Industrial Advisory Board Meeting Agenda
October 1-2, 2014
University of Texas, Arlington

September 30, 2014  University Center – Bluebonnet Ballroom
5:30 – 7:30 pm  Networking Reception/Dinner and Student Poster Preview

October 1, 2014
7:00 – 7:50 am  BREAKFAST (light continental) – Rio Grande Ballroom
8:00 am  Welcome and Opening Remarks/Housekeeping: Dereje Agonafer, Site Director, University of Texas, Arlington,
8:02 am Vistasp Karbhari, UTA President, State of the University (5mins)
8:07 am Khosrow Behbehani, Dean, COE (5mins)
8:12 am Erian Armanios, MAE Chair, MAE (3mins)

8:15 am  Introduction of guests
8:25 am  NSF Evaluator Update: Don Price
8:30 am  Center Director Report: Bahgat Sammakia

Project Reports

Thermal Management

Air-cooled

9:00 am  Project 12: Investigation of Airflow Through Perforated Floor Tiles – Yunji Gu and Joshi, GT
9:20 am  Project 13: Transient Thermal Response and Control of Data Centers – Yunji Gu Joshi, GT
9:40 am  Project 4: Direct and Indirect Evaporative cooling for IT Pods (Phase II) – Betsegaw Gebrehiwot, Agonafer, UTA

10:00 am  BREAK

10:15 am  Project 14: Experimental and Analytical Studies on Transport in Fully and Partially Enclosed Cold Aisles in Air Cooled Data Centers – Husam Alissa, Sammakia, BU

Hybrid

10:35 am  Project 7: Models and Metrics for Dynamic Air and Hybrid Liquid Cooled Data Centers Based on Computational and Experimental Approaches – Ortega, VU and Sammakia, BU
**Water-cooled**

10:55 am  Project 6: *Dynamic Cold Plates for Effective Cooling of Multi-Core High-End Chip Scale Packages* – John Fernandes and Agonafer, UTA

11:15 am  Project 15: *Warm Water Cooling in Data Centers Including Water Storage Systems* – Fleischer, VU/Sammakia, BU

**Reliability**

11:35 am  Project 10: *Impacts of Particulate and Gaseous Contamination on IT Equipment Where Air Side Economizers Are Implemented* – Tejesh Bagul and Agonafer, UTA

11:55 – 1:00  **LUNCH and lab tours of Woolf Hall (Thermal and Reliability lab) and Nedderman Hall (Data Center Facility)**

**Tools**

1:00 pm  Project 1: *Exergy Based Approaches for holistic Design of Energy-Efficient Data Centers* – Anish Bhalerao and Aaron Wemhoff, VU

1:20 pm  Project 3: *Rapid Modeling Tools for Thermal Management of Modular Data Centers* – Wemhoff, VU and Joshi, GT

**Software/Systems Issues**

1:40 pm  Project 2: *Energy Proportionality in Data Centers and Benchmarking: Synergistic Management of Workload, IT Equipment and Cooling System* – Tyler Stacheki and Kanad Ghose, BU

**Emerging Technologies**

2:00 pm  Project 9: *High Bandwidth Integrated Parallel Optical Communication Links for Power Efficient, Cost Effective Data Center Interconnects* – Ghose, BU

2:20 pm  Project 11: *Two-Phase Cooling Coupled with Waste Heat Energy Capture from Data Center Environments* – Sebastian Araya and Fleischer/Ortega, VU

2:40 pm  Project 16: *An In-Depth Understanding of Oil Immersion Cooling Strategies for Data Centers* – Rick Eiland and Agonafer, UTA

3:00 pm  **BREAK – Finish filling out L.I.F.E. forms**

3:15 pm  Guest Presentation: Jim Jagers, National Sales Manager, Mestex

3:45 pm  L.I.F.E. form review and discussion – lead by Don Price
4:45 pm  Review of evening/day 2 activities
4:50 pm  Lab tours of Woof Hall (Thermal and Reliability lab) and Nedderman Hall (Data Center Facility)
5:30 pm  **Reception** – Dinner/Networking/Poster Session/voting on best poster

**October 2, 2014**

7:00 - 8:00 am  **BREAKFAST** (light continental) *Rio Grande Ballroom* –
8:00 am  Poster Contest feedback session and announcement of winner and morning activities
8:15 am  Concurrent sessions
  - IAB Closed Meeting – *Carlisle Room*
  - Student Leadership Council Meeting: *Facilitating Student Communications Among the University Sites* - *Rio Grande B*
  - University Policy Committee Meeting (VPs of Research) – *Woolf Hall 413*

9:15 am  **BREAK**
10:00 am  Group meeting to discuss IAB Feedback and Revised ES2 Roadmap
11:00 am  General Departure – Bus to Mestek Campus (optional)
11:30 am  Luncheon and Tours of Mestek Operations, IT Pod with indirect/direct evaporative cooling system (Mestex and UTA Collaborative Effort)
1:30 pm  Bus to Hilton Hotel/UT Arlington Campus