



**California/Nevada Section
Bimonthly Update
January 2018
Sixty Eighth Edition**

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❖ **2018 ASABE CA/NV Section Meeting – Feb 14th (Wednesday) 2018**

The annual ASABE CA/NV Section Meeting is scheduled on February 14th 2018 at 5 PM. We hope that you plan to attend the meeting. The featured speaker is Dale Brown, Supervisory Engineer and Deputy Project Manager for the CA Department of Water Resources (DWR) Oroville Emergency Recovery - Spillways Team. We look forward to seeing you there!

❖ **2018 ASABE CA/NV Engineer of the Year Award - Nominations Open**

Do you know someone who has made an amazing contribution to Agricultural and Biological Engineering to help the public welfare and/or humankind for the better? You should nominate them. Nominations are now open for the CA/NV Section Engineer of the Year award. For more information or to submit a nomination, contact Awards Chair [Nick Simonian](#).

❖ **2018 ASABE CA/NV Section Officer Positions - Nominations Open**

Do you have a desire to get more involved with ASABE? Do you have ideas for Agricultural and Biological Engineering Activities? Do you enjoy networking in ASABE? If you answered yes to any of the questions, NOW is the time to become an ASABE officer! For 2018, the Vice Chair and Industry/Student Liaison positions are open. E-mail Nomination Committee Chair [Carolyn Jones](#) or call (707) 448-0106*105.

❖ **Cal Poly San Luis Obispo Update**

The Agricultural Engineering Society (AES) at Cal Poly San Luis Obispo closed out the previous school year with a bang, and kept busy over summer! Below are some of the club's recent highlights.

Cal Poly Students take second at AgBot Challenge 2017

A team of students from the Cal Poly BioResource and Agricultural Engineering (BRAE) Department was awarded Second Place and \$15,000 at the AgBot challenge June 23-25 in Rockville, Indiana. The team created an autonomous tractor that could move through a field and plant up to four rows of corn seeds with seeding rate, seeds variety, and fertilizer remote controlled. The team, consisting of BRAE majors Ryan Vyeniello, Charlie Ross, Dillon Beatty, Caleb Fink, Austin Della, Nate McCarthy, and Matthew Valentine, was one of seven teams to compete in this national seeding competition. Dr. Bo Liu from the BRAE department advised the students and provided technical guidance. Dr. Peter Livingston, the BRAE department head, strongly supported the team and provided a tractor for the competition. The team was also funded by the Cal Poly Instructionally Related Activity (IRA) Program.

Tractor Pull

The Cal Poly Tractor Pull club participated in the annual San Luis Obispo Christmas Parade. This is an opportunity for the club to promote the upcoming spring pull as well as the hard work of the club after a great pulling season. Many members put in extra effort to set the tractor on a trailer and decorate it for the holiday season and take it through downtown.

Many locals were excited to the addition to the parade. This is an example of the commitment of the club to hold themselves to the standard that Cal Poly Tractor Pull is known for.



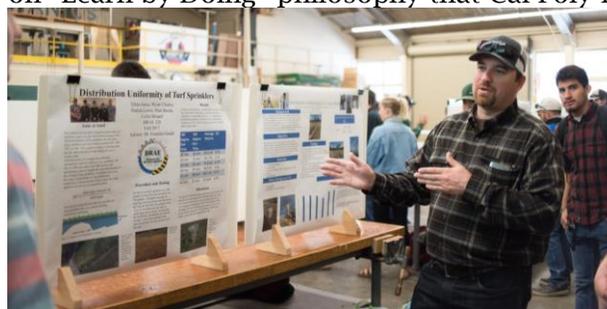
Thanksgiving Donations

Every holiday season our AES club takes it upon themselves to give back to the community. AES made donations to God's Storehouse and Along Comes Hope, both very respected charities and contributors to the community. The club as a whole voted for a chosen charity, then at the following meeting we presented the donation to the charity. It is a great way for students to give back at a very important time of the year



End of Quarter Poster Presentations

Students in BRAE who were either finishing their senior design projects, or were in our intro design class for first year students, all made and presented posters to summarize the projects they had been working on over the previous quarter. AES assisted in setting up the show. We take pride in the hands on "Learn by Doing" philosophy that Cal Poly honors.



Cal Poly Quarter Scale Tractor Team

It is about this time every year that our Quarter Scale Tractor team puts in the most hours on our tractor. We have competed in the ASABE Quarter Scale Design competition for many years and our new club members are eager to put together a competing tractor. The following months will be full of design and fabrication in hopes to get the tractor done in time for the competition in the spring.



Future Career Fair and Resume Workshops

As a club in the BRAE Department at Cal Poly AES tries our best to give our students the best chance to end up with internships and eventually careers once they finish school. Every year we host 20-40 companies who come just to hire BRAE Department students. Prior to our career fair, AES hosts resume workshops to help students tailor their resumes and give them the best chance to gain experience in industry. A lot of planning goes in to coordinating the career fair so it takes many of the officers to bring it all together and create an inviting atmosphere for the companies.

❖UC Davis Update

New Cooperative Extension Specialist joins UC Davis in Mechanization Engineering



The UC Davis Department of Biological and Agricultural Engineering (BAE) recently welcomed another new Department of Ag & Natural Resources (ANR) member to the faculty. Dr. Alireza Pourreza joined the BAE department on 1 January as an Assistant Cooperative Extension Specialist in Mechanization Engineering. Dr. Pourreza comes to the department after serving as Assistant Cooperative Extension Advisor at the Kearney Agricultural Research and Extension Center in Parlier.

UC Davis hosts Water-Energy-Food Nexus Workshop

Faculty from universities in the Middle East and North Africa (MENA) region joined UC Davis researchers in a workshop on the Water-Energy-Food Nexus: Charting a Research and Innovation Agenda for the MENA Region. Held in Davis from 10-12 January 2018, the workshop was sponsored through the UC Davis Arab Region (UCDAR) consortium by the UC Davis Office of Global Affairs, College of Agricultural and Environmental Sciences, College of Engineering, and the Sustainability Research and Training Program. The consortium, with members from UC Davis, the American University Beirut, American University Cairo, American University Sharjah, Birzeit University, and Lebanese American University is led by Dr. Suad Joseph, Distinguished Professor of Anthropology and Gender, Sexuality and Women's Studies at UC Davis. The workshop was organized through UCDAR and the UC Davis Department of Biological and Agricultural Engineering, and focused on collaborative approaches to resolving important resource and food supply issues in California, the MENA region, and other arid and semi-arid regions around the world.

More information about the Water, Energy, Food (WEF) Nexus Project is available at:

<http://sjoeph.ucdavis.edu/ucdar/about-ucdar-programs/water-energy-food-nexus-project>

FFAR Awards \$790k Grant to UC Davis to Revolutionize Food Processing Industry

The Foundation for Food and Agriculture Research (FFAR) has provided a \$790,000 Seeding Solutions grant to UC Davis researchers to test a new food drying technology, which is hoped will improve the drying of commodities such as grains, nuts, rice, and seeds. Worldwide, approximately 60% of postharvest food loss is due to inadequate drying. This project will test

the use of Drying Beads, which work to absorb moisture directly from foods without relying exclusively on heated air.

Funding is being matched by the UC Davis Innovation Institute for Food and Health as well as the College of Agricultural and Environmental Sciences for a total of \$1.5 million dollars. The Principal Investigator on the project is Postharvest Engineer and UC Davis Department of Biological and Agricultural Engineering (BAE) Assistant Cooperative Extension Specialist, Dr. Irwin R. Donis-Gonzalez. He is joined by BAE Assistant Adjunct Professor, Dr. Kurt Kornbluth. Working with them are several other researchers on the project:

- Kent J. Bradford, Ph.D., co-PI, Distinguished Professor, Plant Sciences Dept. at UC Davis
- Edward Spang, Ph.D., co-PI, Assistant Professor, Food Science & Tech Dept. at UC Davis
- Johan Van Asbrouck, collaborator, CEO of Rhino Research, Bangkok, Thailand



Irwin R. Donis-Gonzalez (left), Ph.D., and Kurt Kornbluth, Ph.D., are part of the team of UC Davis researchers (Source: FFAR website, below).

More information about this project can be found on the FFAR web address below:
<http://foundationfar.org/2017/11/28/ffar-awards-790000-grant-revolutionize-food-processing-industry/>

BAE Department t-shirt and mug sales in support of student clubs

The BAE department is taking orders for UCD BAE t-shirts and mugs to raise money for affiliated student clubs



❖ California State University, Bakersfield Update

Continuing its second year as an established organization on campus, the ASABE Student Branch at CSUB is building a foundation and strengthening community connections to allow for a stable future.

Community Collaborations

Marcos Perez, an Agricultural Engineer at the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), presented various job opportunities available within the government sector during the club's meeting. Not only has Mr. Perez donated his time to our organization, he has become an integral community member in the success of many students studying engineering with a concentration in agriculture.



Resume Workshop

The ASABE Student Branch at CSUB, the Pre-Law Society, Beta Gamma Sigma Honor Society and the Arts & Humanities Ambassadors collaborated to present a resume workshop for all students. Each club represents one of the four different schools on campus and they each brought two to three professionals from their respective field to speak on what is necessary to have in a successful resume. Students listened to the panel of ten professionals and then they had the opportunity to have one on one conversations discussing their personal resumes. Marcos Perez, USDA NRCS; Jason Rivas, ARRC; and CharTec's Senior Talent Consultant represented the Natural Sciences, Mathematics, and Engineering (NSME) school and provided students with valuable insight on what employers look for in a resume.



❖Fresno State Update

Center for Irrigation Technology – Director (Administrator II) Open Position

The initial search was closed in Fall 2017 and a new search in progress for the Director, Center for Irrigation Technology (CIT) at Fresno State. CIT is one of three research centers in the California Agricultural Technology Institute (CATI) in the Jordan College of Agricultural Sciences and Technology at California State University, Fresno. The Director/Researcher serves in a full-time, twelve-month management position. Under the general supervision of the Dean of the Jordan College of Agricultural Sciences and Technology (Jordan College), the director will work closely with faculty within the Department of Plant Science and the Department of Industrial Technology in fulfilling the mission of the CIT. The successful candidate is expected to provide research leadership to the CIT.

- For previous editions of the Update, please visit www.asabecanv.org.
- If you have questions or comments, contact Balaji (559) 321-6826 or balajis@csufresno.edu.
- If you have ideas for Update items or would like to join the leadership team, please let us know!