

California/Nevada Section Bimonthly Update March 26, 2021 Ninety First Edition

- ❖ 2nd Annual ASABE CA-NV Student Rally January 16-17, 2021
- ❖ 2021 ASABE CA/NV Annual Meeting February 10, 2021
- **❖** CA/NV Section Executive Committee
- Professional Engineering License Resources from ASABE
- ❖ 2021 CA/NV Engineer of the Year Edward Norum, CSU Fresno CIT
- CA/NV Section Objectives
- CA/NV Section Awards
- Do You Feel A Calling?

2nd Annual (first virtual) ASABE CA-NV Student Rally – January 16-17, 2021



With support from the ASABE Initiative Fund, California Polytechnic State University, San Luis Obispo (Cal Poly SLO) Department of Bio-Resources and Agricultural Engineering (BRAE) and the CA/NV ASABE Section hosted the second annual student rally and inaugural virtual rally on January 16-17, 2021. The rally drew 60 registered participants, including more than 35 students from six unique colleges and universities, including three institutions that had not previously participated in, or are relatively new to, section activities (University of Nevada Reno, Napa Valley College, and Washington State University). Participants will be receiving t-shirts (bottom right) soon!

The event was designed to provide an inspiring and enriching experience focused on growing students' professional networks, promoting professional practice, and demonstrating the many exciting career pathways in agricultural and biological systems engineering. The two-day rally

included tours of farms and agricultural operations in California and across the country (corn and soybean, irrigation technology, aquaculture, dairy, and potato and sweet potato); a guided tour of Sierra Nevada brewery; career, leadership, licensure, and undergraduate/graduate panel discussions; social events; ag and bio engineering trivia; business meetings; an Order of the Engineer ceremony; an engineering ethics activity; and more (Zoom photo at top left)!

Students learned about issues relating to agricultural mechanization, irrigation, food, renewable energy, water, biological materials, manure management, and more from engineers and scientists who confirmed importance of biological systems and agricultural engineering to the sustainability of humanity and natural resources into the future. The event was well attended and feedback from students was positive. The virtual setting helped expand the participation



pool (e.g., from ASABE President Candice Engler, farms and industries across the country, student participants from other sections, etc.) and allowed for the recording and distribution of rally materials. The organizing team plans to include some virtual aspects for subsequent inperson rallies! The rally brought in ten industry sponsors that, paired with registration fees, is expected to cover 100% of event expenses (mainly for t-shirt printing and distribution).

The second CA/NV student rally and inaugural CA/NV virtual rally exceeded all expectations! The rally leadership hopes that it will continue as an annual and sustaining event for years to come. Planning is already underway for the next rally to be hosted by Cal Poly in-person in San Luis Obispo!

❖ 2021 ASABE CA/NV Annual Meeting - February 10, 2021

The CA/NV Section Annual Meeting took place on Wednesday, February 10th, 2021 virtually via Zoom. The event was attended by about 28 members. The business meeting commenced with

2020 officer introductions followed by a Section Report. As of January 2021, the Section has 286 members. As of January 2021, the General Section Fund had \$4,648.66. The rest of the business meeting included Student Rally update, officer elections (see right), school reports, and section awards. Candice Engler, ASABE President and systems engineer at Johnson Bros Farm provided an update on ASABE, while the keynote speech was given by Desi Ramirez and Liz Colby, USDA NRCS Engineers. Their presentation was on NRCS' Post-Fire Recovery Assistance.

Documents pertinent to the 2021 Annual Meeting can be found at <u>Meeting Announcement</u> and <u>Meeting Presentation Slides</u>.

2021 CA/NV SECTION EXECUTIVE COMMITTEE Chair: Lynn Groundwater, PE Vice Chair: Tyler Barzee, PhD Treasurer: Mohammed Sadek, PhD Secretary: Charles Hillyer, PhD Past Chair: Carolyn M. Jones, PE COMMITTEE CHAIRS

Membership: Kristy Perano, PhD PE Program: Irwin Donas-Gonzales, PhD Public Relations: Sushant Mehan, PhD Career Dev.: Luis Cabrales Arriaga, PhD Awards: Manual A. Andrade-Rodriguez, PhD Student-Industry: Steve Zicari, PhD PE

ASABE Vision: "To be among the global leaders providing engineering and technology solutions ensuring a healthy environment and a sustainable world with ample food, water, fiber, and energy."

❖ Professional Engineering License Resources from ASABE

The <u>Agricultural and Biological Engineering (ABE) Professional Engineering (PE)</u> exam is an 9.5-hour exam with 85 questions. It is administered by the National Council of Examiners in Engineering and Surveying (NCEES) by computer-based testing (CBT) format once per year, the next sitting being on October 20, 2021.

ASABE has a variety of <u>PE exam resources</u> available to members including an exam mentoring program, a recommended textbook study list, electronic reference materials, a FREE webinar series, and sample exams. Also available is the ABE Supplied Reference Handbook (SRH) at <u>MyNCEES</u> once you log into your free account. The resources you are limited to during the exam are the ABE SRH and ASABE Standards.



Prepare for your exam by reviewing the <u>PE exam</u> <u>specifications</u>, reviewing the reference materials and examinee guide at asabe.org, practicing sample exam questions through NCEES and ASABE, and learning to

understand the scoring and reporting.

For more information, contact the leadership of the <u>Professional Engineers Institute (PEI)</u> of ASABE or Carolyn Jones at carolyn.jones@usda.gov.

❖ 2021 CA/NV Engineer of the Year - Edward Norum, CSU Fresno CIT



Edward Norum graduated from the University of Minnesota in 1953 with a degree in Agricultural Engineering. While still in college, he met a recruiter for the Hawaiian Sugar Planter's Association (HSPA) Experiment Station and shortly after graduation boarded a Boeing

Stratocruiser headed to Honolulu, Hawai'i. For 68+ years, Norum has worked on engineering and irrigation projects in over 20 countries and the United States, including 35 years in California. He served as



the first director of the Center for Irrigation Technology (CIT) at California State University, Fresno where he is still active in research, testing, and standards work. Norum holds four patents with the most recent patent issued in 2020 for a drip line hydrocyclone.



CA/NV Section Objectives

Per the ASABE CA/NV Section By-Laws, our objectives are:

- a) To promote the science and art of engineering in agriculture and other biological systems.
- b) To encourage original research.
- c) To foster agricultural and biological engineering education.
- d) To support activities of agricultural and biological engineering students; to encourage interaction between students and practicing engineers.
- e) To advance the standard of agricultural and biological engineers.
- f) To promote the intercommunication of members among themselves and allied technologists to encourage the improvement of the intellectual and technical skills of its members with a view to the promotion of public welfare through the development of better educated engineers.
- g) To broaden the usefulness of agricultural and biological engineering.
- h) To unite the members in the bonds of friendship, good fellowship and mutual understanding.
- i) To provide a forum for the open discussion of all matters relating to agricultural and biological engineering; provided, however, that partisan politics and sectarian religion shall not be debated by members.

CA/NV Section Awards

Milestones

60+ Years: Wesley E. Yates (72), John R. Goss (70), Robert B. Skromme (70), Wiley H.

Henson Jr. (69), Bill A. Stout (67), William R. DeTar (64), John C. Siemens

(64), Donaldson S. Taylor (62), and Edward M. Norum (60)

40 Years: Satyansu Kundu and William W. Seiders

25 Years: Wendy J. Powers

Student Poster Competition

UNDERGRADUATE

1st Place (\$300): Dante Panattoni (Cal Poly SLO)

Title: Calibration of Almond Properties Using Discrete Element Method (DEM)

2nd Place (\$150): Minxin Li (Cal Poly SLO)

Title: Robotic Control of Yellow Starthistle

GRADUATE

1st (\$300): Guilherme De Moura Araujo (UC Davis)

Title: Ability of Youth Operators to Activate Agricultural All Terrain Vehicle's Main

Controls

2nd (\$150): Ismael Mayanja (UC Davis)

Title: Development of a Stockpile Hot and Ambient Air Dryer (SHAD) for Freshly

Harvested Almonds

3rd Place (\$75): Alice Dien (UC Davis)

Title: Evaluation of the Performance of an Industrial-Scale Dessicant-Based System

for Agricultural Commodities

4th Place (\$75): Allan Chio (UC Davis)

Title: Production & Application of Compost Products from Dairy Manure for Improving Health & Fertility in Almond Orchards

❖ ABFE in Dairy and Livestock - Story Solicitation

Are you an Agricultural, Biological, Food, or other related Engineer? Have you, your school, your agency, or company been working on topics related to dairy and/or livestock production? We would like to hear your stories – contact Sushant Mehan!

Do You Feel A Calling?

Would you like to get more involved with ASABE and the CANV Section? Do you have ideas for Agricultural and Biological Engineering activities?

We have several opportunities to work on various committees. If you would like to get more involved, want some exposure to fellow professionals, or have some interesting new ideas of ways to improve the CA/NV Section please contact any of <u>our officers</u> or Hossein Edalati at ahedalati@ucdavis.edu or (530) 220-2489.

- Previous editions of the Bimonthly Update are on our Section website.
 - If you have questions or comments, feel free to contact Sushant Mehan.
 - If you have ideas for update items or would like to get involved in the Section, please let us know!