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
11:45 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