

# ENGINEERS CLUB OF THE SUN CITIES AREA

MARCH 2007 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 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 Palmbrook Country Club, 9350 Greenway Road in Sun City, Arizona.

Visitors are always welcome - - just call Reservations at 546-9112 to let us know you are coming.

## MARCH 2 PROGRAM

### Global Warming: Cause, Effects, and Solutions (If Any)

Dr Bruce Rittmann, Arizona State University



Have you noticed that it seems to be getting warmer? Levels of CO<sub>2</sub> in the atmosphere are the highest in history. Glaciers and ice caps are melting at an alarming rate. Ocean levels are rising and lake levels are dropping. Is it time to sell your ocean front property? What's going on? What can we do? At our meeting on Friday, March 2 we will find out. Dr. Bruce Rittmann, an expert on environmental engineering from ASU is going to explain everything.

Dr. Rittmann is Professor of Civil and Environmental Engineering and Director of the Center for Environmental Biotechnology in the Biodesign Institute. He was elected to the National Academy of Engineering in 2004, and is a Fellow of the American Association for the advancement of Sciences, a past president of the Association of Environmental Engineering and Science Professors, and one of the Institute for Scientific Information's Most Highly Cited Researchers. No question, he knows his stuff.

## APRIL 6 PROGRAM

### Around the World in Space Shuttle Endeavor

Astronaut William Gregory

Honeywell Corporation



"The sky's the limit." Our speaker for April has been higher in the sky than most humans. In 1995, he spent nearly 400 hours orbiting the Earth as the STS-67 pilot on the seven-person astronomical research mission aboard the Space Shuttle Endeavour. The crew established a new mission duration record of 16 days, 15 hours, 8 minutes and 46 seconds, while completing 262 orbits. Come and enjoy William G. Gregory's visual presentation of his experiences in space and all that led up to his record-breaking mission. He will use a combination of movies and slides to transport all of us into orbit.

Bill earned a degree in engineering sciences from the United States Air Force Academy in 1979, a master's degree in engineering mechanics from Columbia University in 1980, and another master's degree (in management) from Troy State University in 1984.

Between 1981 and 1988, he served as an operational fighter pilot and instructor pilot, and from 1988 to 1990, he served as a test pilot at Edwards AFB. He has flown more than 40 types of aircraft, accumulating over 5,000 hours of flight time. He became an astronaut in 1991 and worked in many capacities within NASA. He retired from the Air Force, leaving NASA in 1999, and currently serves as Manager of Business Development for Honeywell.

## NOTES FROM...

### Field Trips Committee

#### Field Trip to APS Solar Research Facility

The APS Solar Test and Research Center is the site of the next Club Field Trip scheduled for Friday, March 23. The STAR Center is one of the most advanced solar testing sites in the world, with virtually all types of photovoltaic technology and the latest in high concentration tracking systems under test or development. The tour provides a history of solar energy technology from the early 1970's up to the present day, including systems for residential and commercial use.

The facility is located in Tempe at 1500 East University Drive. Our tour will begin at 9AM and last about 2 hours. The program consists of two parts—a presentation indoors and extensive walking outside. It is a construction site with stairs and gravel roads, so this is not an appropriate tour for anyone with limited mobility, especially those with walking aids.

You can sign up for the field trip at the March luncheon, make a reservation on our website at [www.engineersaz.com](http://www.engineersaz.com), or call Dave Whitehouse at 544-0942.

We have had many requests for a field trip to the Palo Verde nuclear power plant. After contacting the facility, we have determined that a tour there would not be very interesting since we could not go inside. Their tours now include only a drive around the buildings. However, an official from Palo Verde has agreed to take us on a "virtual tour" of the inner workings of the facility for our luncheon program in October.

## MAKE YOUR RESERVATIONS ONLINE

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

In addition to accessing the club web site to get an early copy of the newsletter before each meeting, you can now use it to make luncheon and field trip reservations.

Newsletters will be available on the site about two weeks before the meeting so you can learn more about the meeting and share it with friends who might enjoy the program or be interested in membership.

Make your luncheon reservations on the Reservations page by entering the names of attendees and their entrée selections. A page confirming the details of your reservation will appear when you click the "Submit Form" button.

When a Field Trip is arranged, you can make your reservation through the page where it is described. The description indicates any information that you need to provide. Clicking the "Make Your Reservation" link will open your e-mail program preaddressed to the Field Trip Chairperson.

MAY 4

Nanosensors & Devices

Dr Neal Woodbury

JUNE 1

Malawi Engineering Projects

Dr Jan Snyder

## 2007 OFFICERS

President	Bill Harrison	546-4943
Vice-President	Bob Farrell	362-9030
Secretary	Maureen Comstock	546-9112
Treasurer	Don Block	546-0557

## COMMITTEE CHAIRPERSONS

Programs	Bob Farrell	362-9030
Membership	Bob Latvalla	546-7801
Membership	Steve Kyriakides	544-9280
<b>RESERVATIONS</b>	<b>Gene Comstock</b>	<b>546-9112</b>
Luncheon Planner	Byron Eberwein	974-3371
Scholarship	Geraldine Montag	546-7963
Scholarship	Fred Berkenkamp	214-7757
Scholarship	Rutheloise Borchardt	933-2307
Reception	Maureen Comstock	546-9112
Newsletter	Jim & Pat Ardis	362-1013
Publicity	Keith Morrow	546-3080
Field Trips	Jerry Miller	214-2642
Field Trips	Dave Whitehouse	544-0942
Past President	Bill Lee	977-1818

## TREASURER'S REPORT 1-31-2007

General Fund Balance: \$ 2055.50  
Scholarship Fund Balance: \$ 2013.73

## LUNCHEON MENUS

**March 2:** Garden Salad, Pot Roast, Red Parsley Potatoes, Carrots, Rolls, Beverage, Mint Chocolate Chip Ice Cream.  
(Entrée Option: Fruit Plate)

**April 6:** Waldorf Salad, Chicken Normandie, Whipped Potatoes & Gravy, Green Beans Almandine, Rolls, Beverage, Rainbow Sherbet. (Entrée Option: Fruit Plate)

## RESERVATION POLICY

**The cost of the monthly luncheon is \$16.50 per person.**

An added charge of \$1 will be applied for "walk-ins."

A fee of \$10 will be charged for "no-shows."

Please call in advance if you cannot fulfill your reservation.

Please have cash or your check made out for exact amount.

**RESERVATIONS Gene Comstock 546-9112**

## MEMBER SPOTLIGHT

*An occasional series of articles by Fred Scheske focusing on the engineering careers of Club members.*

**Robert Crawford** entered The University of Kansas with a childhood goal to build bridges or buildings. However, his studies led him to specialize in water treatment facilities. Three days after graduation with a Civil Engineering degree, Bob began his career as a water supply and wastewater engineer for Wilson and Company in Salina, Kansas. He worked for Wilson for 43 years, progressing from engineer to company partner and was instrumental in growing the company from 55 employees in two offices to more than 250 at seven facilities.

As a project manager and marketer for Wilson and Company, Bob often drove 35-40 thousand miles each year traveling to municipalities in Kansas and surrounding areas to meet with city officials regarding plans and contracts for water treatment facilities. One of his largest projects was designing a secondary wastewater treatment plant for Wichita, Kansas. Studies had shown that more than 80% of water in that area was used for agricultural purposes and reclamation was essential.

Bob was appointed by the Governor to serve on the Kansas State Board of Health, and later served in the Kansas State Department of Environment. He would like to see more members become aware of water issues and reclamation for the Phoenix metropolitan area.

Bob has been a member of the Engineers Club for four years. He and his life partner, Ida, live in Peoria.

## MEMBERSHIP DIRECTORY

### 2007 EDITION

available at the March meeting!

## NEWSLETTER & WEBSITE

The newsletter is published at [www.engineersaz.com](http://www.engineersaz.com) about two weeks before each meeting. Questions or suggestions should be directed to Jim or Pat Ardis at [jimpat@ardisnet.com](mailto:jimpat@ardisnet.com) or 362-1013.



Vice President Bob Farrell expressed our appreciation to John Purvis for his inside look at the workings of air accident investigation.



Scholarship recipient Philip Walker described his plans for studies in mechanical engineering and thanked club members for their support.