

CIVIL ENGINEERING AND ENGINEERING ALUMNI INDUSTRIAL COUNCIL MEETING MINUTES

September 25, 2015 – 12:00 p.m. – 5:00, Vine Annex, Room 102

Members Attending: Barry Abbott (phoned in), Garry Barras, Kathy Chavez, James Davey, Michelle Dodroe, Alan Forrest, Charles Gajda, Therese Lane, Kevin Lansey, George Maseeh, Travis McCarthy, Mathew McDole, Ann Moynihan, Nathan Palmer, Dean Papajohn, Benny Young, David Zaleski

Members Who Sent Regrets: Chris Albright, Alejandro Angel, Mo Ehsani, Joe Gervasio, James Glock, Mick Mathieu, Tom McLean, Bill Nelson, Scott Sayles, Spencer Tucker, Stan Turney, Robin West, and Mark Woodson

Absent: Robert Barksdale, Michael Barton, Jerry Cannon, Seth Chalmers, Tom Draeger, John Evans, Lee Farris, Eric Froberg, David Gildersleeve, Chris Grubbs, Tadd Johnson, Kevin Josker, Scott Larson, Juan Lopez, Dave Mahaffy, Tom McGovern, Farhad Moghimi, Jack Moody, William Palmer, Nancy Patania Brown, Claudia Perchinelli, Robert Rasmussen, Adam Sedgeman, Mark Taylor, and Ken Wright

Others Attending: Yi-Chang Chiu, Abby Davidson, Andisheh Ranjbari, Margie Edson-Puerta, and Joel Turk

Welcome and Introductions

Nathan Palmer called the meeting to order at 12:00 P.M. and all attendees introduced themselves.

Society of Civil Engineering Student Group

Abby Davidson (aldavidson@email.arizona.edu) and Joel Turk (joelturk@email.arizona.edu) gave the report.

The CEEM SCE Career Fair will be held in the South Ballroom of the Student Union on Tuesday, October 27th from 5:00-8:00 p.m.

PSWC 2016 conference will be held at California State University, Long Beach on March 31-April 2nd. The canoe and bridge teams are still in the design phase of their projects.

Please email Abby or Joel if you wish to be a conference project mentor or give support for the conference or Carlos Bunzira (cbunzira@email.arizona.edu) if you want to have a table in the Career Fair.

Institute of Transportation Engineers (ITE)

Graduate student Andisheh Ranjbari (aranjbari@email.arizona.edu), the President of ITE, was the spokesperson for this update. Dr. Wu is the faculty adviser. Dr. Felipe Ladron de Guevara of Kittleson and Associates is the Industry mentor for the group. The group of graduate and undergraduate students meet the 2nd and 4th Wednesdays of the month, participate in UA Club events, attend joint SAITE meetings, attend weekly Graduate Transportation Seminars, conferences and field trips. This year they would like to represent the U of A at the ITE Student Leadership Summit in January 2016 at Cal Poly Pomona. This would be the first time that they would attend. There are competitions similar to the

PSWC conference but geared toward transportation. They need approximately \$2,500 to attend this conference. Sponsorships are available. If you would like to donate, please contact Andisheh by email.

Faculty Lecture

Dr. Chiu spoke about his most recent project entitled “fleXpress – Intercity Rapid Transit”. This project information is proprietary so the information cannot be put into the minutes. There was a question and answer session after his talk.

Approval of the minutes

The minutes from the April 17th meeting were reviewed and a motion was made by Kathy Chavez to approve the minutes. The motion was seconded by Ann Moynihan and approved by all.

Treasurer’s Report

Ann Moynihan reported that to date for this fiscal year (July 1, 2015 to date) the department has received \$5,935. Last fiscal year the department received \$75,935 in scholarship and student support, \$4,700 for homecoming, \$18,830 for department discretionary, \$11,059 for the Mohr’s Circle, \$2,500 for department endowments, \$15,700 construction course.

Homecoming Report

Ann reported that the department has \$689 left from last year’s homecoming donations which is the first time we have had excess. The last Centennial lunch is estimated to be \$4,924. The Centennial Awards Luncheon will be Friday, October 23rd at Hotel Congress. The barbecue estimated to be \$4,813 will be Saturday, October 24th 3 hours prior to kick off. We will charge \$35 for the luncheon but we still need to cover the award winners, their guest, and awards. We are hoping to find donor sponsors whose name and/or logo will be in the program as well as any donor who gives \$1,000 or more will be on our homecoming banner. If we get 100 paid lunch tickets we are currently needing \$600 to break even.

Mike Barton said he would look into getting discount tickets for people to travel on the modern streetcar from campus to the hotel.

Construction Committee Report

This report was given by Dean Papajohn and Kevin Lansey. Construction Engineering Management (CE 381) was offered again in the fall. The second class, Construction Project Planning, Scheduling and Control started last semester. Dean Papajohn has been hired full time starting in August 2015 to teach these courses as well as develop the program and seek funding for it. Industry is supporting these courses. Our donors are The Ashton Company, the Henry George Mackintosh Foundation, Granite, KE&G, and Sundt. Some were one time donations and others are continued pledges. Consistent contributions will allow us to add more courses. The Oversight Committee consists of: Bill Vail – Ashton, Travis McCarthy – Sundt, Mike Hoover – Sundt, Kurt Wadlington – Sundt, Todd Keller – Granite, Jeremy Bohne – Granite, Chris Albright – KE&G, Adam Sedgeman – KE&G, Mike DiNapoli – Jacobs – Tristar, Maher Salah – Tristar, Dean Papajohn - UA CEEM, Dave Zaleski – Pima County, Ana Olivares – Pima County, and Todd Emery – ADOT, and Rod Lane – ADOT. The goal is to have 4 or more courses and have a professor of practice on campus to teach them and to establish a \$5 million

endowment to provide sustainable funding for the program. More donors are needed to continue current classes and to increase the number of topics offered. Speak with Dean if more information is wanted of course content.

Awards Committee Report

Chuck Gajda as the chair of the selection committee gave the Centennial Young Alumni award winner as Jorge Villalobos. There were several nominees but Jorge stood above the crowd.

Nathan Palmer as the chair of the Centennial Distinguished Alumni award selection committee said that this year's winners are: Boualem Hadjerioua, Robert Turton, Mark Woodson and Brian Dolan.

Kevin Lansey as the chair of the Centennial professor selection committee said that there are two nominees and the committee has not yet selected a winner.

Young Alumni Report

There was no report submitted.

Department Head Report

The CEEM Department has 110 undergraduate students, 34 BS graduates, 12MS/Ph.D, 12 faculty and 4 staff. It is hard to give the numbers for the CE freshman and sophomores since many do not choose a major until their junior year so we look at the freshman and sophomore class enrollments in CE 210, CE 251, CE 301, CE 363, CE323 and CE 408 as indicators. The FE passing rate for spring 2015 CEEM graduates was 94%.

Under the new funding model revenues are generated by teaching undergraduate courses, progressing undergraduates toward degree majors, teaching and advising graduate students, return on indirect costs associated with research grants/contracts, differential tuition and state support called subvention. To increase revenues we must increase enrollment (recruit on campus and community colleges), get new students from the Architectural Eng. B.S. Degree program, expand graduate program numbers by offering reduced tuition, improve graduate student recruiting, increasing research funding (this helps to increase the grad numbers also since research supports them), and distance graduate education. When a positive balance is achieved it will be used for a rainy day fund, faculty raises, new geotechnical engineering faculty, invest in labs/equipment, research areas and new initiatives (CEM).

The CEEM technical electives are environmental engineering, geotechnical engineering, structural engineering, water resource engineering and hydrology and transportation engineering. Construction engineering cuts across and expands upon existing offerings.

CE 381- Construction Engineering Management consists of project construction development cycle, interpreting construction documents, qty. take-off & cost estimating, construction contracts and regulatory issues, scheduling, QA/QC, change orders & RFIs, project monitoring, safety. 23 of 38 graduates enrolled.

The Construction Project Planning Scheduling and Control course is based on the direction/needs of the oversight committee. It was offered in the spring of 2015 and had 22 students. The topics covered were:

types of schedules, method of measurement and payment, preparing and updating schedules, proper and proactive use of schedules for planning, execution and control.

A draft of the Arch. Eng curriculum was shown. We are beginning the University process for the new degree. We learned the pitfalls from CHEE who recently added a degree. The draft curriculum must go to the advisory committee, College of Architecture, and other AE program leads. We are preparing the proposal, (business plan – establish need, scope and preliminary curriculum) in Jan/Feb for multiple layers of approvals. The curriculum will be finalized 2016-17 and we will begin accepting students in the fall of 2017. The advisory committee for this consists of Bill Nelson (GLHN), Ron Schneider (Schneider and Assoc. (AE grad), Mel Green, Jerry Cannon, and Austin Allen (Henderson). There is room for others if someone would like to volunteer.

Distance Education is being done for Eng. Science and Junior level courses, recorded lectures (2+2 or 3+1 programs – AWC). The graduate program options are Wiley – on-line and supplemented course materials or All Campus – recorded lectures.

Other departmental directions are the leadership seminar is being offered, business aspects in CE 408A – advisory team, hosted ADOT Transportation Research group in the spring, ADOT research pitch meeting coordinated with ASU and NAU last week, Metropia is in Austin and Tucson with PAG, New York city region, hosted two and one upcoming symposia with National Academies of Science, we are seeking to collaborate with the American Association for the Advancement of Science on Science Diplomacy conference, and a possible E-Week Aqualibrium competition. Other departmental research consists of Dr. Wu working on a Blue Tooth project with PAG/COT, Dr. Jo and Dr. Duan are working on a bridge scour monitoring project with Pima County, Dr. Haldar has a new NSF project on structural health monitoring, Dr. Zhang is working on a geopolymer cement replacement to patent, and Dr. Duan is working on a Yuma testing ground project.

The department has the support of the Friends of the Dept. who began as the Mohr's Circle group and they are heading up Centennial Events and evolved to a general advice and direction group that meets approx. every 4-6 weeks. The Alumni Industrial Council has been a tremendous asset. The AZSCE Section/Tucson Branch/YMG has been a big help. The department has 32 scholarships (including the So.AZ. ASCE Branch) totaling \$123K provided to 37 students.

There are 14 members of the Mohr's Circle. They are: AzSCE So. Branch, CH2M Hill, Cypress Civil Development, Dao's Investment Inc., Joseph Gervasio, Kevin and Diana Lansey, Ed and Pat Nowatzki, Chase Parker, Quakewrap, Structural Grace, Sundt Construction, The Ashton Co, Spencer and Ena Tucker, and Woodson Engineering and Surveying.

The department needs Senior Design group mentors to meet with the teams on a weekly or bi-weekly basis (5-6 pm on campus or via web conferencing) to provide project management guidance and add technical expertise. We are hoping for 12 mentors which would be two per team. Also needed are recruiting slides of fun Civil Engineering projects.

We were dismayed to have lost two former faculty this year: Bob Wortman and Ed Nowatzki.

Finally we would like to know how we can be a better partner. How can we benefit constituents? How can we improve relationships? How can we collaborate with industry partners? How can we motivate

alums to be more involved in AIC or specific activities? Your feedback is appreciated. Please send your thoughts to Dr. Lansey.

Development with Margie Edson-Puerta

Margie spoke about how the departments need to create relationships in order to be able to ask for and be successful in soliciting donations. She will be raising funds for the College as well as for the departments. The departments in the College were divided between the two new development officers and Margie has CEEM.

Breakout Notes

Student Outreach

Develop an AIC subcommittee

- High school outreach
- Work with SCE chapter to outreach to undeclared frosh and sophomores
- Also engage SAZASCE
- Community Colleges

State of Outreach

- Engr 102 – 28 schools in AZ (school list on Dept. website)
- Engineering Ambassadors – not specific to Civil
 - Low % direct to Civil

Future Efforts

- Social Media
- National ASCE has some recruiting materials
- Consider re-branding CE Dept. name / Capitalize on Arch. Engineering
- Aqualibrium – Civil piece for Engr. 102 teachers
- Recruiting slides by Oct. 28
- Engage motivations about quality of life
- School counselors
- Open house situations / classroom presentations
- Career Days
- Participate in Engr 102
- Frosh Pizza
- Engaging link on website
- Add videos to the CEEM website from Alumni telling what they do with their degrees.

Increase Donations

The group discussed development ideas and how to increase funding for the Construction Management Campaign endowment. The goal is a \$5M endowment of which the interest would fund a professor of practice to teach the courses as well as software and other materials needed to teach the course. Several names were mentioned for Dean and Margie to contact. Normally 10% of the donors give large donations to get to 80% of the goal. About 20% of donors will give smaller gifts in the \$10K-\$25K range adding up to 15% of the goal. About 70% of donors give in the \$5K and under range which is 5% of the goal.

Summary of Action Items

Therese will send out the United Way code for those who wish to donate through their work campaigns.

Therese will try to reserve the Silver and Sage room in Old Main for the next AIC meeting.

Kevin will set up tours of the Civil Engineering Labs for the AIC to see at the beginning of the meeting.

Next AIC meeting will have 30 minutes at the beginning for open discussion.

Next AIC Meeting:

Next meeting date is April 22, 2015 in the Silver and Sage Room in Old Main. The meeting will begin at noon with a light lunch beginning at 11:30 a.m.

Meeting Adjourned: The meeting was adjourned at 5:00 p.m.