

**November 2010 Review Meeting**  
**November 9-10, 2010**  
**Purdue University**

**Monday, November 8, 2010**

Opportunity for informal dinner appointments with CTRC students, at Member request. Please contact Deanne to set up a time with a student. Discuss projects, potential employment, memories of Purdue, etc.

**Tuesday, November 9, 2010 - Burton D. Morgan Center**

- 7:30 CONTINENTAL BREAKFAST (Room 102, Burton D. Morgan Center)
- 8:00 WELCOME AND REMARKS (Room 121, Morgan Center)
- 8:15 INTRODUCTIONS AND MEETING OVERVIEW
- 8:20 CENTER UPDATE (Garimella)
- 8:35 STATUS OF CTRC PROJECTS (15 min. presentation, 10 min. discussion & LIFE feedback)
- 8:35 Thermal Cycling Fatigue Effects on the Contact Resistance of Organic Interface Materials on Si (Steill)
- 9:00 Assessment of Alternative Waste Heat Recovery Opportunities (Little) - End of Project
- 9:25 Compliant Thermal Interface Adhesives (Chavali, Lin)
- 9:50 Performance Enhancement in Polymeric TIMs: Hierarchical Nested Channels and Improved Interfacial Adhesion (Bajaj) - End of Project
- 10:15 BREAK
- 10:30 Graphene-based Thermal Interface Materials (Hu)
- 10:55 Thermoelectric Power Generation from Waste Heat in Electronic Systems (Wang) - End of Project
- 11:20 Organic Rankine Cycle with Solution Circuit for Electronic Waste Heat Recovery (Krishna)
- 11:45 Introduction of Posters
- 11:50 Group Picture
- 11:55 LUNCH and STUDENT POSTER SESSION (Room 102, Morgan Center)
- 1:30 Flow Regime-Based Predictive Model for Flow Boiling in Microchannels (Ritchey, Paranjape)
- 1:55 Two Phase Liquid Jet Impingement Cooling (West) - End of Project
- 2:20 Update on Electrowetting - NSF Fundamental Research Supplement (Dash)
- 2:45 BREAK
- 3:00 NEW PROJECT PRESENTATIONS (10 min. presentation and 5 min. discussion)
- 3:00 Optimization of Manifold Microchannel Heatsinks (Murthy)
- 3:15 Optimal Porous Microstructures for Enhanced Thermal Management (Murthy)
- 3:30 Surface Treatment for Boiling Heat Transfer Enhancement (Kim)
- 3:45 Determination of Liquid Film Thickness in Slug and Annular Flow for Improvement of Flow Boiling Heat Transfer Model (Harirchian)
- 4:00 Anti-Noise Synthetic Jet Enhanced Heat Sink (Persoons) – Alternate project
- 4:15 LAB OPEN HOUSES– Birck Nanotechnology Center (2283, 2239 ), Electronics Cooling Lab (ME 61) and Thermal Microsystems Lab (ME 71), Herrick Laboratories
- 6:30 DINNER – Christos New City Grill, 3291 Teal Road, Lafayette

For questions, contact: Dr. Suresh Garimella, Director, CTRC (765) 494 5621 or  
Deanne Kemeny, Administrative Coordinator, CTRC dkemeny@purdue.edu

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**Wednesday, November 10, 2009** – Burton D. Morgan Center

- 7:30 Continental Breakfast
- 8:00 Poster Contest winner announcement
- 8:10 Discussion of Industry Feedback (via LIFE Forms)
- 9:00 IAB Discussion - Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis
- 10:00 BREAK
- 10:15 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