



The WV STEM Club is a social organization which meets monthly for lunch with a speaker on a topic of interest. 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 and visitors are always welcome.** Contact Phil Main: maintwin3@gmail.com, 623-826-0101 (cell).

JANUARY 3 PROGRAM

Sustainability of Arizona’s Ground Water Supply using Satellite Tracking Data

Jay Famiglietti, Satellite Hydrologist, Chief Scientist of the Arizona Water Innovation Initiative, Global Futures Professor in the School of Sustainability, Arizona State University



Jay Famiglietti is a pioneering satellite hydrologist and a Global Futures Professor in the School of Sustainability at Arizona State University, where he is Chief Scientist of the Arizona Water Innovation Initiative. As Executive Director of the Global Institute for Water Security at the University of Saskatchewan, he led Canada’s top freshwater research program. Before moving to Canada, he served as Senior Water Scientist at the NASA Jet Propulsion Laboratory at the California Institute of Technology; he was a professor in Earth System Science and in Civil and Environmental Engineering at the University of California, Irvine; and he was a professor in Geological Sciences at the University of Texas at Austin. Jay and his team use satellites to track changing freshwater availability and water risk across the globe. They developed the groundbreaking methods to detect groundwater depletion from space using the NASA GRACE mission.

Famiglietti received his B.S. in Geology from Tufts University in 1982 and his M.S. in Hydrology from the University of Arizona in 1986. [3] He continued his graduate studies at Princeton University, where he earned both his M.A. and Ph.D. in Civil Engineering.

Dr. Famiglietti will present on the sustainability of Arizona’s ground water supply and how data is obtained through satellite tracking.

PAST PRESIDENT’S MESSAGE

Jim Schlenvogt

Hello Again Everyone! January is the time of year to “Pass it Forward” with the Club’s Annual Scholarship Donation request. Please consider donating to the Scholarship Fund, so the Club can help several STEM students move on from their Sophomore year to their Junior year in a four-year STEM Program. In the last **SIX** years, the West Valley STEM (VEST) Club has awarded **\$28,000** to **THIRTEEN (13)** Scholarships to STEM students.

The Club’s Annual Election of Officers for the next Calendar Year was held at the November 7, 2024 meeting. The Club still have the following positions open:

Open Position – President

Open Position – Reservations Committee Chairperson

As I announced several times, after three years as President of the West Valley STEM Club, Jim Schlenvogt will resign as President on December 31, 2024 and become a Past-President on the Board. In addition, Phil Main has requested the Club find a new Chairperson for the Reservations Committee. The Board of Directors meet September to May, on the third Monday of the month, 9:30 am at the Grandview Terrace, in the first-floor meeting room. If you are an active Club member and wish to see the Club continue to grow and have interesting programs, please consider coming to our **Board Meeting on January 20, 2025 or any future Board Meeting.** The Board of Directors will continue to search for new candidates until the positions are filled. The Club has a GREAT TEAM on the Board of Directors and everyone complements each other very well. If you have an interest or need additional information, please contact Jim Schlenvogt, js3820@msn.com, 480-869-0548 or one of the other Club Board of Directors’ members.

The Program Committee has found the following topics for future meetings:

- Beyond the Buzz: Alcohol's Impact on Cognitive Health
- Europa Clipper Spacecraft Mission to Jupiter
- Colorado River 2025 Water Forecast
- Science of Preventing Alzheimer's Disease

In closing, Thank You for your support and assistance over the last three years! I hope you had a safe and healthy holiday season, and we look forward to seeing you and your guest at the next meeting.

2025 MEMBERSHIP DUES

Dues for 2025 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)

WEST VALLEY STEM January 2025

2025 OFFICERS

President	Open
Vice President	Gary Graunke
Secretary	Betty Goldberg
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

COMMITTEE CHAIRPERSONS

Programs	Peter Rauen/Rick Cecil
Membership	Steve Sumner
Reservations	Philip Main
Luncheons	Jim Schlenvogt
Scholarship	Jim Schlenvogt
Member at Large	Don Zoss
Newsletter	Dave and Karen Campbell
Website	Gary Graunke
Event Audio	Paul Scherer
Event Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	George Zieglansberger
Past President	Jim Schlenvogt

Email the Board at: js3820@msn.com

FEBRUARY 6 PROGRAM

Beyond the Buzz: Alcohol's Impact on Cognitive Health

**Claudia Hristova, PsyD,
Neuropsychology Fellow, Banner Alzheimer Institute
& Sun Health Research Institute**

This presentation explores the complex relationship between alcohol consumption and cognitive functioning. The presentation highlights the short- and long-term effects of alcohol on the brain, including its role in neurotoxicity, cognitive impairments, and conditions such as Alcohol-Related Dementia and Wernicke-Korsakoff Syndrome. It also incorporates recent research on recovery potential and emerging treatments.

2025 MEETING DATES

The Club's **REVISED** meeting dates for 2025:

- 02/06/2025 (Thursday)
- 03/07/2025 (First Friday of the Month)
- 04/04/2025 (First Friday of the Month)
- 05/09/2025 (SECOND Friday of the Month)
- 06/06/2025 (First Friday of the Month)

TREASURER'S REPORT DECEMBER 2024

Gross General Fund Balance	\$11,238
Net Fund Balance (after payment of obligations)	\$7,938
Membership	118

The December 50/50 winner was Brian Brener. Brian donated his \$37 winnings to the Scholarship Fund. Thank You for Your Support!

2024 and 2025 Board Members



Outgoing 2024 OFFICERS, left to right: Secretary: Darrell Armbruster, President: Jim Schlenvogt, Treasurer: Carol Mungas, Vice President: George Zieglansberger, Past President: Steve Sumner

2025 OFFICERS

Vice President-Elect: Gary Graunke
Secretary-Elect: Betty Goldberg
Treasurer-Elect: Carol Mungas
Past President: Jim Schlenvogt

December 11 PROGRAM

**Artificial Intelligence (AI) and You.
A Brief History, How We Use It, and Examples of
How it's Used Today**

**Larry Laursen, Retired Technical Manager,
Dow Chemical, Central Research and Development**

