

California/Nevada Section Bimonthly Update April 12, 2023 Ninety Sixth Edition

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# 2023 ASABE CA/NV Annual Meeting - February 14, 2023

This year's annual ASABE CA/NV section meeting was held on Tuesday, February 14, at the Fresno Convention Center with around 30 members attending. The meeting occurred the week of a successful Student Rally, AETC conference, and World Ag Expo. The evening started with poster presentations from seven undergraduate and graduate students on topics including irrigation, nutrient management, modelling and control systems. As attendees enjoyed a catered meal, the business meeting proceeded with section updates, school reports, election of new 2023-2024 section officers, and presentation of awards for posters, milestones, and this year's section Engineer of the Year, Dr. Peter Livingston of Cal Poly San Luis Obispo.

Occurring in conjunction with the first AETC conference held on the West Coast, attendees were treated to updates by both current ASABE President Keith Tinsey and AETC Section Chair Austin Roepke. Both speakers highlighted contributions of, and opportunities for, CA/NV section member involvement in international society activities. Another highlight of the evening was the presentation from keynote speaker Dr. Zhongli Pan (Professor in Biological and Agricultural Engineering at UC Davis), who described a novel SmartProbe technology. This instrument, and associated software-app, is being developed and commercialized for early detection of insect infestation and environmental monitoring in agricultural products such as rice, almonds, walnuts, and pistachios. This important work can potentially prevent millions of dollars in losses every year through early identification and corrective action.

A big THANK YOU to the 2022-2023 section officers, including past chair Hossein Edelati for emceeing the evening, as well as all of this year's meeting sponsors.



2023 ASABE CA/NV Section Sponsors

#### Student Poster Contest Winners

- UNDERGRADUATE:
  - 1st Place (\$300): Brandon Munoz (Cal Poly SLO)
  - 2nd Place (\$150): Ryan Machado (Cal Poly SLO)
  - 3rd Place (\$75): Troy Thornton (Cal Poly SLO)
- GRADUATE:
  - 1st Place (\$300): Ali D. Et al (UC Davis)

#### Milestones

- 60 Years: Edgar J. Carnegie
- 50 Years: Douglas W. Williams, Eugene B. Nebeker, Jimmie L. Gartung, Stephen C. Ebe
- 40 Years: Steven J. Allison
- 25 Years: Muluneh Sime, John Schaap, Duane L. Needham

#### Section Engineer of the Year

Dr. Peter Livingston's tremendous support of the 2022 Rally held in San Luis Obispo November 12-13 made for a successful event and further demonstrated his dedication to education and outreach, especially in BioResources and Agricultural Engineering!

Dr. Livingston is the BRAE Department Head. He came to Cal Poly from University of Arizona, Tucson, where he was Associate Professor of Practice in the Agricultural and Biosystem Engineering Department. Peter has more than 35 years of professional experience in agricultural and water resources engineering, as well as natural resources planning. He earned all his degrees in Agricultural Engineering: B.S. from University of Arizona, M.S. from Colorado State University, and Ph.D. from University of Arizona.

Dr. Livingston has worked for a large international consulting firm, an Indigenous Nation, and started two firms; left the first to finish his Ph.D. and started Bosque Engineering to use his experience in agricultural design. He brings experience in attracting industry projects/funds to, as well as mentoring, Senior Design Projects. He also has experience securing USDA grants for research and inter department and university research experience, looking forward to working with centers and departments on campus and with other universities.

Dr. Livingston is a commissioner for the Accreditation Board for Engineering and Technology (ABET), the accrediting entity for engineering programs in the US. With his wife, Sue, they have been raising various exotic animals and brought the alpacas to CA.

# 2023 CA/NV Section Student Rally Recap - February 11-12, 2023

The Fourth Annual ASABE CA/NV Section Student Rally took place in Fresno on February 11 and 12. The rally was hosted by Charles Hillyer with the CSU Fresno Center for Irrigation Technology (CIT), Balaji Seth with the CSU Fresno Department of Industrial Technology (IT), and ASABE's Agricultural Equipment Technology Conference (AETC). The Rally was attended by around three dozen students from Fresno State, Cal Poly San Luis Obispo, and UC Davis. On the first day, students and guests toured the Fresno State citrus and nut processing labs, the CIT, a Fowler Packing mandarin orchard fitted with frost protection and irrigation scheduling and tracking technologies from WiseConn USA, and facilities at Verwey Dairy including a carousel milking parlor, robotic feed sweeper, mechanical manure solid/liquid separator, and more! Guest attendees from AETC said were enthusiastic about the variety of technologies they saw employed by California agricultural producers! On the second day, a career panel was held including speakers Kathryn Tarver from Monarch Tractor, Raul Raya and Kristy Perano from USDA NRCS, and Frank Baggiolini from Maricopa Orchards. Attendees later spent time networking in small groups with the speakers who shared their experiences in college, graduate school, and in the workplace. We thank all participants for another successful event and look forward to next year's event in Davis, CA!

# ❖ 2023 AETC in California Event Recap - February 12-14, 2023

California hosts ASABE's Agricultural Equipment Technology Conference (AETC) for the first time! After decades of interest and a full year of planning, ASABE's first AETC in California was a success! A total of 163 attendees (as compared to 191 in 2022 in Louisville, KY) registered and took part in the programming this year. CA/NV Section leadership assisted the AETC planning committee to bring unique sessions together including panels on Agricultural Equipment on Dairies, Specialty Crops, Woody Biomass, Irrigation Equipment, and others. Many attendees provided positive feedback such as enjoying the "focus on crops and practices not addressed at the KY venue", "exposure of west coast participants and vendors", "hearing a good variety of topics, many local to the area, which gave a nice perspective on the differences between the midwest and west", and that "speakers shared topics of relevance". They appreciated the "ability to expand what equipment was discussed" and "new people to interact with, and the opportunity to explore the World Ag Expo". CA/NV Section leadership looks forward to working with the AETC planning committee to hold the event in CA again in a few years! Check the <a href="link">link</a> for more information about the event!

#### 2023 ASABE CA/NV Officers Elected

During the annual meeting, the following nominated officers were all unanimously elected to their official positions for 2023.



# Section Membership Report March 2023

The CA/NV section of ASABE has continued to grow our membership due to strong outreach over the last year. At the beginning of 2022, we had 259 members. That has grown to 325 as of the end of February 2023. Over the course of the last 14 months, we had a total of 118 new members and 6 reinstated members! (Please note that due to some members not renewing, the total membership is lower than the previous membership + new and reinstated members.)

| Time Period      | New | Reinstated | Total Members |
|------------------|-----|------------|---------------|
| Jan/Feb 2022     | 12  | 2          | 259           |
| March/April 2022 | 34  |            | 254           |
| May/June 2022    | 28  | 3          | ~285          |
| July/Aug 2022    | 15  |            | 295           |
| Sept/Oct 2022    | 13  | 1          | 309           |
| Nov/Dec 2022     | 8   |            | 317           |
| Jan/Feb 2023     | 8   |            | 325           |

Please remind undergraduate students that ASABE membership is free for students!

# **❖** Treasurer Update

ASABE CA/NV section maintains two accounts. The General account used for section activities and the Rally account is for the student rally activities. The main source of funding comes from the members registration and donations. We are always thankful to valuable members and donors for their contributions. The table below shows the summary of the financial transactions of year 2022.

ASABE CA/NV Section 2022 Financial

| Strating balance           | \$       | 6,557.00                    | 2/11/2022  |
|----------------------------|----------|-----------------------------|------------|
|                            |          |                             |            |
| Expenditures               |          |                             |            |
| Poster Awards              | \$       | 825.00                      | 2/17/2022  |
| Anniversary Milestone pins | \$       | 275.00                      | 5/6/2022   |
| Misc (check)               | \$       | 6.00                        | 11/10/2022 |
|                            | \$       | 1,106.00                    | Total Exp. |
|                            |          |                             |            |
| Deposites                  |          |                             |            |
| 2022 meeting registration  | \$       | 380.00                      | 11/10/2022 |
| 2022 incoming registration | -        |                             | 11/10/2022 |
| 2022 AM sponsors           | \$       | 1,000.00                    | 3/22/2022  |
| 5 5                        | \$<br>\$ | 1,000.00<br><b>1,380.00</b> |            |

# **ASABE Student Rally 2022 Financial**

| 2022 Raily Meal \$ 1,082.05 11/30/20<br>2023 Raily Bus \$ 964.00 2/9/20 | Deposites       |                |            |
|---|-----------------|----------------|------------|
| 2022 Rally Meal \$ 1,082.05 11/30/20 2023 Rally Bus \$ 964.00 2/9/20    |                 |                |            |
| 2022 Rally Meal \$ 1,082.05 11/30/20                                    |                 | \$<br>2,046.05 | Total Exp. |
| -   | 2023 Rally Bus  | \$<br>964.00   | 2/9/2023   |
| Expenditures  | 2022 Rally Meal | \$<br>1,082.05 | 11/30/2022 |
| - "   | Expenditures    |                |            |

# **❖** World Ag Expo 2023 Overview

The 56th World Ag Expo took place on February 14-16, 2023, in Tulare, CA with over 100,000 farmers, students, and ag professionals attending the show. More than 100 educational seminars, demonstrations, workshops, and industrial tours were held over the three-day event. There was high attendance of ASABE and AETC members at the World Ag Expo. The members were impressed by the wide variety of ag equipment used in different field applications, autonomous equipment, electrified equipment, and BEVs, as well as live demonstrations, Ride&Drives, and Ride&Chats that were offered at the World Ag Expo.

"You see and get energized by the global scope of innovations and entrepreneurship," said one of the ASABE members. "The World Ag Expo is unique and different from every other mid-west ag show." "It was breathtaking to see how innovative the irrigation industry is becoming," said one attendee. On the U.S. House of Representatives Committee on Agriculture listening session, an ASABE member said, "It's great that House Ag Committee is meeting with farmers at the expo and letting the people's voices be heard." "I'm definitely coming back next year," said an ASABE member. The next World Ag Expo will be held on February 13-15, 2024.

# UC Davis Healthy Soils Field Day - March 30, 2023

On Thursday, March 30th, 2023, the UC Davis research team led by Professor Ruihong Zhang hosted a project field day titled, "The UCD Healthy Soils and Alternative Manure Management Program Project Field Day," on a Dairy Farm in Hilmar, CA. About 45-50 dairy and orchard farmers, industry representatives, and federal and state government employees attended this event. Attendees learned about manure management on dairies, recycling and processing of manure, almond stick and twig waste being processed into loose and pelletized composted soil amendment, and the application of those amendments on almond orchards.

The research presented at the field day was made possible by project sponsors: the California Department of Food and Agriculture, the Almond Board of California, and the California Dairy Research Foundation. This research also could not have happened without the support of the current and former farm owners, Larry Mattos (current), John Melo (current), and Aaron Wickstrom (former) for hosting the event on their property.

Event materials may be found in the links below. For more information, please contact Professor Ruihong Zhang (<a href="mailto:rhzhang@ucdavis.edu">rhzhang@ucdavis.edu</a>) or Hossein Edalati (<a href="mailto:ahedalati@ucdavis.edu">ahedalati@ucdavis.edu</a>).

- Event Photos
- Event Flyer and Program

# Students: Apply for the Student Honor Award

ASABE's <u>Student Honor Award</u> recognizes scholarship, activity in student branch affairs, extracurricular and national student activities and the importance of maintaining the good will and respect of associates. Each student engineering branch and student mechanization branch may elect one student branch member for the award.

Score sheet and winning student names must be received at ASABE headquarters by April 20.

# **❖** Do You Feel A Calling?

Would you like to get more involved with ASABE and the CA/NV 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 our officers through <a href="https://asabecanv.wordpress.com/officers/">https://asabecanv.wordpress.com/officers/</a>.

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- For previous editions of the Update, please visit <a href="https://asabecanv.wordpress.com/newsletter/">https://asabecanv.wordpress.com/newsletter/</a>.
- If you have questions or comments, feel free to contact Joseph Sexson at joseph.sexson@usda.gov
- If you have ideas for update items or would like to get involved in the Section, please let us know!