For AE Cat.I Proposal

Weiss, William Jason
Sent: Thursday, May 11, 2017 8:09 AM
To: Liu, Judy

From: Oscar Zuniga [ozuniga@marquess.com]
Sent: Thursday, May 11, 2017 5:11 AM
To: Weiss, William Jason; Ashford, Scott Alan
Subject: RE: OSU hosting OSBEELS this week

Jason;

Of course you may use my email for whatever purpose it may suit.

Thank you.

-Oscar

From: Weiss, William Jason [mailto:Jason.Weiss@oregonstate.edu]
Sent: Wednesday, May 10, 2017 11:33 PM
To: Ashford, Scott Alan <Scott.Ashford@oregonstate.edu>; Oscar Zuniga <ozuniga@marquess.com>
Subject: RE: OSU hosting OSBEELS this week

Oscar

Thank you very much for your email. It was great to have OSBEELS on campus and great to learn about your passion and support for this new program. The Architectural Engineering Program with a focus on Building Systems will, we anticipate, be a new degree offering. While there is a good deal of work to do as we launch we are very excited. Thank you for your email. I will be in contact in the near future to discuss this with you in greater detail. If you do not mind I would like to include your email in our application package to the university as further support of the need for this program.

Best wishes

Jason

Jason Weiss
Head of the School of Civil and Construction Engineering
Professor and Edwards Distinguished Chair
Director of the Kiewit Center for Infrastructure and Transportation Research
111F Kearney Hall
Corvallis, Oregon 97331

jason.weiss@oregonstate.edu
Phone 541-737-1885
Fax 541-737-3052
http://cce.oregonstate.edu

Editor in Chief - ASTM Advances in Civil Engineering Materials

From: Oscar Zuniga <ozuniga@marquess.com>
Date: May 10, 2017 at 9:16:49 PM PDT
To: "scott.ashford@oregonstate.edu" <scott.ashford@oregonstate.edu>
Subject: OSU hosting OSBEELS this week

Dr. Ashford;

Thank you for the warm hospitality that was extended to us when we held our board meeting on campus. I know the delightful weather wasn't exactly your doing, but it might as well have been- everything was wonderful and the tour of the labs was tremendously exciting. I had never been to any of the engineering buildings, much less into the labs, so it was very exciting to see the top-notch work that is being done and the extremely rich academic environment that is available to us right here in Oregon! Now, I must admit that I am somewhat biased since I got my undergrad degree in ME from the University of Texas at Austin and I consider Texas engineering schools to have set the bar that others have to try to reach ;o)

Something you said piqued my interest very much, or at least I think it was you who mentioned it. You said that there were plans in the works to expand, enhance, or overhaul the Architectural Engineering program and morph it into Building Systems Design. That really, really struck a chord with me because I have been involved in that field continuously since graduating from UT in December 1973. I learned HVAC and plumbing design at my father's knee, since he was a mechanical engineer in private consulting practice since I was a child, I grew up around engineering design and construction sites, and always knew I'd be an engineer just like my Dad. He also collaborated with other engineers to provide electrical engineering design to go with the HVAC and plumbing design projects that came in the door, so I also grew up learning lighting, power, and fire & life safety systems design. Texas is like Oregon in that a registered engineer in a given discipline can practice in whatever areas he or she is competent (structural being an exception), so I have always done both mechanical and electrical building systems design side-by-side. When I moved my young family from Texas to Oregon in 1993 to raise our children in a better environment than the deep south Texas-Mexico border, my new employment required that I obtain licensure as an electrical engineer in California, so twenty years out of college I studied for the electrical P.E. exam, sat for it, and passed it to become a "legitimate" dual-registered mechanical and electrical building systems design engineer.

Having worked with fire sprinklers, fire alarms, life safety systems, emergency and standby power systems, and systems for essential facilities such as hospitals and public safety facilities over the years, I decided that I would go back to school to study fire protection engineering. In 2011 I enrolled in the then-new Master's in Fire Protection Engineering program (distance learning) that was just beginning to be offered out of Cal Poly – San Luis Obispo. The distance learning program is perfectly tailored to working professionals and I set my sights to work straight through the program by taking as heavy a course load as the program allowed. Forty years out of college for my undergraduate studies, I was awarded my Master's in June 2013 and sat for the P.E. exam in FPE that October, and passed it… the first Cal Poly FPE Master's program graduate to get the P.E. in that discipline. I now hold treble-licensure in Mechanical, Electrical, and Fire Protection Engineering in Oregon, California, Washington, and Texas.

I say all of that to say this. I currently have a graduate mechanical engineer interning under me and he is about two years from completing his required supervised experience for his P.E. My wife and I have thought about doing something different after my commitments to my intern and my business partners are met, and in fact I don't need to be working as many hours as I do now. I thought briefly about continuing my studies in fire protection engineering by applying for the doctoral program at the University of Canterbury in New Zealand since they have a robust and renowned program, but discarded the idea. My area of research would have been improving the performance of engineered timber materials and structures in fire conditions, and I would have done my lab work at Southwest Research Institute in San Antonio, where I worked for nine years as Manager of Facilities Engineering. SwRI has world-recognized fire technology research facilities that are suited to this type of studies. Since I did not pursue my PhD, I do not have the credentials required for any sort of professorship, but perhaps as an instructor, lecturer, or staff-? I have over forty years' experience gained from continuous practice in building systems design for educational,

institutional, commercial, industrial, residential, and healthcare facilities, including more than a passing familiarity with related areas of practice such as structural engineering and energy modeling as well as utility infrastructure, building codes, and related topics. As a lifelong learner, I enjoy moving into new fields of exploration and advancing my understanding of where engineering is evolving and changing.

This is not a job application, it's not a request, and I hope it's not an imposition on your time. It's a statement of interest in the Building Systems program that is in development at OSU and it's also an offer of anything I can do personally to encourage development of the program because there are very, very few programs that are tailored to this specific application of engineering. For example, our consulting company has been actively searching for an electrical engineer for several years, with no success. We get applications from software engineers, power generation and transmission engineers, electronics engineers, and the like- but none of them knows anything about building systems. Kudos to you and the University for recognizing this need and stepping up to fill it!

I look forward to meeting with you again sometime, and I know I've burned up a lot of your time reading through this, so I thank you again for 'listening'.

Oscar Zuniga, MSc, P.E.
Mechanical, Electrical, & Fire Protection Principal
Marquess & Associates, Inc.
1120 E. Jackson St.
Medford, OR 97504
(541)772-7115