

### The Arizona Civil Engineer

### **Inside This Issue:**

UA 2016 Centennial Lecture	0
Series	2
UA Homecoming Weekend	3
Phoenix Branch News	4
PBYMF ASCE 1st Annual Cornh	ole
Tournament	5
Driverless Cars	8
SAB October Luncheon	8
PAG Technology and	
Transportation Summit	9

The Arizona Civil Engineer is a publication of the Arizona Section of ASCE

Editor Meghan Bowen <u>editor@azsce.org</u>

Webmaster Sherry Martin, PE <u>sherry@azsce.org</u>

Information published in the newsletter must be consistent with ASCE Arizona Board Policy.

## President's Message October 2016

Mark Lamer, PE, MEng, M.ASCE, Arizona Section President



The new fiscal year for ASCE has begun as of October 1st and I am excited to represent the ASCE Arizona Section as the Section President for this upcoming year! I believe that this fiscal year will be very productive and beneficial to the section and its members. Mark Fountain provided diligent and thoughtful leadership over his past year of Arizona Section presidency, ensuring that the continuity between presidents results in a seamless transition of board actions and section outreach.

This year already started off great by having the previous year end on a very high note with the very successful 2016 Arizona ASCE/ASHE conference. We were fortunate to have the largest attendance seen at an Arizona Section Annual Conference in quite a while, and the conference coordinators and section officers continue to receive positive comments about the content of the technical sessions and the overall organization of the event itself. Let's extend a thank you to all the conference committee members that helped organize the event, and a special thanks for the excellent performance as conference co-chairs by Mark Fountain and Marlo Abramowitz and to Jose Aguliar and Jeff Swan for taking on the critical role of arranging the technical sessions.

Another reason I am really excited about FY 16/17 and believe it be great year is that this past summer the Arizona Section board spent some time evaluating the sections needs and direction

which resulted in a brand new (draft) strategic plan for the section...

Continued on Page 10







College of Engineering Chemical & Environmental Engineering



Marla Smith-Nilson, who received a bachelor's degree in civil engineering from the University of Arizona in 1991 and the Outstanding Young Alumni Award from the UA department of civil engineering and engineering mechanics in 2007, will offer the department's 2016 Centennial Lecture.

Her presentation will be held on Friday, Oct. 28, as part of CEEM's Homecoming celebration. Smith-Nilson, an advocate for clean water in impoverished areas, has implemented water sanitation projects in nearly 200 villages around the world since 1991. She currently serves as executive director of Water 1st International, a nonprofit organization that she founded in 2005. Under her leadership, Water 1st International has established 733 water systems in four countries.

In 2013, Smith-Nilson was featured in a Today Show segment honoring women making a difference in the world. In 2015, she was honored with the World Citizen Award from the World Affairs Council.

Smith-Nilson received the Flinn Scholarship in 1987, which gave her the opportunity to travel the world and helped to inspire her interest in water sanitation. While at the UA, she also served as president of the ASCE student chapter.

The Centennial Lecture Series was founded in 2005 as part of CEEM's centennial celebration. The department invites distinguished speakers to present on campus every two years.



# 2016 Centennial Lecture Series

Marla Smith-Nilson

Clean water advocate and 2007 Outstanding Young Alumni

October 28, 2016 Education Room 211 12:00 p.m.

RSVP for CEEM's Homecoming Festivities at:

http://tinyurl.com/ CEEMHomecoming2016

### Homecoming Weekend and UA Civil Engineering Department/Alumni-Industry Council Events

## Kevin Lansey, PhD, Department Head Hydraulics & Hydrology University of Arizona

Mark your calendars for homecoming weekend and UA Civil Engineering Department/Alumni-Industry Council events!

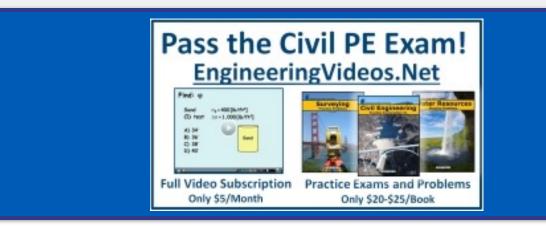
As is our tradition, the AIC and the department will host our 11th annual CEEM BBQ in the CE courtyard prior to the Stanford game on Saturday October 29. It's a great time to meet fellow alums and enjoy a beer, brat and burger.

On Friday, we also have a special day planned. The CEEM Centennial Lecture will be given by Ms. Marla Smith-Nilson. Marla is the founder of Water 1st International is a non-profit organization whose stated goal is helping people in poor countries implement water, sanitation and hygiene education projects. They work closely with local organizations and apply a philosophy of collaboration and sustainability to develop lasting solutions. Water1st has nearly 1,800 projects still functioning today, proving that this respectful approach works. Since 2005, the Water1st community has given \$14 million to fund 1,794 water projects, transforming the lives of 162,000 people. Marla is a 1991 CE alumni and was recognized as a CEEM Outstanding Young Alumni in 2007. The Centennial Lecture is open to the public and will be held at noon in Education Room 211.

At 2 pm Friday, our focus will shift to the Civil Engineering building and the dedication of our main classroom, CE201, as the Edward A. Nowatzki Memorial Lecture Hall. Room naming fees were met through the generous contributions of Ed's family, friends, and colleagues from the UA and civil engineering community. The room dedication underscores Dr. Nowatzki's contributions as an educator and an engineer. Naming funds will be placed in an endowment with the proceedings covering future Centennial Lecture costs. Ed was instrumental in initiating the Lecture series so it is appropriate that these resources allow us to further his vision of bringing high quality speakers to promote and educate the public about civil engineering. All are welcome to attend the dedication ceremony that will be held in the classroom.

For more information on this year's Homecoming festivities see <u>http://civil.arizona.edu/ceem-getting-set-</u> homecoming-2016.

To RSVP for these events please visit <u>http://tinyurl.com/CEEMHomecoming 2016</u>.



### **ASCE Phoenix Branch News**

# Rob Lyons, PE, CFM, Vice President ASCE Phoenix Branch



#### LAST MONTH .....

September Luncheon

Jim Geisbush of the Central Arizona Project and our own V.P. Rob Lyons with JE Fuller presented a rehabilitation project of a structure that protects the CAP Canal from being flooded or breached by Centennial Wash. CAP was concerned that the structure (Dike 2) has been nearly overtopped twice since the original construction in the late 1970s, leading to a hydrologic study including forensic storm modeling, new design technology, rehabilitation alternatives evaluation, and eventually design and construction.

IN COMING MONTHS - Register at: http://www.azsce.org/branches-technical-groups/branches/phoenix-branch/

**October 12, 2016** - Luncheon. Come enjoy lunch with colleagues Daniel Van Cuyk, SE of Caruso Turley Scott Structural Engineers and Brittany McBride LEED BC & D of McCarthy Building Companies who will present the interesting design and development of the OdySea Aquarium. The aquarium is a 200,000 square foot 3 story concrete structure that will be the largest in the Southwest.



**November 16, 2016** – Joint ASCE Phoenix Branch/APWA AZ Luncheon. Come enjoy lunch with ASCE and APWA AZ colleagues and get the latest news and status of the South Mountain Freeway (SR202L) design and construction. REGISTER by visiting <u>https://events.r20.constantcontact.com/register/eventReg?</u> <u>oeidk=a07ed9eoxop9a25243c&oseq=&c=&ch=</u>

### UPCOMING EVENTS BY PARTNER ORGANIZATIONS

October 15, 2016 The Phoenix Branch Younger Member Forum (YMF) will sponsor the 1st Annual Corn Hole Tournament. Tournament proceeds will benefit the Dr. Jan J. Tuma Memorial Scholarship Fund. INFORMATION available at <a href="http://files.constantcontact.com/e944a119301/9edf75a4-1100-4dda-81d6-b3c7f618d382.pdf">http://files.constantcontact.com/e944a119301/9edf75a4-1100-4dda-81d6-b3c7f618d382.pdf</a>

 REGISTRATION
 http://events.r20.constantcontact.com/register/event?

 oeidk=a07ed2epkoj5537f0b7&llr=5erurioab

Thank you for your membership and participation! ~ The ASCE Phoenix Branch Board



# FUNDRAISER FORMS

# AzSCE Phoenix Branch YMF Sponsorship Form

If you have questions about sponsorship or door prize donations, contact Nicolai Oliden 480.242.8275. See sponsorship descriptions on front side of this flyer.

AzSCE/YMF Fundraiser - Sponsorship Form			
Name:			
Company or Sponsor Name:	Phone:		
Address :	Email:		
Type of Sponsorship:	Amount Enclosed:		
Name:			
Company or Sponsor Name:	Phone:		
Address:	Email:		
Type of Sponsorship:	Amount Enclosed:		

Make checks payable to <u>ASCE/YMF</u>. Please complete and return this entry form by September 30, 2016 to Nicolai Oliden, Ethos Engineering, noliden@ethosengineers.com, 9180 S Kyrene Rd #104, Tempe, AZ 85284

# AzSCE Phoenix Branch YMF Player/Spectator Sign-Up Form

\$50/Player or \$30/Spectator (Non-Player). Adult Family Members Are Welcome. Cost Includes lunch, drink tickets, and tournament entry (players only).

Name (P-Player, S-Spectator)	Company	Email Address
1		
2		
3		
4		
Contact Name:	Players @ \$50.00	=
Phone:	Non Players @ \$30.00	=
Email:	Total =	

Registration can also be completed online via our Constant Contact page. Registration and payment may be made online with a credit card, or checks may be mailed to Nicolai Oliden, see contact info above. **REGISTER HERE** 

THANK YOU FOR YOUR SUPPORT AND PARTICIPATION IN OUR ANNUAL FUNDRAISER

# **FUNDRAISER FORMS**

# Player/Spectator Sign-Up Form Continued

\$50/Player or \$30/Spectator (Non-Player). Adult Family Members Are Welcome. Cost Includes lunch, drink tickets, and tournament entry (players only).

For Tournament and Board Sponsors, please include list attendees below

C:

1.1

AzSCE/YMF Fundraiser - Sig		
Name (P-Player, S-Spectator)	Company	Email Address
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

### **Driverless Cars**

### Maria Angelica Deeb, PE, MS, MEP, MPA

# Factor that may be a game changer and must be addressed now: Self-driving Cars and Autonomous-driving vehicles deployment

This paper summarizes the forecast made by others on when automated and self-driving cars are going to be available, and when will they be common on the roads. Based on current forecasts, it is concluded that accommodations to construction and operation of roads and cities will not have to be done at this time, however this is the time to develop strategies to enhance positive outcomes and mitigate negative impacts the automated and self-driving cars may pose. Now is the time to think of the implications, impacts, benefits and costs, and the potential strategic physical and policy options. Autonomous vehicles and self-driving cars are going to be part of the road users' transportation professionals are going to have to deal with. Now is the time to plan for accommodations that may need to be implemented to the road catering to users that will not have these autonomous vehicle vehicles but will conflict and interact with those that do. Research suggests that autonomous vehicles will probably increase total vehicle travel unless implemented with offsetting policies such as efficient road and parking pricing. Another critical issue is the degree of potential benefits that can be achieved when only a portion of vehicle travel is autonomous. A key public policy issue is the determination of the degree that this technology may harm people who do not use such vehicles. For now, transportation professionals must get involved in making sure that autonomous vehicles do not create negative impacts to roadway users using or not using self-driving technology. Public Policy makers must plan ahead on how to accommodate self-driving cars. Encouragement from transportation and city government professional is needed, and they must look at ways to create public policy measures that encourage benefits to the cities when self-driving cars are introduced to the market. Benefits can vary, but are not limited to reduction in the need for parking, encouragement of intermodal trips, and expansion of mobility by providing lower-cost travel options. Public policy can encourage the development of new mobility options that are obtained through self-driving cars.

To read more, please visit <u>http://mariaacafe.freeblog.site/</u>

### **ASCE** October Luncheon

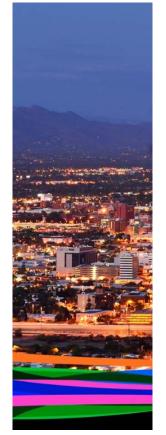
Wednesday, October 12th, 2016 11:30 - Noon: Registration & Buffet Lunch Noon: Announcements 12:10 pm: Featured Speaker Presentation 12:55 pm: Scholarship Raffle Drawing Where: Hotel Tucson City Center, 475 N Granada Ave Featured Speaker: Fletcher McCusker, CEO Sinfonia HealthCare Fletcher McCusker will give a general overview of his impacts on the

Fletcher McCusker will give a general overview of his impacts on the downtown revitalization and his responsibilities on the Rio Nuevo board.





### Save the Date and Register Today Thursday, October 13, 2016



### Technology and Transportation Summit 2016

Pima Association of Governments announces the inaugural Technology and Transportation Summit (TTS). This event will host a premier collection of industry and academic leaders working to create a more sustainable, efficient, functional, and "Connected" urban environment.

Join us October 13, 2016 to experience where technology and applied transportation solutions merge into plans for the future. Space is limited, so please save the date and sign up below to stay connected with this event.

**REGISTER NOW** 

Sponsorships for this event are still available. Please contact <u>Mary Carter</u> via <u>email</u> or phone at 520-495-1424 ASAP if interested.

www.tts16.com

### President's Message

#### Continued from Previous 1

The board believes that this plan will help guide this year's officers and future officers, minimizing duplicative efforts and increasing section success. The developed strategic plan for the Arizona Section is provided below, please take a look at it and let us know what you think.

#### ASCE Arizona Section Vision:

ASCE members serving as global leaders to build a better quality of life.

#### ASCE Arizona Section Mission:

The American Society of Civil Engineers, Arizona Section, will lead by advancing the profession through membership, involvement, public outreach, promoting sound public policy, through awareness and understanding, with reporting and a transfer of knowledge.

#### Goals:

- Encourage industry participation in ASCE membership
- Advance involvement and participation in Arizona
- Promote the benefits of being an ASCE member
- Facilitate annual outreach to public officials educating public policy makers on infrastructure value
- Increase collaboration between industry practitioners serving as technical and ethical leaders

#### Initiatives:

- 1. Increase communication of ASCE membership benefits and opportunities
- 2. Encourage the section board and its members to foster relationships with existing members
- 3. Garner community interest in civil engineering by ensuring information and location for all the ASCE National landmarks and civil engineering historic located within the state are provided on the Arizona Section website
- 4. Increase intra-section collaboration to provide more valuable direction and resources for the Arizona Section members

One last thing; I want to extend two huge THANK YOU's.

First I need to thank Mr. Brent Borchers as he has completed his term on the ASCE Arizona Section Board. Brent has been a wonderful leader for the section providing valuable information on past section activities and decisions as well as the ins and outs of the section and region level activities. Don't lament the absence of Brent from the section for too long though, as he was elected to the ASCE Region 8 Board of Governors where he will be continuing his service to ASCE.

Second I need to thank Marlo Abramowitz for her invaluable time and tremendous work organizing the Arizona Section Conference, which she will be stepping down from. If you thought the section conference was good the past two years, you can thank Marlo because she was integral in ensuring the conference was valuable to the members and a success for the section.