### **WEST VALLEY STEM CLUB**

#### **JUNE 2023 NEWSLETTER**

#### www.engineersaz.com

The WV STEM 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).

#### 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 Vietnamera 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.

#### HAVE IDEAS FOR A SPEAKER?

If you have recommendations for monthly VEST meeting <u>speakers or programs</u> please contact Pete Rauen: <u>peterauen42@gmail.com</u>

## PRESIDENT'S MESSAGE Jim Schlenvogt

Hi Everyone! The Club is moving on to our Club's final month for the first half of 2023. We started the event year in October to January at the Briarwood Country Club, and then the Board of Director's had to perform the research and due diligence to move the future monthly meetings to the Grandview Terrace.

The Scholarship Committee did a great job interviewing six scholarship candidates, raising significant donations, and awarding three scholarships of \$3,000, \$1,500 and \$1,500 to three outstanding STEM students who are transferring to ASU in the Fall as incoming STEM Juniors.

In addition, the Club's website went down, and after some additional research, and a meeting on April 20th, Bonnie Williams has taken the lead on the Website Committee to work with the Board of Directors to reactivate and update the Club's website, www.engineersaz.com We are scheduling various BETA version updates of the website, and we are hoping to have the final approved website ready by the Club's Fall, 2023 monthly meetings.

The Program Committee, chaired by Peter Rauen, has recruited speakers to discuss an outstanding list of topics, including:

- The Past and Future of Electric Vehicles
- The Science of Preventing Alzheimer's Disease
- James Webb Telescope Project
- Arizona Ground Water Aquifer Replenishment Science

Please contact Peter or me, if you know of a good 2024 speaker or program. In addition, if you know of a location accepting group tours, please contact George Zieglgansberger, Club VP, who will coordinate the tour, or please let one of our Board members know.

Finally, I want to acknowledge all of our volunteers and the invaluable contributions everyone makes at meetings, at events, recruiting new members and guests, participating on committees, preparing reports, etc. Their commitment and teamwork are truly inspiring! Volunteers are the backbone of our Club, and if you want to volunteer, please feel free to contact me or one of our Board of Directors.

We look forward to seeing you and your guests at our next meeting. Have a safe and healthy summer. Thank you for your participation!

#### **WEST VALLEY STEM JUNE 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

MembershipPhilip MainReservationsPhilip MainLuncheonsJim SchlenvogtScholarshipJim SchlenvogtMember at LargeHal 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

#### **TREASURER'S REPORT APRIL 2023**

Gross General Fund Balance \$13,140.24
Net Fund Balance (after payment of obligations) \$6,319.24
Membership 78

May 50/50 Winner was \$45.00 to John Austgen (John donated \$25 back to the Scholarship Fund -Thank You!)

#### **TGEN FIELD TRIP APRIL 14 2023**



The Club had 22 members participate on the field trip to tour the Translational Genomics Research Institute, (TGen), complex at 445 North 5th St., in downtown Phoenix. The tour was led by Kim Thompson, Education and Outreach Specialist. Over the last four years, the Club has had three speakers present at our monthly meetings. The tour was very educational to learn about DNA tracking, leading edge medical research and equipment. We are looking forward to additional Club field trips periodically during future years. The Club says a big THANK YOU to George Zieglansberger for coordinating the field trip.

#### **OCTOBER 6 PROGRAM**

#### The Science of Preventing Alzheimer's Disease

## Mike Malek-Ahmadi, PhD, GStat Bioinformatics Scientist Banner Alzheimer's Institute



Dr. Malek-Ahmadi earned a BS from the University of Arizona, a MS from the University of South Florida, and a PhD from the University of Westminster. He has worked in the field of Alzheimer's disease research since 2003 and is an author on over 60 peer-reviewed journal articles in the areas of Alzheimer's disease, mild cognitive impairment, and normal aging. Dr. Malek-Ahmadi's current work at the Banner Alzheimer's Institute involves the analysis of

clinical, neuroimaging, neuropsychological, and neuropathological data used toward identifying and characterizing pre-clinical Alzheimer's disease.

#### **MAY 5 PROGRAM**

# The Engineering of the Lake Pleasant Dam Rich Weissinger and Brian Buzard Central Arizona Project



#### **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

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623-748-8222 (Home), 623-826-0101 (Cell)