

OCTOBER PROGRAM

“BIM (Building Information Modeling) Cost Estimating and Potential Risks and Liabilities

Associated with BIM”

Sponsored by the Engineers' Club of St. Louis

Guest Speakers:

Tom Brooks-Piling, AIA

and

Robert Staed, JD

Date: Tuesday, October 20, 2009

Location: Engineers' Club of St. Louis
4359 Lindell Blvd.
St. Louis, MO 63108

Time: Registration at 7:15 am
Breakfast from 7:30 - 8:30 am
Program: 8:00 - 10:00 am

Cost: Engineers' Club Member - \$40.00 per person, Non - Member - \$60.00 per person; Make Check payable to the Engineering Foundation of St. Louis, a 501 C-3 organization.

Two (2) PDH's will be awarded for attending this seminar.

RSVP: Please RSVP by Friday, October 16, 2009 to Kurt Krispin at the Engineers' Club. Phone: (314)533-9333 or Email: kurt.krispin@engineersclub.net
No-shows will be billed if reservation is not cancelled by Noon, Friday, October 16, 2009. Substitutions accepted.

Tom Brooks-Piling is the Architecture Practice Leader for Parsons Brinckerhoff in St. Louis. His Presentation will utilize a case study. This workshop will demonstrate BIM cost estimating techniques used for conceptual design studies, schematic design, design development, construction documents and on to construction. The case study is a 25,000 square foot science lab addition to a High School in St. Louis County.

Bob Staed is a Partner and Senior Vice President of Ames & Gough, St. Louis. He is former Chief Legal and Risk Officer for HOK Group, Inc. and HOK Sport. Bob will identify the benefits of BIM, discuss potential risks and liabilities associated with BIM, discuss ways to establish policies and procedures for prudent practice with BIM and quantify the value, the costs, the risks, and the rewards associated with BIM.

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“Affecting the Future”



October is one of my favorite months. Ever since I was a kid, it always has been. I look forward to what the month brings; cooler weather, the changing leaves, and anticipation of the upcoming holiday seasons, which mean so much to me. So it is the excitement of the near future that I focus on this month.

At last month's MSPE program, Sonny Trimble spoke of his task of leading the group of engineers, scientists, archeologists and others who gathered evidence of mass killings by the Ba'ath Party in Iraq. Through the team's work, the government of Iraq was able to convict Saddam Hussein and his regime. I hope many of you had the opportunity to hear Dr. Trimble's presentation, because it was fascinating and very powerful. Certainly, Dr. Trimble affected future history books by his work. Will you?

MSPE actively tries to affect the future of engineering through activities and involvement opportunities for students of every age. Last year, we sponsored the St. Clair Edgar Murray team as they competed in the Future Cities competition, and we sponsor them again this year. We are also actively seeking a role in judging the Greater St. Louis Science Fair, and trying to leverage some of our members' affiliation with Project lead the Way for other opportunities to help. Year round, our members promote engineering to young people with very hands-on presentations of the Discover E Bridge program. We also sponsor the annual MATHCOUNTS competition among junior high students that typically involve approximately 120 students participating. We will continue the coordination of the annual celebration at the Science Center during Engineer's Week. This celebration of engineering and technology displays is enjoyed by several thousand people each February, many of which are children. And finally, we will continue to award scholarships to local high school students with a desire to pursue careers in engineering. The future of engineering lies with these students who show a propensity for math and the sciences. If we can engage them early and peak their interest, the future of our profession will be secure.

There is so much more to do, but we need your help, involvement, and interest. Please do not say, "I am too old." Please do not say, "I am too young."

- Tiger Woods was 3 years old when he shot 48 for 9 holes
- Mozart was 11 years old when he wrote his first symphony.
- Ralph Waldo Emerson was 14 when he enrolled at Harvard.
- Paul McCartney was 15 when John Lennon invited him to join a band.
- Bill Gates was 19 when he co-founded Microsoft.
- Joe DiMaggio was 26 when he hit safely in 56 consecutive games.
- William Shakespeare was 31 when he wrote Romeo and Juliet.
- Thomas Jefferson was 33 when he wrote the Declaration of Independence.
- Mother Teresa was 38 when she founded the Missionaries of Charity.
- Henry Ford was 50 when he started the first manufacturing assembly line.
- Winston Churchill was 65 when he became Britain's Prime Minister.
- Michelangelo was 72 when he designed the dome for St. Peter's Basilica.
- Benjamin Franklin was 79 when he invented bifocals.
- Dimitron Yordanidis was 98 when he ran a marathon in 7 hours and 33 minutes.

Point being, whether you're six or sixty, the rest of your life is in front of you. You cannot change one moment of your past, but you can **affect the future**. At any age you can lend your time and experience to change the course of a young person's life, their career, and possibly our world as a result. Now is your time to get involved, to make a difference with MSPE, and affect the future of *our* profession.

Jason S. Dohrmann, P.E.
President, MSPE St. Louis Chapter

PRESIDENT'S MESSAGE

<p><u>St. Louis Engineer</u> Newsletter Editor/Advertising John F. Gagliardo, E.I.T., (314)534-1030 jgagliardo@davidmason.com Web Pages www.nspe.org, www.mspe.org</p>	<p><u>Board of Directors</u> President Jason Dohrmann, P.E., (636)519-0990 Vice Pres. Matt Tinker, E.I.T., (314)682-1598 Treasurer Bob Becnel, P.E., (314)232-1914 Secretary Jennifer Kuchinski, P.E., (314)421-1476</p>	<p><u>State Directors</u> Ed Austin, P.E. L. Scott Becker, P.E. Josephine Emerick, P.E. Breck Washam, P.E.</p>	<p><u>Chapter Directors</u> Allan Erdman, P.E. John Gagliardo, E.I.T. Christine Grunbaum, P.E. G. Scott Nall, P.E. Gerald Williams, P.E.</p>
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Sandra H. Magnus (Ph.D.)

October 13th, 5:30 pm

Engineers' Club, 4359 Lindell Blvd.

Cost: \$22

Joint meeting of: AIChE / AIAA / ASME / SWE / WWW



Time: 5:00 - 6:00 Networking / Cash Bar 6:00 - 7:30 Dinner 7:30 Speaker

Menu: Chicken Florentine, salad, cheese gratin potatoes, vegetable, rolls, and dessert. All dinners include unlimited tea and coffee. A cash bar is available.

RSVP: Please RSVP with your sponsoring organization or you can contact Sarah Bock at 314-654-1852 or Sarah.Bock@cowidien.com by Friday, October 7th.

St. Louis Professional Societies AIChE, ASME, AIAA, SWE, and WWW will host a cooperative dinner meeting featuring Dr. Sandra Magnus. Dr. Magnus was a recent NASA mission specialist aboard Space Shuttle missions, STS 112, to the International Space Station. She will share her experiences during her time spent living on the Space Station. Dr. Magnus is from the St. Louis area, Belleville, IL. She is also a former Mc Donnell Douglas engineer.

NASA EXPERIENCE:

Selected by NASA in April 1996, Dr. Magnus reported to the Johnson Space Center in August 1996. She completed two years of training and evaluation and is qualified for flight assignment as a mission specialist. From January 1997 through May 1998 Dr. Magnus worked in the Astronaut Office Payloads/Habitability Branch. Her duties involved working with ESA, NASDA and Brazil on science freezers, glove boxes and other facility type payloads. In May 1998, Dr. Magnus was assigned as a "Russian Crusader" which involved traveling to Russia in support of hardware testing and operational products development. In August 2000, she served as a CAPCOM for the International Space Station. In August 2001, she was assigned to STS-112. In October 2002, Dr. Magnus flew aboard STS-112. In completing her first space flight she logged a total of 10 days, 19 hours, and 58 minutes in space. Following STS-112, Dr. Magnus was assigned to work with the Canadian Space Agency to prepare the Special Dexterous Manipulator robot for installation on the ISS. She was also involved in return to flight activities. In July 2005, Dr. Magnus was assigned to the ISS Expedition Corps and began training for a future space station long duration mission. She flew to the space station with the crew of STS-126, launching on November 14, and arriving at the station on November 16, 2008. On her second flight, Dr. Magnus spent 4.5 months aboard the space station and returned to earth with the crew of STS-119 on March 28, 2009.

Space Station assembly mission during which the crew conducted joint operations with the Expedition 5 by delivering and installing the S-One Truss (the third piece of the station's 11-piece Integrated Truss Structure). Dr. Magnus operated the space station's robotic arm during the three spacewalks required to outfit and activate the new component. The crew also transferred cargo between the two vehicles and used the shuttle's thruster jets during two maneuvers to raise the station's orbit. STS-112 was the first shuttle mission to use a camera on the External Tank, providing a live view of the launch to flight controllers and NASA TV viewers. The mission was accomplished in 170 orbits, traveling 4.5 million miles in 10 days, 19 hours, and 58 minutes.

SPACE FLIGHT EXPERIENCE: STS-112 Atlantis (October 7-18, 2002) launched from and returned to land at the Kennedy Space Center, Florida. STS-112 was an International

STS-126 launched on November 14, 2009 and arrived at the station two days later to start Dr. Magnus' participation in Expedition 18 as the Flight Engineer 2 and Science Officer. The shuttle delivered all of the additional components necessary to expand the International Space Station to support a six person crew. During the course of Expedition 18 Dr. Magnus and Capt. Mike Fincke worked to install this new equipment - a water regeneration system, two new crew quarters, an advanced resistive exercise device and a second toilet. In addition several new payload racks were installed and activated. Overall the mission completed the upgrade required to begin six person crew operations in May of 2009, supported two Orlan based spacewalks and completed twice the amount of science originally planned for the increment. Dr. Magnus returned home on STS-119, which, while there, delivered and installed the final solar array to the station. STS-119 landed on March 28, 2009, bringing Dr. Magnus safely back to Earth after a stay of 4.5 months and 50,304,000 miles.

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CALL FOR NOMINATIONS SOUGHT FOR AWARDS

Please consider nominating a member or company for one or more of the St. Louis Chapter's Awards for the 2009-2010 year. Awarding includes Outstanding Engineer in a Practice Division, Private Practice Professional Development, Quality Based Selection (QBS), Engineer of the Year and the Young Engineer of the Year. The awards will be given at the annual Engineers Week Awards Banquet (in February). Deadline for submitting nominees and applications is **Friday, November 27, 2009**. Nomination may include resume, biographical data or formal application at the MSPE website. Direct questions to the specific Committee Chair listed below, or general questions to Engineering Practices Department Chair, Bob Becnel, at bob@becnel.com or 314-232-1914.

List of Awards

Engineer of the Year & Outstanding Engineer in PEI, PEPP, PEG, PEE, PEC

- PE in Missouri
- Membership in MSPE/NSPE *is not* required

Young Engineer of the Year

- Age 34 or younger as of January 1, 2010
- Membership in MSPE/NSPE *is* required

Qualifications-Based Selection (QBS)

Private Practice Professional Development (PPPD)

Award descriptions

A full list of past award winners, award descriptions and specific qualifications is available at the MSPE website in an MS Word file downloadable from http://www.mspe.org/chapters/Chapter9/09_Awards_guide_2009.doc.

Contacts

AWARD	COMMITTEE CHAIR	PHONE	E-MAIL
Engineer of the Year, QBS, PPPD	John Gray, P.E., RCDD	636-787-0032, ext 11	john.gray@ldpgroup.com
Outstanding Engineer in Construction (PEC)	James Swingle, E.I.	314-280-2624	jswingle@sachsco.com
Outstanding Engineer in Education (PEE)	Earl W. (Will) Hodgen, P.E.	314-569-3600	whodgen@motech.edu
Outstanding Engineer in Government (PEG)	John C McDonald, P.E.	314-589-6066	McDonaldJ@stlouiscity.com
Outstanding Engineer in Industry (PEI)	William J. (Bill) Bezdek P.E.	314-233-6824	william.j.bezdek@boeing.com
Outstanding Engineer in Private Practice (PEPP)	John Hock, P.E., PTOE	636-537-5585, ext 52	JH@engdesignsource.com
Young Engineer of the Year	Matthew Tinker E.I.	314-682-1598	mtinker@burnsmcd.com

JAPAN ROBOT NIGHT

JAPAN AMERICA SOCIETY OF ST. LOUIS IN COOPERATION WITH CENTER FOR INTERNATIONAL STUDIES

University of Missouri-St. Louis and JETRO, Chicago presents:

October 15, 2009

5:30 p.m. Registration and Reception; 6:30 – 8:00 p.m. Program

University of Missouri-St. Louis - Millennium Student Center (MSC), Century Room C

Japan has developed service robots that can play significant roles in helping its aging population. PARO (baby seal robot) interacts with people and makes them feel emotionally attached. It has an impact in three areas: psychological (such as relaxation and motivation), physiological (such as improvement in vital signs) and social effects (such as facilitating communication among patients and caregivers).

The Japan Robot Night will feature Dr. Takanori Shibata, the inventor of PARO and Senior Research Scientist at the National Institute of Advanced Industrial Science & Technology. The program includes the demonstration of PARO and a presentation by JETRO Chicago on service robots trends in Japan. The event is open to the public and is free. However, a PARKING PERMIT is required for ALL visitors to UMSL. To request your FREE permit, a campus map and make a reservation for this program, call Japan America Society of St. Louis at 314 516 -5754.

SEPTEMBER PROGRAM HIGHLIGHTS



Dr. Michael "Sonny" K. Trimble gave a very engaging program at the Engineers' Club on Tuesday, September 22nd titled: "The Iraq Mass Graves Team: Documenting Genocide, Assisting Iraq." Dr. Trimble served as the Program Director of the Mass Graves Investigation Team, Iraq, and was responsible for planning, preparing, and leading a 22 person international team that performed archaeological and forensic exhumations and analysis. The results of these scientific investigations and reports provided the Iraqi legal system with forensic evidence for the prosecution by the Iraqi High Tribunal of members of the former regime. Dr. Trimble is shown in the photo on the left.



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MARK YOUR CALENDARS

MSPE St. Louis Chapter Board Meeting Dates:

September 17th at 7:00 am - Engineers' Club, St. Louis, MO
October 15th at 7:00 am - Engineers' Club, St. Louis, MO
November 19th at 7:00 am - Engineers' Club, St. Louis, MO
December 17th at 7:00 am - Engineers' Club, St. Louis, MO
January 21st at 7:00 am - Engineers' Club, St. Louis, MO
February 18th at 7:00 am - Engineers' Club, St. Louis, MO
March 18th at 7:00 am - Engineers' Club, St. Louis, MO
April 15th at 7:00 am - Engineers' Club, St. Louis, MO
May 20th at 7:00 am - Engineers' Club, St. Louis, MO

MSPE St. Louis Chapter Program Dates:

Please note the following dates except for the September Lunch Program are tentative and subject to change. See the monthly MSPE St. Louis Chapter *St. Louis Engineer* newsletter for the most up to date program information.

Tuesday, October 13th at 5:30 - 9:00 pm - Sandra H. Magnus, PhD, NASA, Engineers' Club, St. Louis, MO

Thursday, October 15th at 5:30 - 8:00 pm - Japan Robot Night, University of Missouri - St. Louis, Millennium Student Center (MSC), Century Room C, St. Louis, MO

Tuesday, October 20th at 7:15 - 10:00 am - "BIM Cost Estimating and Potential Risks and Liabilities Associated with BIM, Engineers' Club, St. Louis, MO

Tuesday, November 17th at 12:00 pm - MSPE St. Louis Chapter Lunch Program, Speaker TBA, Engineers' Club, St. Louis, MO

December - No Program

January - MSPE St. Louis Chapter Program, MoDOT/IDOT Update, Time TBA, Engineers' Club, St. Louis, MO

February - Engineers Week - Multiple Events TBA

Tuesday, March 23rd at 12:00 pm - MSPE St. Louis Chapter Lunch Program, Speaker TBA, Engineers' Club, St. Louis, MO

Tuesday, April 27th at 12:00 pm - MSPE St. Louis Chapter Lunch Program, Speaker TBA, Engineers' Club, St. Louis, MO

Missouri Society of Professional Engineers St. Louis Chapter

The Engineers Club of St. Louis
4359 Lindell Boulevard
St. Louis, MO 63108



Address Correction Requested