WEST VALLEY STEM CLUB

June 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).

JUNE 3 PROGRAM

City of Surprise Water Resource Management Solar
Thermal Biosolids Dryer,
Efficiencies, and Five Year CIP Plans

Lee Lambert



Lee Lambert is the Director of the Water Resource Management Department for the City of Surprise. This Department overseas Water Treatment, Wastewater Treatment, Collections, Reclaim Water, Water Distribution, and Stormwater Divisions within the City of Surprise. He began working for the City of Surprise in 2005 as a Project Manager overseeing significant water infrastructure projects, then he switched

over to an operation role as the Water Manager in 2013. Later he assumed the role of Assistant Director in 2019, and then Director in 2020.

Mr. Lambert is a native of Arizona, graduate of the University of Arizona with a Bachelor of Science Degree in Regional Development, and multiple certifications in water and wastewater treatment processes. He began his professional career working for the State of Arizona Department of Water Resources in 1995, and later worked for the Maricopa County Planning Department prior to working for City of Surprise. All total he has been actively working in the water field for over 27 years.

Abstract: An overview of the City of Surprise Water Resource Management Department's constant commitment to look for efficiencies, new technologies, and how that's helping to guide the future of our five year Capital Improvement Projects plan. The discussion will cover the constant need to look for efficiencies in an industry that is energy driven, a look at the recent construction of a Solar Thermal Biosolids Dryer to address better efficiency, and the future plans for water infrastructure in Surprise.

2022 MEMBERSHIP DUES

Dues for 2022 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)

PRESIDENT'S MESSAGE Jim Schlenvogt

Hello again! We hope you were able to attend many of our past Friday Luncheon meetings and participate in our City of Surprise Field Trips. In addition to the interesting luncheon speakers, our annual membership is only \$25 per year and this is a real bargain.

For the second half of 2022 and the first half of 2023, we will have interesting speakers and field trips. Please feel free to make meeting reservations for you and a guest or two. Our Program Committee, chaired by Peter Rauen, has spent a considerable amount of time researching potential speakers who were available on our meeting dates and willing to travel to the Briarwood.

Thank you Peter for all of your hard work and your great programs! Following are some of the future luncheon meeting topics the Club has written commitments from the speakers, (subject to availability):

- The Science behind Alien Encounters
- The Arizona TSMC (Taiwan Semiconductor) Project
- Water Supply from the Colorado River System
- The Future of Nuclear Power Generation
- Everything You Need to Know about Electrical Vehicles
- The Engineering of the Lake Pleasant Dam

Other topics the Club is exploring include the following:

- ASU Space Exploration Projects, (Including a potential Fall, 2022 Field Trip to ASU)
- TGEN Medical Research Projects
- Sun Health Research Institute Medical Research
- 5G Technology
- U. of AZ Space Exploration Projects
- Other Topics (Please feel free to contact Peter Rauen or a Board Member with the name of a potential STEM speaker, contact information, and the proposed topic).

In closing, I hope you have a safe and healthy summer and we look forward to seeing you again this fall. Our membership continues to grow and we want to continue this trend. Thank you again for your financial support to the Club's STEM Scholarship Program!

2022 WV STEM MEETING DATES

June 3, October 7, November 4, December 2

WEST VALLEY STEM June 2022

2022 OFFICERS

President Jim Schlenvogt

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

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 Hal Lind/Doug Totel **Event Audio**

Event Computer Paul Scherer **Publicity** Lance Berglund

Field Trips George Zieglgansberger

Past President Steve Sumner

Email the Board at: board@engineersaz.com

TREASURER'S REPORT April 2022

General Fund Balance: \$ \$7968.64

Membership Total: 83

OCTOBER 7 PROGRAM

The Science Behind Alien Encounters: UFOs Are Real

Dr. Robert E. Farrell



Dr. Robert E. Farrell received his Bachelor of Science in mechanical engineering from The Ohio State University, his MBA from Western New England College, and his Doctor of Engineering from the University of Massachusetts. He is now retired from Penn State University as Associate Professor Emeritus.

For nearly twenty years, Dr. Farrell has lectured and written extensively on the subject of encounters people have had with extraterrestrial intelligence. Using science available to most people, he has explained how UFOs do the amazing things claimed by credible witnesses. His research into the mysterious bodies found near Nazca, Peru has led him to believe that the two species found there may have extraterrestrial origins. The history of UFO sightings has led to his research into the cause and location of the great Sumerian flood depicted as Noah's Flood. Because of the many problems with the Big Bang Theory, Dr. Farrell has explored an alternative theory which uses the same data as the Big Bang Theory but without violating known laws of physics and without requiring "Dark Energy".

Abstract: On Tuesday, September 17th, 2019, the U.S. Navy acknowledged, for the first time, that for years Navy pilots have been filming objects which they cannot identify and which have flight performance characteristics well beyond anything our government possess. Our generation is not the first to experience encounters that defy earthly explanation and is evidenced even in ancient beliefs. Dr. Farrell will review the history showing that we are being visited. Well-known and respected rocket scientists such as Werner von Braun and Hermann Oberth have stated a belief that UFOs are not of this earth and are able to manipulate or create gravitational fields as a means of propulsion. How do UFOs accelerate at one hundred g's and make right angle turns without harming the occupants? How do they change colors, and "cloak" themselves? Is it even possible to create gravitational field propulsion? What research is being done in this area? This lecture will explain what credible UFO witnesses have described, is not magic and can be explained in a nuts-and-bolts fashion.

A THANKFUL SCHOLARSHIP RECIPIENT

Julian Najera-Amarillas

I am very happy to say that I have finished my first year at Arizona State University with a 3.89 cumulative GPA in my Computer Science program. I want to thank you and the West Valley STEM Club for awarding me the West Valley STEM Club Scholarship last spring and giving me the opportunity to pursue my dreams. Also, thank you for inviting me to your meetings and allowing me to attend in person. It was a great experience and I enjoyed meeting everyone in person!

My future plans involve working at Amazon this summer as a Software Development Engineer Intern and continuing my education at Arizona State University this fall. Thank you so much for helping me accomplish my dreams and allowing me to make an impact on the world. Please let me know how I can help in any way in the future. Thank you, have a great summer!



MAY 6 PROGRAM

Isometric Projection of Video Signal Brightness Variations in Real Time and Discoveries Peter Schumacher