

WEST VALLEY STEM CLUB

December 2022 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 Briarwood Country Club, 135th and Meeker in Sun City West, AZ. Guests are always welcome. Contact Phil Main: maintwin3@gmail.com, 623-826-0101 (cell).

DECEMBER 2 PROGRAM

Water Supply from the Colorado River System

Rachel Von Gnechten,
Water Resources Engineer
Arizona Department of Water Resources



Rachel von Gnechten is a Water Resources Engineer in the Colorado River Management Section at the Arizona Department of Water Resources (ADWR). At ADWR, Rachel serves as the primary contact for Arizona's Recovery Planning Advisory Group and contributes to intra-state

modeling analyses and operational strategies. Prior to joining ADWR, Rachel was a research analyst at the International Water Management Institute in Washington, D.C. where she worked on projects on water storage and productivity. She holds a M.S. in Civil Engineering with a focus in Water Resources Engineering and Science from the University of Illinois at Urbana-Champaign and a B.S.E. in Civil Engineering from Arizona State University.

Abstract

The situation in the Colorado River Basin has been featured prominently in the media, with the most recent news that Lake Mead will operate in a Tier 2a Shortage Condition in 2023. For Arizona, this means a reduction of 21% of the state's annual apportionment of Colorado River water. To date, the Basin States and Mexico have worked diligently to help protect the Colorado River Basin, and collectively these actions have helped keep the reservoir elevations above critical thresholds for many years. Without them, we would have seen shortages and curtailments before now; however, more needs to be done. Against this backdrop, the presentation will discuss the models and hydrologies used by the Bureau of Reclamation to generate projections of the Basin, prior protective actions, the current status of the system, and impacts to Arizona and the Central Arizona Project in the upcoming year.

PRESIDENT'S MESSAGE

Jim Schlenvogt

Hello again! I hope you are having a great start to the holiday season. Your Board of Directors has spent many months visiting and evaluating monthly meeting location venues and pricing. The location that stood out as the best value and quality amenities was the Grandview Terrace Community at 14515 W. Granite Valley Drive, Sun City West, AZ. For more information see the following:
www.GrandviewTerrace@SunHealth.org.

Following are the items we evaluated the final venues on:

Ranking Scale:

1 = Best, 2 = Average, 3 = Not as good

<u>ITEM</u>	<u>GRANDVIEW TERRACE</u>
Location:	<u>4TH FLOOR ROOM</u>
Meeting Date	First Friday of the Month (Booked Feb-June Meetings) <u>Start February 3, 2023</u>
PARKING ACCESSIBILITY	2
MEETING/ LUNCH Scheduling	7 Day Notice Plated at your seat serving, Select two options and a third is Vegan Plate
Lunch Information & Ordering Information	Soup or Salad, Vegetable, Starch, Dessert, Drinks
Lunch Entrée Plus	
QUALITY	1
COST	1 \$30 (Evaluate after the first few meetings)
Recommend Meeting Cost:	Excess Revenue goes to Scholarship
Kitchen Facilities	Not Required
Cleanup/ Meal Support	Not Required
ROOM CHARGE	FREE
AUDIO/ SOUND	FREE
PROJECTOR	FREE
Monthly Board Meetings	FREE - Seating for 12 Board Members

More information will be available in future Newsletters and at our next several meetings. We are looking forward to providing more value for our members!

WEST VALLEY STEM December 2022

2022 OFFICERS

President	Jim Schlenvogt
Vice President	George Zieglgansberger
Secretary	Marilyn Dumond
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

COMMITTEE CHAIRPERSONS

Programs	Peter Rauen/Jim Schlenvogt
Membership	Philip Main
Reservations	Philip Main
Luncheons	Jim Schlenvogt
Scholarship	Jim Schlenvogt
Member at Large	Hal Lind
Newsletter / Website	Dave and Karen Campbell
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: board@engineersaz.com



Surprise SciTech Festival

The West Valley STEM Club will have a table at the Surprise SciTech Festival, on December 10th, 10:00 to 2:00 in the parking lot, north of Surprise Baseball Stadium. Please stop by and visit all of the STEM activities and robots.

Scholarship Donations

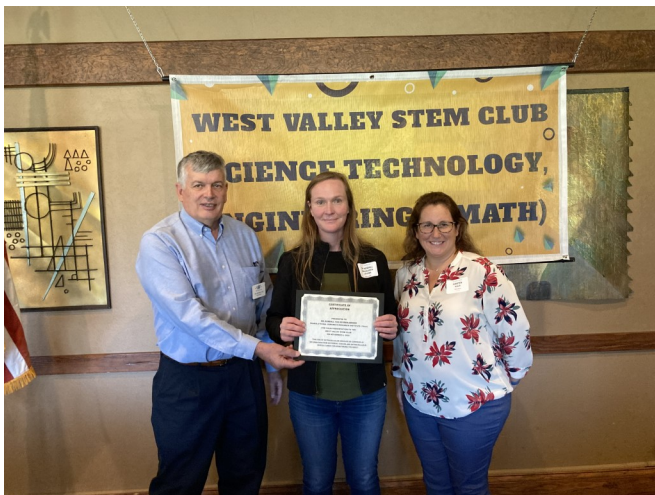
The West Valley STEM Club is conducting our Annual Scholarship Fund Donation Event at our December and January meetings.

TREASURER'S REPORT OCTOBER 2022

General Fund Balance: \$7,385.34
Membership Total: 51

NOVEMBER 4 PROGRAM

The Use of Extracellular Vesicles as Carriers of Information From Different Tissues and Extracellular Vesicle Cargo for Monitoring the Body
Dr. Kendall Van Keuren-Jensen



January 6 Program

The Future of Nuclear Power Generation
Keith E. Holbert, Ph.D., P.E.
Director, Nuclear Power Generation Program
Arizona State University

2022 WV STEM MEETING DATES

December 2, January 6, February 3, March 3,
April 7, May 5, June 2

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)