

VALLEY ENGINEERING, SCIENCE & TECHNOLOGY CLUB

February 2020 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

FEBRUARY 7 PROGRAM

Title: The Future of Energy is Bright

Speaker: Donald Chung, Energy Innovation
Program Consultant, APS



Donald brings over 20 years of technical and commercial experience to his role at APS, where he is focused on developing innovative solutions meeting customers' clean energy and resilience needs. His expertise in renewable and distributed energy was built through prior roles at the National Renewable Energy Laboratory – where he managed energy technology analysis projects, as well as project development consulting efforts – and at an international solar technology company where he held various leadership positions with responsibility for North American sales, marketing, procurement, and operations. Donald holds a B.S. from Duke University, an M.S. from U.C. Berkeley, and an M.B.A. from the University of Michigan.

Abstract: The future of energy is certainly bright! From our beginning in 1886, as the first awarded franchise in the city of Phoenix to the present, APS remains at the forefront of the ever-changing electric utility future. For over 130 years APS has been an integral partner in a long and prosperous relationship with the cities, towns and counties that we serve in Arizona. That successful partnership continues in a time of unprecedented change in how customers use energy and interact with their utility companies. A very exciting time indeed!

The advances in technologies, “two-way” interactions with customers who generate a portion of their own electricity and the “Smart Grid” are changing the way customers use energy and are shaping a new energy frontier. That new frontier includes expanding choices and control customers have in managing their energy use with a focus on a sustainable energy future for all Arizonan’s. That future includes a growing portfolio of renewable energy production, smart and economical use of existing conventional resources, and the challenges of meeting the needs of a growing population.

2020 VEST LUNCHEON DATES

March 6, April 3, May 1, June 5, October 2, November 6,
December 4

PRESIDENT'S MESSAGE

By Steve Sumner

Now that the Holidays are finished for this year, your Board will be preparing for the 2020-2021 Season which begins with our October 2, 2020 luncheon.

One of the items which we will investigate is venues for holding our 2020-21 luncheons. As part of this investigation, Pete Rauhen sent members a questionnaire. This questionnaire will give insight as to membership's desire for next season. If you did not complete and return the questionnaire to Pete, we have put several copies on each table.

Please complete and return to the Membership table as you leave the room this afternoon. Without feedback from the members, we will not have any idea on how to proceed toward next season. Also if you are interested in joining our ad hoc committee to investigate alternate venues for our meetings, please let myself or any other Board member know.

Please remember that the continuing existence of our club depends on participation of our members.

Enjoy your meal, the conversations with your table mates and the presentation.

MARCH 6 PROGRAM

Smart Sewers for Smart Cities: Informing on Public Health through Wastewater Analysis

Speaker: Adam J. Gushgari, PhD, PE ASU



Adam Gushgari received his PhD in Civil/Environmental Engineering at Arizona State University where he focused on a new monitoring technology called “wastewater-based epidemiology”. Following his PhD graduation, he co-founded AquaVitas LLC – a company focused on using wastewater monitoring as a tool to help curb the opioid epidemic – a crisis that has impacted him personally. A born and bred Arizona native – Adam uses his unique background of land development civil engineering, analytical chemistry, and his personal experiences to assist community stakeholders in understanding their drug and health problems through wastewater monitoring.

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2020 OFFICERS

President	Steve Sumner
Vice President	Open
Secretary	Marilyn Dumond
Treasurer	Carol Mungas
Asst. Treas.	Dave Campbell

COMMITTEE CHAIRPERSONS

Programs	Rick Cecil / Sarah Ruhlen
Membership	Philip Main
Reservations	Chuck Wasik
Luncheons	Jackie Wasik
Scholarship	Jim Schlenvogt
Member at Large	Peter Rauen
Member at Large	David&Susan Whitehouse
Newsletter / Website	Dave Campbell
Event Audio	Hal Lind
Event Computer	Paul Scherer
Publicity	Lance Berglund
Field Trips	Eric Muhly
Hospitality	Doris Palmer

Email the Board at: board@engineersaz.com

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Abstract: Data-informed decision making has never been more important than it is today. Governments and stakeholders routinely utilize big-data to make informed policy decisions and education campaigns to positively impact the lives of their constituents, but the efficacy of their strategies is heavily impacted by the quality of datasets considered in their decisions. Wastewater-based epidemiology (WBE), a relatively new field of science focusing on extracting chemical data from wastewater samples, has seen significant worldwide adoption of the technology to understand the prevalence of drug abuse at the community level. The European Union has seen incredible success in WBE monitoring through their SCORE network, and nationwide campaigns are being established in Canada, Russia, China, and Australia. While a nationwide campaign has not yet been established in the United States, many state and local governments have implemented smaller regional sampling campaigns to understand drug abuse in their communities and how their policy and actions impact their constituents. This presentation will briefly cover the history of the technology, domestic and international WBE successes, and the current ways that the field is being developed to address other public health and safety concerns.

TREASURER'S REPORT JAN 2020

General Fund Balance:	\$ 8,321.75
Scholarship Fund:	\$ 1,365.00
Membership Total:	132

January 50/50 was \$ 63.00 - Congratulations to winner Phil Main !
2020 Membership dues are now due.

RESERVATION POLICY

The cost of the monthly luncheon is \$24.00 cash or check. The reservation deadline is 6 PM Monday before the meeting. **Late reservations cannot be guaranteed the regular meal.** Call Chuck Wasik at 623-537-9196 to cancel your reservation. Note that the full cost of the luncheon will be charged for "no-shows" and cancellations after 5 PM on Monday before the meeting. Please have cash or make out your check in advance.

LUNCHEON MENUS

February 7: #1 Meatloaf Express, Meat Loaf with Mushroom Sauce, Mashed Potatoes, Sautéed Green Beans **or #2 Fish & Chips**, Golden Fried Panko Crusted Cod, French Fries and Cole Slaw. Both entrées include a Fresh Baked Jumbo Cookie (**Grilled Vegetable Plate or Fruit Plate also available**)

March 6: #1 Roast Turkey, Dressing, Mashed Potatoes Cranberry Sauce and Chef's Vegetable **or #2: Shrimp Scampi** in garlic butter sauce, Savory rice pilaf or pasta, Chef's Vegetable. Both entrées include Ice Cream Parfait Sundae, Caramel sauce, whipped cream & Pecans (**Grilled Vegetable Plate or Fruit Plate also available**)

SCHOLARSHIP UPDATE

On January 30, Jim Schlenvogt, George Zieglgansberger and Karen Campbell met with Michelle Alcantar, Director of Community and Business Partnerships at Glendale Community College. We promoted the VEST scholarship at the Stem Connect tutoring/advising center, the math center and met with Dr. Tim Frank, Engineering Program Director. The VEST scholarship is being promoted by GCC email, a campus text app, and in engineering classes. Applications are due February 12. We are looking forward to reviewing the applications and having recommendations to the VEST Board in early March.

FUTURE MEETINGS

April 3

Rapidly Deployable Infrastructure (MicroGrids) for Humanitarian Assistance
Speaker: Alexander Mobley ASU



20 years of Antarctic Ballooning
January 3 Speaker: Phil Mauskopf , PhD, ASU
For more information on our speakers, please visit our website at www.engineersaz.com