meeting (CLOSED SESSION)

11:00 Open House - Birck Nanotechnology Center (2283, 2239), ME 91, Electronics Cooling
Lab (ME 61) and Thermal Microsystems Lab (ME 71). Herrick Laboratories (Thermal
Systems and Acoustics wings).

12:00 MEETING ADJOURNMENT

LIFE - Level of Interest and Feedback Evaluation

For questions, contact: Dr. Suresh Garimella, Director, CTCRC (765) 494 5621 or
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