

**May 2009 Review Meeting**  
**May 12-13, 2009**  
**Purdue University**

**Monday, May 11, 2009**

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

**Tuesday, May 12, 2009** - Burton D. Morgan Center

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| 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)   |
| 8:25  | NSF Remarks   |
| 8:35  | Remarks from Purdue University  |
| 8:45  | STATUS & HIGHLIGHTS OF CTRC PROJECTS AND FEEDBACK (~ 15 min presentation, 10 min discussion & feedback on LIFE forms)                                   |
| 8:45  | Performance Enhancement in Polymeric TIMs: Hierarchical Nested Channels and Improved Interfacial Adhesion (Bajaj)                                       |
| 9:10  | Thermal contact resistance between silicon and organic interface materials (Iverson)  |
| 9:35  | Acoustically enhanced heat transfer (Tomforde)  |
| 10:00 | Flow regime-based predictive model for flow boiling in microchannels (Harirchian/Jones)   |
| 10:15 | BREAK   |
| 10:40 | Electromechanical transport of nanofluids: Microfluidic pumping and heat transfer enhancement. (Liu)  |
| 11:05 | Electrowetting (Kumari, Annapragada)  |
| 11:30 | Two phase liquid jet impingement cooling (West)   |
| 11:55 | Assessment of alternative waste heat recovery opportunities (Sr. Garimella, Little)   |
| 12:20 | Introduction of Posters   |
| 12:25 | Group Picture   |
| 12:30 | LUNCH and Student Poster Session (Room 102, Morgan Center)  |
| 2:00  | Thermoelectric power generation from waste heat in electronic systems (Wang)  |
| 2:25  | Characterization of composite heat spreaders (Huang)  |
| 2:50  | Thermal and electrical characterization of CNT vias (Xiong)   |
| 3:15  | Poster contest winners announcement   |
| 3:20  | Break   |
| 3:30  | Miniature-scale linear compressors for electronics cooling (Bradshaw)   |
| 3:55  | Control of Cooling Fan Noise by Radiation Efficiency Control (Shin)   |
| 4:20  | Lab Open Houses - Birck Nanotechnology Center (2283, 2239 ), Electronics Cooling Lab (ME 61) and Thermal Microsystems Lab (ME 71), Herrick Laboratories |

For questions, contact: Dr. Suresh Garimella, Director, CTRC (765) 494 5621 or  
Christine Merrill, Administrative Coordinator, CTRC cmerrill@purdue.edu

6:30 DINNER - TBA

**Wednesday, May 13, 2009** – Burton D. Morgan Center

7:30 Continental Breakfast

8:00 Company  
Introductions

8:00 Company #1

8:10 Company #2

8:20 Company #3

8:30 Discussion of Industry Feedback (via LIFE Forms)

9:15 CTRC Portfolio review

9:30 Industry Needs Discussion Panel - CTRC Research strategy discussion

10:30 BREAK

10:45 Industrial Advisory Board Meeting (CLOSED SESSION)

11:30 Wrap-up and Action Items

12:00 MEETING ADJOURNMENT

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LIFE - Level of Interest and Feedback Evaluation

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