

# ENGINEERS CLUB OF THE WEST VALLEY

DECEMBER 2012 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, January 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 to let us know you are coming.

## DECEMBER 7 PROGRAM

### The Arrow of Time

Ralph V. Chamberlin, PhD  
Arizona State University



Experiments show that time progresses only forward. Ralph will address the question of: Why can we NOT go back in time? Time reversal is used in many areas - including Newton's laws, Einstein's relativity, and Hollywood's movies - but everyday experience tells us time goes only forward.

In physics, this arrow of time is required by the second law of thermodynamics. Surprisingly, the same law says that our total information about the universe always *decreases*! He will present several examples explaining our concept of time and total information, and why they progress in only one direction.

Ralph received his BS degree from the University of Utah and his MS and PhD degrees from the University of California at Los Angeles. He did post doctoral research at the University of Pennsylvania for two years before joining ASU in 1986.

## JANUARY 4 PROGRAM

### Genetically Modified Food: Required Labeling or Not?

Dr. Charles J. Arntzen  
Arizona State University



Charles Arntzen grew up on a farm in Minnesota, and has spent his career in activities directly related to agriculture and plant biotechnology. He joined the Dupont Company in the 1980's and helped establish their program in crop genetic engineering. That program merged into the Pioneer Hybrid seed company to make DuPont one of the largest agriculture-biotech companies in the world.

For the last 20 years, Charlie has used plant biotechnology for production of medical products. He has had extensive experience in government regulation of genetically modified crops, and will discuss that technology in the context of "should GM content be required on food labels?"

Charles Arntzen is a Regent's Professor in the School of Life Sciences at Arizona State University, and the Florence Ely Nelson Chair in ASU's Bidesign Institute.

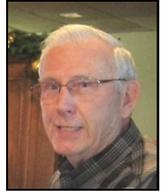
## WELCOME NEW MEMBERS

Marshall Smith, George Lawrence  
and Marie Zagorski

Club Membership is 153

## NOTES FROM...

President Les Sherry



### A FINAL WORD

Whoa - this year has gone by fast! I hope you all have a most joyous Holiday Season.

Since this is my last meeting as President, I have many people to thank for making my term enjoyable and rewarding. First, thanks to the Officers and entire Board for their outstanding performance in maintaining the clubs historically high level of professional programs, and for their extra effort in improving our programs and membership involvement. Second, thanks to all of you members who have supported the club through your enthusiastic participation in our luncheons, field trips and scholarship program. For those of you that had the opportunity to participate in the April survey questionnaire, your comments, recommendations and offers to assist or participate on the Board has resulted in the club better addressing your desires and in an outstanding group of nominees for next year's Board. We now have the ability to have back-up and assistance for all our key positions.

I will miss my heady discussions with our luncheon speakers at the head table but I am looking forward to some spirited membership interaction next year.



Terry McManus, Vice President of Strategic Initiatives, of the T-Gen Research Institute received a certificate of appreciation from Les Sherry for his presentation describing the activities and developments of the Translational Genomics Research organization.

**2012 OFFICERS**

President	Les Sherry	975-9081
Vice President	Bob Farrell	810-5095
Secretary	Jodie Lawrosky	238-5256
Treasurer	Bob Latvalla	546-7801

**COMMITTEE CHAIRPERSONS**

Programs	Daryl Lund	271-7337
Programs	Bob Farrell	810-5095
Membership	Bob Kessler	910-7054
Reservations	Dave Whitehouse	544-0942
Luncheons	Doug Keeler	480-8476
Luncheons	Hal Clemett	546-4941
Scholarship	Len Cohen	546-3741
Scholarship	Don Johnson	975-1657
Scholarship	Gerry Montag	546-7963
Member at Large	Fred Scheske	556-2892
Newsletter	Bill Harrison	546-4943
Event Support	Ralph Palmer	815-8143
Web Site	David Campbell	518-4871
Publicity	Maurice Hoyt	533-4213
Field Trips	Keith Morrow	546-3080
Past President	Don Block	546-0557

**BOARD EMAIL ADDRESS: [board@engineersaz.com](mailto:board@engineersaz.com)**

**TREASURER'S REPORT 11-18-2012**

General Fund Balance:	\$5,812.43
Scholarship Fund Balance:	\$1,121.75

**LUNCHEON MENUS**

**December 7: Yankee Pot Roast with Natural Gravy, Broiled Red Potatoes, Chef's Vegetable and Peppermint Ice Cream and Cookie.**

**(Entrée Option: Fruit Plate or Grilled Vegetable Plate)**

**January 4 Entrée #1: Roast Breast of Tom Turkey with Gravy. Entrée #2: Grilled Salmon.** Both include Salad, Creamy Mashed Potatoes, Steamed Broccoli, and Ice Cream with a Rolled Cookie.

**(Entrée Option: Fruit Plate or Grilled Vegetable Plate)**

**RAFFLE RESULTS AND DONATIONS**

The winner of the November raffle was Roger Gimby who received \$90 with an equal amount to the Scholarship Fund.

**MEMBERSHIP DUES**

**Dues of \$20 for 2013 are now being accepted at the membership table before meetings or by mail to the Membership Chairman**

**Bob Kessler  
18005 N 129th Drive  
Sun City West AZ 85375**

**February 1 is the deadline to be included in the new Membership Directory.**

**Scholarship Update**

by Gerry Montag

This column is the third of a series of updates on what some of our scholarship recipients are doing.

**Tyler Stannard – Year 2010, \$3,000 Awardee**

In May, 2013, Tyler will be graduated with a Bachelor of Science degree in Materials Science from ASU. His GPA is still an incredible 4.0. He has already started the application process to top-rated universities to pursue a PhD.

In his spare time, Tyler has been working for an ASU professor on a project in nuclear forensics which is based on the premise of using lithium ion batteries as ubiquitous neutron detectors following a criticality accident or nuclear weapon detonation. Tyler's role was to model the effects of detonation using Monte Carlo modeling software. Batteries were sent to Oregon State University for irradiation as an experimental verification. Proposed test methods for determining the neutron influence are gamma ray spectroscopy and mass spectrometry.

In addition, Tyler applied for and received a Fulton Undergraduate Research Initiative (FURI) grant to pursue the spectrometry portion of the research. He avers that gamma ray spectroscopy appears to be the most accurate detection method so far. For the FURI, he also decided to look at the change in battery electrochemical impedance.

His future research interests lie toward a focus in nuclear materials but he would be open to continuing research on advanced lithium ion battery concepts.

Tyler never ceases to thank the Club for his scholarship.

**NOTICE****LUNCHEON PRICE CHANGE**

**Due to rising food and operating costs, beginning January 2013, the cost of the regular monthly luncheon will be increased to \$18.00 per person. However, a seafood option will also be available. You will need to specify which option to include when you make your reservations.**

The reservation deadline is 5PM 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 5 PM on Wednesday before the meeting.** Please have cash or make out your check in advance.

**RESERVATIONS Dave Whitehouse (623)544-0942**