STRUCTURAL ENGINEER

# Fiber Reinforced Concrete Values and Applications

This presentation is brought to you by Forta Corporation, the original manufacturer of synthetic fiber reinforcement for concrete in North America. There will be a brief history of the first generation micro fiber reinforcement introduced in 1978 and a more in depth review of second-generation macro synthetic fiber introduced by Forta Corporation in 2000.

Macro synthetic fiber has been included in the Steel Deck Institute standards for temperature and shrinkage since 2003. American Concrete Institute accepted macro synthetic fiber reinforced concrete (FRC) as equal to steel for temperature and shrinkage crack control in 2010.

We will explore the similar and different reinforcement values of bi-lineal continuous reinforcement and three-dimensional FRC. This review of the five typical FRC applications will include examples of existing pavement, slab on ground, shotcrete, overlays and metal deck projects. There will also be a review of enhanced crack control and improved ductility, impact and shatter resistance of FRC.

Forta corporation hopes to generate your interest in learning more about the use of FRC in future projects. We look forward to informing you about this technology, and welcome any follow-up questions you may have for us.

WHEN:	WHERE:	COST:	RSVP:	UPCOMING MEETINGS
September 17,, 2015 6:00 pm Social	HESS Engineering and Scientific Society	Members: \$25.00 Non-members:	<u>Click Here</u> to register online. The deadline is	October 25, 2015 TBD
6:30 pm Dinner 7:00 pm Program	5430 Westheimer Houston, TX 77056 713.627.2283	\$35.00 Student members & Non dinner guests	12:00pm, the Tuesday before	November 19,2015 TBD

## **CLICK HERE** TO REGISTER FOR THIS MEETING

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### Presenter's Biography **Mike Smith**

Mike Smith is Forta Corporation's regional manager for Texas, Oklahoma, Rocky Mountains, Pacific Northwest and the Dakotas.

Mike has worked in the fiber reinforced concrete (FRC) business for over 20 yrs. He has been involved in millions of square feet of steel, fiberglass and polypropylene FRC pavement, slab on ground, shotcrete, overlays and metal decks. Some of the projects Mike was involved in include Lockheed Martin, Caterpillar, FedEx, Swift Trucking, Prologis, Intermountain Health Care, Army Corps of Engineers, Bureau of Reclamation, school districts and universities as well as multiple municipalities including federal & state highway departments.

Mike started his concrete career in ready mix sales and technical services for Monroc, inc. (currently DBA Idaho Concrete and Eagle Precast) in Boise Idaho. He then served as a four state territory manager for Fibermesh followed by a six state territory manager for Saint Gobain. Now Mike has found his home with Forta Corporation, the original synthetic FRC manufacturer in North American.

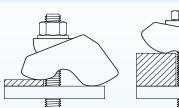
Most importantly Mike provides education and tools for the construction industry regarding FRC values, function, applications and proper use. He does this through mix design support, on site services, reinforcement calculations and load based designs following ACI guidelines and ASTM testing.

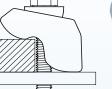
Mike lives near Denver Colorado with his spouse, Debi. He has four children and 3 adorable grandchildren.

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### President's Corner Al Bustamante, PE

Summer is over. Well, not quite yet for us in Houston. However, the academic summer break is over, school is back, and yes – traffic is terrible (it always is, but during the summer it slows down a bit and now it's back to the typical gridlock).

On a more positive note, our chapter is in the process of experimenting with having our monthly meetings during the lunch hour as opposed to the typical evening hours. We will continue to have our regular meeting at HESS for now, until we have some data to better determine if a change of venue and time is required.

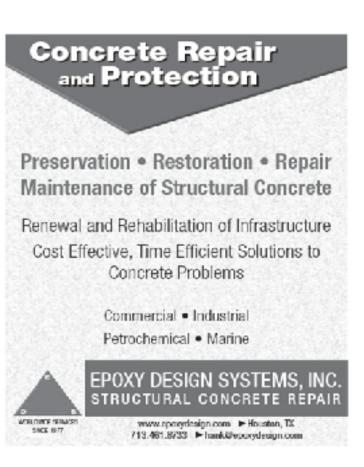
It is hard for many people to change. This is a word that means getting out of something you are accustomed to (in other words your comfort zone).

I see change as an opportunity, an opportunity to possibly make a positive impact and evolve. We are confronted with "problems" in life all the time and we can choose two approaches:

Option 1. Let the problem control our lives

or

Option 2: See the problem as an opportunity to learn/grow. I always choose the second option.





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### President's Corner (Continued) Al Bustamante, PE

One issue that our chapter has faced this year is low attendance to our monthly meetings. This is a great opportunity to evaluate how we can get more attendance. I'm excited to announce that we have over 35 RSVPs to our first lunch seminar as of September 11, 2015 (the lunch seminar is on September 15).

We will do another lunch seminar this year and evaluate what kind of response we receive. Stay tuned for additional information on our lunch seminars, which by the way are FREE (free meal and PhDs – can't beat that deal). We are also working on getting a website for our chapter. There is still lot of work to do on this, so we will take all the help we can get from our members.

If you have any input or have any questions about our chapter, please don't hesitate to contact me at:

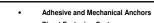


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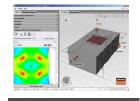
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### **Texas A&M Student Chapter President** Ashfaq Syed

Howdy!

I am Ashfag Syed and I am serving as the President for the SEAoT Student Chapter for the fall term. I served the student chapter as the Vice President in spring. Our new Vice President is Natasha Boger, and Amber Campa is still serving as our treasurer. We have some exciting meetings lined up on campus for the fall semester and we are looking forward to participating in the Houston/Gulf Coast chapter meetings as well.

The Texas A&M University SEAoT Student Chapter had the first Fall meeting on Sept 10th. The speakers were Mr. John Hand and Mr. John Powell from Arup, Houston.



Mr. Powell started his presentation with an overview on Arup's history, market segments and career opportunities. He then discussed some of the projects Arup has done in the energy industry including some offshore structures.





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### SEAoT Houston Gulf Coast Chapter Newsletter

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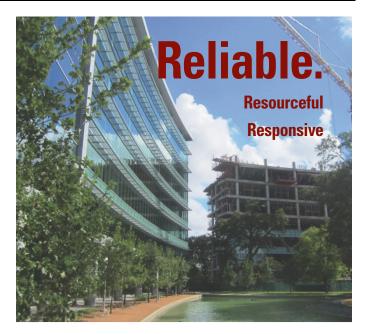
### Texas A&M Student Chapter President (continued) Ashfaq Syed

Mr. Hand gave a presentation on Arup's building department and spoke about his work on sky bridges over tall buildings. The next general meeting at Texas A&M University will be on Sept 24th. We are hosting Mr. William F. Williams from Texas Transportation Institute.



The SEAoT Student Chapter will also be visiting Nucor Building Systems located in Terrel, TX on a field trip as a part of STEEL Day celebrations on Sept 25th. We hope that this will be a great experience for our members to learn and experience the steel manufacturing and fabrication industry.

If your organization is looking to hire structural engineering graduates or interns, please send me an email at <u>president@seaot.</u> <u>tamu.edu</u>. Our student organization consists of around 40 aspiring structural engineering students looking for opportunities to gain industry experience and to find the right job.







Visit us at: www.tweinc.com

### Young Engineers Group Chris Hill

Last month more than 20 young members and potential members of the SEAoT Chapter of Houston attended an Astros game in the Coke Corner of Minute Maid Field. Over 8 different originations where represented.

This event was a major success and allowed for a diverse range of networking and socializing opportunities. We are hopeful that this event will spring board membership within the younger professionals in our industry. To capitalize on the success of this event happy hours are being planned to get this group and others together in the near future. The young members of SEAoT would like to thank the membership as a whole for supporting this event.



### STRUCTURAL ENGINEERS ASSOCIATION OF TEXAS

# **ANNUAL STATE CONFERENCE**



### 2015 Officers and Directors

The Houston/Gulf Coast Chapter is hosting SEAoT's annual State Conference this year on October 22nd and 23nd at the Hilton North Houston Hotel. This premier technical conference is a "must attend" for professional Structural Engineers practicing in Texas.

The Conference provides an unparalleled opportunity to learn about new technology, materials and applications from an impressive line up of speakers, meet with vendors and network with other professionals. This year's attendees can expect to earn eleven Professional Development Hours of continued education credit during the Conference.

Early registration runs through September 26 during which the price of attendance is only \$225 for SEAoT members. Visit the SEAoT website for registration and program information.

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State Director (15-16)	Bob Lanser	281.543.0305	boblanser@aol.com		
Alternate State Director	Joe Kallaby	281.584.9300	osi-jk@swbell.net		
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