1. **Introduction and Welcome (Debbie Goldman, IAB President)**
   Debbie started the meeting by welcoming three new members and visitors: Dr. Jim Barnes, Hewlett-Packard; Dr. Brian Johnson, Ball Aerospace & Technologies Corp.; and Scott Makinen, Intel. She reviewed the agenda and then turned it over to Tony for the Department Update.

2. **ECE Department Update (Tony Maciejewski, ECE Department Head)**
   The presentation included the following topics:
   a. ECE ranks in the top 10 nationwide for faculty productivity
   b. Update on 2007 faculty search
   c. Dr. Carmen Menoni named VP for IEEE-LEOS Publications
   d. Dr. Randy Bartels’ project funded by new bioscience grant from Colorado Office of Economic Development and International Trade
   e. Laser research benefiting state
   f. Record attendance at 2007 Engineering Career & Internship Fair
   g. Thomas Williams, EE PhD ’71 and IAB member, received European Automation Association Lifetime Achievement Award
   h. ECE rolls out new look and feel
   i. ABET Update: Computer Engineering re-accredited for 6 years; will go through process again in 2008 to get on track with regular renewal cycle
   j. International Summer Fellowship program, a new pilot program for students from the Indian Institute of Technology (Chennai, India)
   k. Update on state funding
   l. Volunteer students coordinate and run two Cajun boils, raising $2,558 for Chris Kautz Memorial Scholarship
   m. ECE alumnus Kate McDonnell first licensure student of Engineering Education degree program
   n. ECE continues emphasis on K-12 outreach, e.g., Oct. New Belgium event, collaboration with the IEEE, and FIRST Robotics
   o. ECE ramps up recruitment
   p. ECE Enrollment Trends
   q. National Enrollment Trends
3. Update on Action Items from Fall Meeting (Tony Maciejewski)

Tony’s presentation provided an update on the following action items:

- **Action item:** Find ways to incorporate the design experience throughout the curriculum so that students are prepared and familiar with the program when they reach their senior year.
  - **Status:** Dr. Bill Eads has integrated a mini design exercise into EE102 (Digital Circuit Logic). A similar approach is being explored for EE251 (Intro to Microprocessors).

- **Action item:** Advertise senior design “labor force” to other departments as a way to build interdisciplinary projects.
  - **Status:** Ed Chong, ISTeC Education Advisory Committee, has been contacted. Senior design has been pitched to various industry partners as well, including Advanced Energy, Avago, Agilent, Drivven, and HP.

- **Action item:** Require students to prepare 3-5 minute presentation (elevator speech) as well as a longer, more detailed version.
  - **Status:** Students were required to prepare 10-15 minute project presentations at the end of the fall semester. Students also are expected to deliver a brief speech for events such as Engineering Exploration Day, where they share their projects with a broad audience.

- **Action item:** Continue Best Paper Contest – ask IAB to review papers.
  - **Status:** The contest will be held again this year. Judging begins on Monday, April 30. The winner will be announced at the spring graduation reception on May 11.

- **Action item:** Ask IAB members to serve on panel to review project presentations.
  - **Status:** Six visitors from Avago, HP, and IBM attended the fall ’07 oral presentations. Will encourage continued industrial involvement.

- **Action item:** Teach students project management skills through the senior design lecture series. Bring in a speaker early in the semester and then two or three later in the semester.
  - **Status:** Organized two lectures regarding project management skills (“Building a Championship Team” and “Project Management Lifecycle”). Students responded favorably.

- **Action item:** Investigate how to give students early exposure to senior design project management processes. Possibly have seniors mentor freshmen as part of their senior design project.
  - **Status:** Explicitly invited juniors to attend E Days to gain exposure to senior design. Senior design is being promoted in lower level classes. There is a college-wide effort to offer a course that gives young students research and project experience. Honors program also provides early exposure and mentoring opportunities.

- **Action item:** Offer professional development courses to address team dynamics, e.g., team building, conflict resolution, etc.
  - **Status:** The college requires all graduating students to attend at least two seminars from the Global Citizenship lecture series. Alma Rosales also is leading the College of Engineering Professional Learning Institute.
4. Industry Spotlight: Open-Silicon (Colin Baldwin, Business Development & Technical Solutions Manager)
Colin presented an overview of Open-Silicon, highlighting the company’s past and current state, as well as goals for the future. He provided information on the ASIC model, past and present, with specific details on offshoring and the industry’s low cost business model.

5. College of Engineering Professional Learning Institute (Alma Rosales, IBM Executive On Loan)
Alma provided a high-level overview of the College of Engineering Professional Learning Institute (PLI), including its purpose, mission and vision, and implementation strategy. She provided the board with a survey to gain input on the PLI plan. The board offered a few recommendations and comments at the meeting, emphasizing the importance of ethics and equality in the workplace. A key part of the plan, they said, is to make sure industry is aware of the PLI and its significance – that way it means more to employers when they see it on a student’s resume. They also recommended advertising PLI to graduate students and they expressed interest in attending some of the PLI sessions. Following the meeting, Alma’s Power Point presentation was distributed to the board via email along with a reminder encouraging industry feedback at any time.

6. CSU Technology Transfer (Mark Wdowik, CSU VP of Technology Transfer)
Mark updated the board on CSU’s technology transfer model and how it handles IP rights. He also discussed industry collaborations and start-ups.

7. Breakout Session I: Strengthening the Ties Between Industry and the ECE Department (Facilitator: Hugh Grinolds, EUV ERC Industrial Liaison Officer)
Hugh asked the board to consider and discuss among their tables the following questions:
- How can we further engage industry in ECE programs and initiatives?
- How can we better connect industry with students?
- How can the ECE department provide proper recognition to our most supportive industry partners?

The group discussions spawned the following comments, suggestions, and ideas:
- Xilinx offers a nationwide university program, providing lab equipment to schools. The goal is to create future customers by giving students early exposure to Xilinx equipment and tools. They recently donated equipment to the ECE department, but would like to become even more involved with CSU.
o Build on ECE “Field Trip Day” to include additional companies and more extensive tours. Alvin Loke indicated that AMD would be interested in becoming involved.

o Provide opportunities for students to “shadow” industry partners.

o Expand ECE seminar series to include two-part seminars from companies. The seminars would occur at CSU on the same day, back-to-back. The first seminar would focus on the company’s research initiatives (audience = faculty and graduate students), the second seminar would include more detailed information about the company, as well as internship and employment opportunities, if appropriate (audience = undergraduate students and perhaps graduate students).

o Have more faculty research talks at company sites. Maybe even have students present their research or projects. The board noted that this may be difficult for some companies, due to various policies and the “red tape” involved.

o As students and faculty prepare their presentations for conferences, they might consider practicing their talks in front of industry. Tony mentioned that all conference presentations are available on the ECE web site. He encouraged the IAB to contact the department if interested in a specific topic. The ECE faculty are always willing to give their talks at companies.

o Brian Johnson with Ball expressed an interest in higher level talks, presentations that provide a broader research picture including the future trends of science and technology. He said he would like to continue working with faculty and students on research projects, similar to the radiometer project.

o Continue the Engineering Career Fair – the board agreed that a fair focused on engineering is a good thing for employers. They also like the ECE lecture series.

o Jim Barnes with HP noted that many companies used to rely on a central research lab model for their research needs. He said it seems that there are a lot of industry projects that would be suitable for graduate students. He recommended bridging the gap between ECE and industry by creating a mechanism for matching up students with appropriate industry research projects. To facilitate this, the board recommended having Tony present an overview of the ECE strategic plan at the next meeting to give them a clear understanding of the department’s goals and vision. This will allow the IAB to define areas that align with their interests and needs and better determine how they can help the department.

o Create a “road show package,” a turnkey presentation that board members can share with their companies to help raise awareness about ECE. Tony also mentioned that he’d be happy to give talks at companies to promote ECE.

o Tony shared a few budget details with the board. In response, a few members asked for a list of equipment/lab needs. They said they may be able to help by asking their companies to donate equipment to the department.

o Encourage students to invite IAB members to participate in projects. This can be achieved via phone or web conferencing, technology currently being utilized in the industry.

o The group talked about creating a southern IAB chapter comprised of business professionals from the Denver area and south. They considered meeting at company sites instead of CSU. Debbie Goldman called a vote on the idea, but the board voted against it. Future meetings will continue to take place at CSU.
Provide IAB with advance copies of student resumes prior to the Engineering Career and Internship Fair. Advertise to students as an opportunity to get early exposure to employers.

8. Student Design Presentations
   Two student groups presented their senior design projects to the board. Dallin Kuzmich and Matt Jisbon shared their Electronic Pipe Organ, while Pat Kusbel and Elliot Buller gave an overview of their Microwave Radiometer project.

9. Breakout Session II and Lunch
   During lunch, the board was asked to provide suggestions and ideas for improving the board. Due to time constraints, the discussion was brief. A couple comments include:
   - Alma’s talk was good. Shows that the college is following through on the board’s suggestions.
   - The board liked the day’s agenda and the variety of presentations. They especially enjoyed the students’ presentations.
   A survey also was distributed to gain feedback. The department will use the results of the survey to help plan for future meetings.

10. IAB Elections (Facilitator: Debbie Goldman)
    The board unanimously voted in favor of John Nichols as the new IAB vice president. Fernando Tomasel becomes IAB president.

11. Closing Thoughts (Tony Maciejewski)
    Tony wrapped up the meeting and thanked the board for their participation. He encouraged everyone to attend the fall IAB meeting in October.

ACTION ITEMS:

- Look into expanding ECE “Field Trip Day” to include additional companies. AMD expressed interest, but check with other board members as well.
- Provide opportunities for students to “shadow” industry partners.
- Investigate the possibility of expanding the ECE seminar series to include two-part seminars from companies. The seminars would occur at CSU on the same day, back-to-back. The first seminar would focus on the company’s research initiatives (audience = faculty and graduate students), the second seminar would include more detailed information about the company (audience = undergraduate students and perhaps graduate students).
- Have more faculty research talks at company sites. Maybe even have students present their research or projects. Periodically send the board a link to upcoming conference presentations and remind them that the faculty are willing to present at their companies.
- Look into offering more high-level research talks as part of the ECE seminar series – presentations that provide a broader research picture including the future trends of science and technology.
- Continue the Engineering Career Fair.
• Continue the ECE lecture series.

• Have Tony present an overview of the ECE strategic plan at the next meeting to give the board a clear understanding of the department’s goals and vision. This will allow the IAB to define areas that align with their interests and needs and better determine how they can help the department.

• Create a “road show package,” a turnkey presentation that board members can share with their companies to help raise awareness about ECE. Remind board that Tony is willing to give talks at companies to promote ECE.

• Ask the board for help with equipment donations by sharing a list of departmental needs.

• Encourage students to invite IAB members to participate in projects. This can be achieved via phone or web conferencing, technology currently being utilized in the industry.

• See if it’s feasible and ethical to provide IAB with advance copies of student resumes prior to the Engineering Career and Internship Fair. Advertise to students as an opportunity to get early exposure to employers.

Please mark your calendar for the spring IAB meeting on Friday, October 19, 2007.