

WEST VALLEY STEM CLUB

MAY 2023 NEWSLETTER

www.engineersaz.com

The Engineers Club is a social organization which meets monthly for lunch with a speaker on a topic of interest. Spouses and guests are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or has an interest in Engineering, Science or Technology. Meetings are held at 11:30am on the first Friday of each month (unless otherwise noted), October through June, at Grandview Terrace, in the fourth-floor ballroom, at 14515 W. Granite Valley Drive, Sun City West, AZ. Guests are always welcome. Contact Phil Main: maintwin3@gmail.com, 623-826-0101 (cell).

MAY 5 PROGRAM

The Engineering of the Lake Pleasant Dam

Rich Weissinger and Brian Buzard

Substituting for Darrin Francom

Assistant General Manager, Operations,

Maintenance and Engineering

Central Arizona Project



Darrin's entire Operations, Maintenance & Engineering group typically comprises a large portion of the CAP workforce, and the Power Programs team he oversees manages the pumping energy rate that accounts for nearly a third of the CAP water rates. After serving as an officer in the U.S. Navy Civil

Engineer Corps, Darrin began his career at CAP in 2001 as a Civil Engineer.

During his career at CAP, Darrin has held a number of leadership roles within the Engineering and Maintenance departments, including the Director of Operations, Power and Engineering before his current role as an Assistant General Manager. Other supervisory roles were: Engineering Services Manager; Project Management Division Supervisor, which included management of CAP's planning and execution of capital projects that maintain the reliability of the CAP system; Supervisor for CAP's design engineers; and Centralized Maintenance Manager, which included CAP's two Heavy Overhaul Group (HOG) teams, as well as the Fleet Maintenance, Machine Shop and Headquarters Maintenance departments.

Darrin earned a B.S. in Civil Engineering from the University of Arizona, is a registered Professional Engineer, and a Certified Maintenance and Reliability Professional.



Tyler Swingler – Aerospace Engineering – the \$3,000 Scholarship

Joan Serrano – Mechanical Engineering – the \$1,500 Scholarship

Nohely Del Rio – Civil Engineering – the \$1,500 Scholarship

Also, we were fortunate to have Michelle Patterson, one of the Club's 2019 scholarship winners, speak at our April 7th meeting. All four of these guests provided an inspirational presentation about their successful education and their career goals. Again, we want to say THANK YOU to everyone who donated to the 2023 Scholarship Fund!

The Program Committee chaired by Peter Rauen has recruited speakers to discuss an outstanding list of topics, including, Engineering of the Lake Pleasant Dam (CAP), The Past and Future of Electric Vehicles, James Webb Telescope Project, and Arizona Ground Water Aquifer Replenishment Science. Please let Peter or me know if you know of a good speaker or program.

On Friday, April 14, 2023, at 10:30 am, 22 members toured TGen, Translational Genomics Research Institute, 445 N. Fifth Street, Phoenix, AZ and enjoyed a cash lunch at noon. George Zieglgansberger, Club VP, coordinated the tour. Great Job George! In addition, if you know of a location accepting group tours, please let one of our Board members know.

At the March 20th Board of Director's meeting, the Board reviewed the options for the meeting cost and what to charge people to attend the meeting. We looked at our Club's support expenses, and the value we are receiving for the meeting, (i.e., quality and quantity of the meal, the technical speakers, the venue, etc.). The Speaker and one guest, and similar for the Scholarship Winner(s) will be free and covered by the Club. In addition, if there is any extra money beyond the meeting expenses, these few dollars per person, will go to the scholarship fund. In addition, with inflation there was concern about increase in meal expenses this Fall; and then we hope not to have to increase meal costs at that time. After some discussion, the Board voted to approve the meal charge at \$30 per person.

We look forward to seeing you and your guests at our next meeting and have a safe and healthy year!

PRESIDENT'S MESSAGE

Jim Schlenvogt

Hi Everyone! The Club is moving on to our fourth month of celebrating a new meeting location. We had 46 guests at our April meeting.

On March 22, 2023, the Scholarship Committee interviewed six qualified STEM student scholarship applicants. The student must be entering their Junior year in a qualified four-year STEM program. Pictured from right to left is the Scholarship Interview Team Jim Schlenvogt, Karen Campbell, Louis and Kelley Johnson, and George Zieglgansberger. Thank you to the Interview Panel. Also pictured from right to left are the three GCC 2023-2024 scholarship winners who attended the April 7th meeting.

WEST VALLEY STEM MAY 2023

2023 OFFICERS

President	Jim Schlenvogt
Vice President	George Zieglgansberger
Secretary	Darrell Armbruster
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

COMMITTEE CHAIRPERSONS

Programs	Peter Rauen/Rick Cecil
Membership	Philip Main
Reservations	Philip Main
Luncheons	Jim Schlenvogt
Scholarship	Jim Schlenvogt
Member at Large	Hal Lind
Newsletter	Dave and Karen Campbell
Website	Bonnie Williams
Event Audio	Hal Lind/Doug Totel
Event Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	George Zieglgansberger
Past President	Steve Sumner

Email the Board at: js3820@msn.com

JUNE 2 PROGRAM

The Review of the Electric Vehicle Industry Gary Graunke



Gary Graunke served as President of the Oregon Electric Vehicle Association, a non-profit association of electric vehicle enthusiasts promoting electric vehicle (EV) education and encouraging their safe construction and use. He is a Vietnam-era veteran, and graduated from University of Wisconsin-Madison with distinction in computer science. In the course of his

career he worked for Univac, Harris Corp., Tektronix, Sequent Computer (now IBM), and Intel. He was also a founder in three smaller companies. He has served on ANSI computer language and IEEE cryptography standards committees, contributed to computer language implementation, decision support databases, parallel programming, software integrity, content protection, and computer security. He has 44 issued U.S. patents. His HDMI contributions were recognized by the Academy of Television Arts and Sciences in awarding an Emmy for Intel. His OEVA work with the Oregon Department of Transportation was recognized on ODOT's Federal Highway Administration 2013 Environmental Excellence award.

Gary has been interested in fuel-cell and electric cars since high school. He converted the first Honda Insight to all-electric operation and used it for his daily driver for 8 years, has owned an aftermarket plug-in 2008 Prius, Nissan Leaf, and a Tesla models S, X, and 3. He has attended numerous electric vehicle conferences, created educational materials relating EV's to climate, economic, and national security issues, and been an electric vehicle and sustainable energy advocate to local and state governments and the media.

Gary's talk will cover review of electric vehicle types and characteristics, trends in electric power generation, problems and opportunities for grid-EV integration, scalability of EV's vs the transportation status quo, economic drivers for transition to electric vehicles, national energy security drivers for EV adoption and climate change related drivers for EV adoption.

TREASURER'S REPORT MARCH 2023

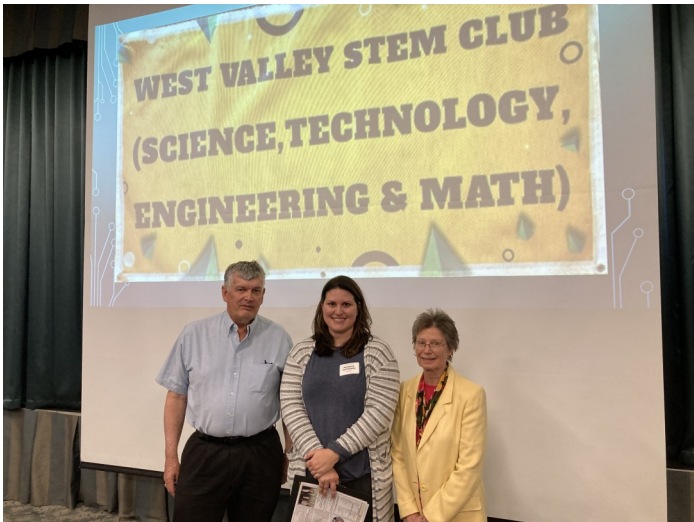
General Fund Balance: \$12,012.59

Membership Total: 84

APRIL 7 PROGRAM

STEM Education at Glendale Community College Continuing on to ASU and a Career in STEM

Michelle Patterson, MS, Industrial Engineering Process Engineer, Banner Health



2023 MEMBERSHIP DUES

Dues for 2023 are \$25.00 of which half goes to the Scholarship Fund. **Please consider making an additional donation to the Scholarship Fund** (put scholarship in the memo line). Please mail your check(s), made out to West Valley STEM to: Philip Main, 17604 N Buntline Drive, Sun City West, AZ 85375-5148, maintwin3@gmail.com 623-748-8222 (Home), 623-826-0101 (Cell)