

ENGINEERS CLUB OF THE WEST VALLEY

June 2013 NEWSLETTER

www.engineersaz.com

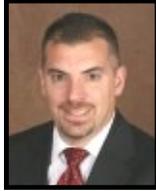
The Engineers Club is a social organization which meets regularly for lunch with a speaker on a technical topic. Spouses are invited and many attend regularly. Short field trips are occasionally scheduled. Membership is open to anyone who has worked in or had close ties to the engineering or scientific fields. Meetings are held at 11:30am on the first Friday of each month, October through June, at Briarwood Country Club, 135th and Meeker in Sun City West, Arizona.

Visitors are always welcome -- Reservations are required -- Just call (623)544-0942 or mail to: reservations@engineersaz.com

JUNE 7 PROGRAM

Meeting Our Water Demand

Shawn Bradford
Director of Operations
EPCOR Water, Phoenix, AZ



Shawn Bradford has over 26 years of experience in the water and wastewater fields, with experience at all levels, including management, operations and maintenance. He currently serves as the Director of Operations for the Central Division with EPCOR Water and is responsible for over 79,000 service connections in Sun City, Sun City West and the Aqua Fria District. He oversees a staff of 80 people and is responsible for annual revenues in excess of \$72 million.

Prior to coming to EPCOR Water, Shawn was the Public Works and Water Resources Director for the City of Good-year. While in that capacity, he led a staff of 105 and was responsible for managing an annual administrative budget of \$31 million.

Shawn has an M.B.A. in Strategic Leadership from Amberton University and a Bachelor of Science Degree in Management from Becker College. He also has an Associates Degree in Environmental Engineering from Northeastern University.

The expansive growth and demand for water places an ever increasing strain on the limited supplies in the Southwestern United States. The delivery and use of surface water remains a critical component for Arizona's long-term growth. Shawn will describe how EPCOR Water has positioned itself to meet these demands through progressive planning and a diverse water resource portfolio that utilizes surface, ground, and

October 4 PROGRAM

Silicon clathrates and their potential application in batteries, thermo electrics and super conductors

Candace Chan, Arizona State University—Materials Science and Engineering

Dr. Chan received a B.S. in chemistry from Rice University, where she worked in the lab of Nobel Laureate Prof. Richard Smalley. After several internships at Los Alamos National Lab and Lawrence Berkeley National Lab, she went to Stanford to pursue a Ph.D. in physical chemistry. She obtained her Ph.D. from Prof. Yi Cui's group in the materials science department at Stanford in 2009. She was awarded the Paul J. Flory award for Physical Chemistry, the Stanford Graduate Fellowship, the NSF Graduate Fellowship, MRS Silver Graduate Student Award, and TMS Ross Tucker Award. After a postdoc as a Miller Fellow in the Dept. of Chemistry at UC Berkeley, she joined the faculty at ASU in Fall 2011 as an assistant professor in materials science and engineering and a graduate faculty in chemistry.

NOTES FROM ...

President Don Block



Here is something to think about. Close your eyes and think about going for a drive on a beautiful day. You go outside, get in your car, program your destination into your GPS, sit back and relax while your car takes you away. You just sit back and enjoy the scenery. Sound farfetched? Not as much as you might think. I was just reading about some of the automated aids that are either now available or are well into the development phase. We are still a long way from full autonomy but technology is changing so rapidly that it may not be too long before you can do exactly what I stated.

So far autonomous technology has been introduced very carefully by car manufacturers. They realize that having too little to worry about can be just as dangerous as having too many distractions. A Ford Fusion equipped with some of these driver aids pretty much drives itself. Sensors busily track other vehicles and road markings; computer systems operate the accelerator, the brakes, and even the steering wheel. The car can reduce its speed to keep a safe distance from the vehicle ahead, and speed up again if the car ahead does so. At the same time cameras provide the ability of additional electronics to track the traffic lane lines to keep the car from drifting out of the present lane. Both of these systems can be easily overridden. The speed control is set not to exceed the programmed speed limit and to drop out below 12 miles per hour, for example. Lane tracking can be overridden by jerking the steering wheel.

Many cars also perform the most troublesome driving task of parallel parking using a feature called Active Park Assist. It has been stated that this feature can park a car in a space so small that an individual would never be able to get the car out.

How far will this go? It is hard to say but think about this: Google has been testing a fleet of almost completely autonomous hybrid cars for some time. The company says its cars have travelled over 300,000 miles without an accident.

Video of the [Google Car](#).

Some Engineering web sites

[The Arizona Society of Professional Engineers](#)

[The Association of Professional Engineers and Geoscientists of Alberta](#)

2013 OFFICERS

| | | |
|----------------|-------------------------------|--------------|
| President | Don Block | 623-546-0557 |
| Vice President | Dave Campbell | 623-518-4871 |
| Secretary | Lee Roach | 623-810-7413 |
| Treasurer | Bob Latvala | 623-546-7801 |

COMMITTEES

| | | |
|-----------------|--|--------------|
| Programs | Daryl Lund | 608-250-0659 |
| Programs | Bob Farrell | 623-810-5095 |
| Membership | Bob Kessler | 623-910-7054 |
| Reservations | Dave Whitehouse | 623-544-0942 |
| Luncheons | Tom Watkins | 623-584-5811 |
| Scholarship | Gerry Montag | 623-546-7963 |
| Member at Large | Fred Scheske | 623-556-2892 |
| Newsletter | Bill Harrison / Rick Scott | 623-546-4943 |
| Event Support | Dick Stout | 403 931-3115 |
| Web Site | Dave Campbell | 623-815-0985 |
| Publicity | Maurice Hoyt | 623-518-4871 |
| Field Trips | Lanny Barnes | 623-533-4213 |
| Past President | Les Sherry | 623-546-3364 |
| | | 623-975-9081 |

CLUB SURVEY RESULTS

By Les Sherry

Our survey provided a lot of statistical data that shows we have a very high level of member satisfaction with the way the club is functioning. One statistic that stands out to me concerns the responses to the question asking for "recommendations for improving the club". Fifty members made 77 suggestions. There were many thought provoking suggestions that will be considered in the future. But, only one comment was consistent among 44% of the respondents. That comment fell in the range of "the club is fine as is", "I thoroughly enjoy the luncheons" and "no changes needed". I don't think you can have a better endorsement than that from a critical thinking group of engineers, especially when that wasn't the question asked of them! Obviously any future changes to the club will have to be very carefully considered.

Several recommendations addressed a desire for the club to improve the audio system to prevent feedback problems. The existing audio system is Briarwood's and past efforts to improve it have been limited. However, your suggestions for improvements have motivated the Board to purchase an updated audio system of our own that should solve the problem. With a bit of luck, Dick Stout, our Events Chairman, will have the system purchased and up and running for our June luncheon meeting.

Luncheon arrangements: (101 member responses)

- Usually satisfied with audio quality..... 97%
- Usually satisfied with Video quality..... 94%
- Usually satisfied with Room Arrangement..... 92%
- Would like option to move closer to speaker..... 67%

Stay tuned for "what factors motivate members to attend luncheons."

BOARD EMAIL ADDRESS: Board@engineersaz.com

TREASURER'S REPORT 5/20/2013

General Fund Balance: \$ 4701.09
 Scholarship Fund Balance: \$ 3231.13

LUNCHEON MENUS

June 7 Entrée #1: Pork Cordon Bleu
 Entrée #2: Grilled Salmon
Entrée Option Fruit Plate or Grilled Vegetables
Includes Salad, Au Gratin Potatoes and Broccoli with Vanilla Ice Cream and a Cookie for desert.

October 4: Entrée #1: Chicken Marsala.
Entrée #2: Battered Cod.
Entrée Option Fruit Plate or Grilled Vegetables
Salad, Balsamic Rice, Green Beans Almandine, With Apple Turnover and Ice Cream for desert.

RESERVATION POLICY

The cost of the monthly luncheon is \$18.00 per person. The reservation deadline is 5 PM Monday before the meeting. Late reservations cannot be guaranteed the regular meal. Call Dave Whitehouse if you cannot keep your reservation. The full luncheon cost is due for "no-shows" and cancellations after 5PM on the Wednesday before the meeting.

RESERVATIONS Dave Whitehouse (623)544-0942

WELCOME NEW MEMBERS

Club Membership is 140

RAFFLE RESULTS AND DONATIONS

The winner of the May 50/50 raffle was Mike Lynch who received \$ 87 and \$ 86 was added to the Scholarship Fund.



Benjamin Limmer receives a certificate of appreciation from Bob Farrell for his presentation on the Phoenix Valley Metro capital and development programs at the May luncheon.