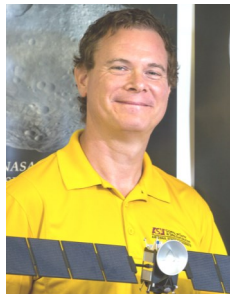


# VALLEY ENGINEERING, SCIENCE & TECHNOLOGY CLUB

April 2019 NEWSLETTER

[www.engineersaz.com](http://www.engineersaz.com)

The Engineers Club is a social organization which meets regularly for lunch with a speaker on a technical topic. Spouses are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or related to the engineering or scientific fields. 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  
Visitors are always welcome - - just call Reservations at (623)544-0942 to let us know you are coming.



## APRIL 5 PROGRAM

### Exploring Ocean Worlds

David Williams, PhD ASU

Dr. David A. Williams is an Associate Research Professor in the School of Earth and Space Exploration at Arizona State University, Tempe, Arizona. Dr. Williams is the Director of the Ronald Greeley Center for Planetary Studies, the NASA Regional Planetary Information Facility at ASU. He is also the Director of the NASA Planetary Aeolian Laboratory, which administers wind tunnels at ASU and the Ames Research Center in California. David is currently performing research in volcanology and planetary geology, with a focus on planetary mapping, geochemical, and remote sensing studies. His research has included computer modeling of seismic wave propagation through planetary interiors, visible and near-infrared spectroscopy of the lunar surface, planetary geologic mapping of the satellites of Jupiter and Saturn, the planet Mars, the asteroid Vesta and the dwarf planet Ceres, computer modeling of the physical and geochemical evolution of lava flows in a variety of planetary environments, and petrologic study of lava samples from Mount St Helens. He was involved with NASA's Magellan Mission to Venus and Galileo Mission to Jupiter. He is a Co-Investigator on the European Space Agency's Mars Express orbiter mission, and he is a Science Team Member on NASA's Dawn Mission to asteroid Vesta and dwarf planet Ceres. He is also a Co-Investigator on NASA's newly selected Psyche Mission. In 2014 David was elected a Fellow of the Geological Society of America, and asteroid 10,461 DAWILLIAMS was named in his honor.

Abstract: In 1996 NASA's Galileo Jupiter orbiter discovered evidence for a salty, liquid water ocean underneath Jupiter's moon Europa. Since then, other NASA spacecraft have found evidence for oceans around other icy worlds in the outer Solar System, including Ganymede, Callisto, Titan, and Enceladus. The presence of all of this liquid water, in close proximity to heat sources and the elements required for life (CHNOPS, carbon-hydrogen-nitrogen-oxygen-phosphorus-sulfur), raises the possibility that other abodes for life could exist in our Solar System, beyond Earth. With the discovery of Earth-sized exoplanets (planets around other stars in our galaxy) within the habitable zones of their host stars, the time will soon come when we might discover ocean worlds beyond our Solar System. What are the implications of these discoveries? Join Professor David Williams of ASU's School of Earth and Space Exploration to discuss these issues and where NASA is headed as it attempts to better explore Ocean Worlds!

## FROM SCHOLARSHIP COMMITTEE CHAIR JIM SCHLENOGOT

I was requested by the VEST Board to update the membership on the status of the VEST Scholarship Program. The Scholarship Committee is one of the long standing committees of the VEST Club with the goal to recruit qualified student(s) who are entering their Junior Year in a qualified four-year Engineering, Science or Technology University. The VEST Scholarship Committee includes the following members: **Carol Mungas, Karen Campbell, Barb Doyen, Ralph Palmer, George Zieglsberger, and Jim Schlenvogt (Chairman)**. On January 18<sup>th</sup>, George and Jim met with the Glendale Community College (GCC) personnel and students and they toured the GCC Science, Technology, Engineering, and Math, (STEM) and the Engineering Science Technology Departments' facilities areas. This was a very interesting and informative tour. The GCC Scholarship VEST applications were due on February 15<sup>th</sup> and the VEST Committee received seven applicants. The Committee reviewed the applications and selected the top four students for the March 8<sup>th</sup> on-campus interviews. The VEST Scholarship Committee recommended and obtained the VEST Board's approval to award the following four 2019 VEST Scholarships:

<b>Samantha Barr - Biomedical Engineering</b>	<b>\$3,000</b>
<b>John Coronite - Computer Science</b>	<b>\$1,000</b>
<b>Clint Howard - Mechanical Engineering</b>	<b>\$1,000</b>
<b>Michelle Patterson - Industrial Engineering</b>	<b>\$1,000</b>

These four students will be attending the May 3rd VEST Meetings to provide more information on their backgrounds and to thank the VEST Club for their 2019 scholarship donations. In addition, the June 7<sup>th</sup>, VEST monthly meeting speaker will be Dr. Tim Frank, Ph.D., Program Director and Faculty Member for the GCC Engineering Science Technology Department.

## FUTURE MEETINGS

June 7

Title: Glendale Community College  
Speaker: Tim Frank, PhD, Engineering  
Program Director

## 2019 VEST LUNCHEON DATES

April 5, May 3, June 7

## 2019 OFFICERS

President	Steve Sumner
Vice President	Open
Secretary	Doris Palmer
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

## COMMITTEE CHAIRPERSONS

Programs	Rick Cecil
Membership	Philip Main
<b>Reservations</b>	Dave Whitehouse
Luncheons	Susan Whitehouse
Scholarship	Jim Schlenvogt
Member at Large	Les Sherry
Newsletter / Website	Dave Campbell
Event Audio	Hal Lind
Event Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	Open
Hospitality	Doris Palmer
Past President	Tod Hamilton

Email the Board at: [board@engineersaz.com](mailto:board@engineersaz.com)

## MAY 3 PROGRAM

### The ASU Space Technology and Science (NewSpace) Initiative: Advancing the emerging space industry at ASU

Scott Smas, ASU



Scott Smas is the Program Manager for the ASU Space Technology and Science (NewSpace) Initiative. He is responsible for the overall operations of the initiative and managing the strategic direction the initiative pursues on collaborations and funding. Throughout the past 20+ years with ASU, he has been in a variety of positions to promote the business and re-

search support functions of multiple faculty, disciplines and programs.

#### Abstract:

ASU Space Technology and Science (NewSpace) Initiative is one of the strategic initiatives at Arizona State University that focuses on relationships with the emerging and disruptive "NewSpace" sector in Arizona and beyond. We leverage the growing ASU legacy of discovery in space sciences and technologies and showcase this to the emerging commercial space industry. From our early stage success with Professor Craig Hardgrove's NASA funded LunaH Map cubesat mission (with multiple new commercial partners) to engagements with members of the Commercial Spaceflight Federation. ASU NewSpace is at the forefront of this evolving and entrepreneurial field. An overview of the current ASU activities including the MILO Institute, highlights of the new players in Arizona and beyond, and what will the rest of 2019 bring will be highlighted in this talk.

## TREASURER'S REPORT MARCH 2019

<b>General Fund Balance:</b>	<b>\$ 10,263.24</b>
<b>Scholarship Fund:</b>	<b>\$ 1,608.00</b>
<b>Membership Total:</b>	<b>150</b>

**March 50/50 was \$ 78.00 - winner was Phil Main who donated his entire winnings to the Scholarship Fund! Thank You!**

**2019 membership dues are now due.**

## LUNCHEON MENUS

**April 1: #1 Chicken Parmesan, or #2 Shrimp Scampi**  
Both entrées will come with Cesar Salad, Basmati Rice, Parmesan Broccoli, and a Carrot Cake Bar. *(Grilled Vegetable Plate or Fruit Plate also available)*

**May 3: #1 B.B.Q. Pork Ribs, or #2 Salmon** Both entrées will come with Spinach Salad, Rice Pilaf, Asparagus and a Red Velvet Torte. *(Grilled Vegetable Plate or Fruit Plate also available)*

## RESERVATION POLICY

**The cost of the monthly luncheon is \$22.00 cash or check.**  
The reservation deadline is 6 PM Monday before the meeting.

**Late reservations cannot be guaranteed the regular meal.**  
Call Dave Whitehouse to cancel your reservation.

Note that the full cost of the luncheon will be charged for "no-shows" and cancellations after 5 PM on Wednesday before the meeting.

Please have cash or make out your check in advance.

## Amazon Fulfillment Center

On March 15, ten members of VEST toured the Amazon Fulfillment Center. If you are interested in a future tour, please contact Steve Sumer at: [rrbrdgbldr@yahoo.com](mailto:rrbrdgbldr@yahoo.com). Steve will also need your birthdate to set up the tour.

