Practice Periodical

From the President



I am very excited about this year! The Board is energized, we are building on a great foundation, the IAC is truly an international conference, and I am excited to be able to work with an incredibly talented group of engineering professionals such as you!

We are continuing to enhance the value we provide to our members through webinars, networking opportunities, publications, training, sponsorships, and relevant information. We are also working on several new benefits such as student scholarships, an industry track at the annual conference, and a member list serve, just to name a few. Also, as the year goes by, you should enjoy increasing functionality of the society's web page (www.asem.org). Our website hosts the relevant society information such as recorded webinars, links to the Engineering Management Journal and the conference, information on certification, and much, much more!

The IAC conference committee is already hard at work organizing exciting tours, energetic keynote speakers, and special tracks. The IAC will feature paper sessions, workshops and tutorials, a student track, the ASEM Awards Banquet, and the always-popular society social event. Training for and delivery of the AEM/PEM certification exams will bookend what promises to be a very exciting conference. I encourage you to come to the 2014 International Annual Conference to be held in Virginia Beach, Virginia, USA, this coming 15-18 October. This year's theme "Entrepreneurship Engineering".

Thank you again for your help with making ASEM the voice for the engineering management profession!

Elizabeth A. Cudney, PhD, PEM ASEM President

Don't tell people how to do things, tell them what to do and let them surprise you with their results.

~ George S. Patton

ASEM ON FACEBOOK

How do you define Engineering Management? Someone will win a 2014 ASEM membership for their tag line!

Check out the contest and other interesting items on the society's <u>Facebook page</u>. You could "friend" us too! ©

ASEM Facebook page is another great way to stay informed about the activities of the American Society for Engineering Management.

EMJ CALL FOR PAPERS

Special Issue on Healthcare Systems

Manuscripts should be submitted by May 30, 2014. More information can be found at the EMJ websitehttp://www.asem.org/asemweb-emj.html or by contacting

Dr. Beth Cudney (<u>Cudney@mst.edu</u>) or Dr. Jami Kovach (<u>jkovach2@central.uh.edu</u>)

MARK YOUR CALENDAR

The ASEM International Annual Conference will be October 15-18, 2014 in Virginia Beach.

Please visit the ASEM web site at http://www.asem.org for more information.

ASEM 2014 IAC CALL FOR PAPERS

Entrepreneurship Engineering: Harnessing Innovation

Invited Session proposal due Jan. 15, 2014
Abstract (250 words) due March 3, 2014
For Call for Papers and to submit invited session proposal or abstract, go to https://www.xcdsystem.com/asem2014/

For more information on submission and conference technical contents, please contact one of our technical chairs:

Dr. Suzanna Long, longsuz@mst.edu

Dr. Craig Downing, downing@rose-hulman.edu

Dr. Ean H. Ng, Ean. Ng@oregonstate.edu

WEBINARS

ASEM webinars are complimentary for members. To register for the webinar, please send an email with the subject line "ASEM Webinar" to asem-hq@mst.edu. Upcoming webinars include:

Economic Analysis – Part 1 (Jan 2014) Lean Systems – Part 2 (Feb 2014) Economic Analysis – Part 2 (March 2014) Lean Systems – Part 3 (April 2014)

Please visit the ASEM web site at http://www.asem.org for more information.

WHAT'S YOUR TAKE?

How well do you know the EM Body of Knowledge? Enter our ASEM EMBoK Definition contest by creating a pithy or funny definition for the term:

Management

Email your take on the definition to news@asem.org and look for the winning definition in our next issue.

Dear Auntie EM

Dear Auntie EM,

What do the initials such as AEM, PEM, PE, and PMP after some people's signature mean? Certifiably Confused

Dear Certifiably Confused,

Those letters represent professional certifications that can be earned by engineering management professionals. ASEM has two levels of professional certification, associate engineering manager (AEM) and professional engineering manager (PEM). The AEM certification is designed for technical professionals early in their careers. Certification can be obtained by some combination of college degree, passing an exam, work experience, and paying appropriate fees. The PEM is a higher certification that is based on work experience/training and passing the PEM exam. More information can be found at:

http://asem.org/asemweb-emprofessional.html

PE stands for licensed professional engineer. It also has two levels and exams are given by NCEES. The day-long exams have different specialties. Engineering Managers can choose between them, but the *industrial engineering* exam or the *general* exam tends to be the best match for EM professionals. Each state has slightly different requirements related to work experience for licensure. More information can be found at www.ncees.org

The project management institute (PMI) also has certification programs in the area of project management. You can find more information at www.pmi.org.

All of these have the benefit of helping you establish your professional expertise.

Auntie EM

Got a question about engineering management? Send it to news@asem.org and look for an answer in our next edition.

WELCOME OUR ASEM FELLOWS

Congratulations to the three new ASEM fellows who were announced at the 2013 Conference.



Ben Baliga

Bantwal "Ben" Baliga graduated in 1981 in Mechanical Engineering with a first class with distinction from

Mysore University and joined the then Daimler Benz's Indian joint venture plant and worked in Production Management. In 1991 he completed a Master's in Management Science and then immigrated to Australia where he completed a Master's in Engineering and a Ph.D. from Swinburne University of Technology.

In 2001 he moved to the US and joined St. Cloud State University as a faculty and is currently a tenured Professor. Dr. Baliga is the founding director of the Master of Engineering Management program at St. Cloud State University. He was the founding director of the program and continues to serve in that position. He served as ASEM President in 2012-2013.

Geert Letens

Geert Letens received a M.S. degree in Telecommunications Engineering from the Royal Military Academy



in Brussels, a M.S. degree in Mechatronics from KULeuven, and a M.S. degree in Total Quality Management from Limburg University Center. He holds a Ph.D. in Applied Economics from Ghent University and a Ph.D. in Social and Military Sciences from the Royal Military Academy. He has served as a change agent for the Belgian Armed Forces at various technical units and provided training and consulting services to several

Fortune Global 500 companies for more than 10 years. At present he is a Lieutenant Colonel - Military Materials Engineer of the Department of Economics, Management and Leadership at the Royal Military Academy, Belgium.

Further, he is a Research Fellow at the Vlerick Leuven Gent Management School, a visiting Research Professor at Virginia Tech and a visiting Professor at the Pontifical Catholic University of Parana. Geert is a senior Member of the Institute for Industrial Engineers, where he served as the president of the Society for Engineering and Management Systems in 2012. He was recently elected as the Secretary of ASEM.



Susan Murray

Susan Murray graduated from Texas A&M University with a BS and PhD in industrial engineering. She received her MS also in industrial

engineering from University of Texas-Arlington. Prior to moving into academia, she worked for seven years in the aerospace industry including two years at NASA's Kennedy Space Center. She is a professional engineering licensed in Texas and a PEM.

In 1994 she moved to the Engineering Management and Systems Engineering Department at Missouri University of Science and Technology (then the University of Missouri-Rolla). She is a professor at Missouri S&T and a faculty fellow of the Mary Kay O'Connor Process Safety Center at Texas A&M University. She is the author of Kaplan's *Industrial Engineering FE Review Manual*. She serves as the executive director of Epsilon Mu Eta, the Engineering Management Honor Society.

RESEARCH NOTES

Dr. Hongyan Chen (former student of Dr. Ruwen Qin) won the 2012 best EM Dissertation Award. Dr. Chen graduated from Missouri S&T in 2012. Her work was in the area of Real Options.

Real options (ROs) are a tool of risk management developed from the pricing theories and methods of financial options. The essence of ROs is the ability to take adaptive actions as the environment changes. ROs, however, are not a simple, straightforward extension of financial options to non-financial domains for various Non-financial environments reasons. different than the financial market: therefore. important assumptions (e.g., non-arbitrage) wellgrounded in the financial industry may not always be valid in non-financial industries. Moreover, ROs often exist in a variety of non-standardized, complex forms.

In her research Dr. Chen developed:

- An option game framework capable of modeling, implementing, and analyzing the incentive function of ROs
- RO models and valuation techniques that capture major characteristics of stochastic capacity investment

The significance to the EM professional is:

- This dissertation demonstrates the importance of appropriate uses of ROs in EM practice
- This dissertation is the first attempt to study the incentive function of ROs
- Engineering managers are offered a comprehensive guideline of designing RO incentives in PPPs (public private partnerships)
- Provides an insightful analysis of stochastic capacity investment

Drs. Chen and Qin's work will appear in a future edition of the *Engineering Management Journal*.

IN MEMORIAL



Dr. Merl Baker, a founding father in the field of Engineering Management, passed away in August at the age of 89. He was the first chancellor of the University of Missouri-Rolla (now Missouri University of Science and

Technology). He was instrumental in founding the first EM department in the nation. The ASEM Best Student Paper at the international annual conference is named in his honor.

Dr. Baker is survived by his wife of 66 years, Emily Wilson Baker, his son, his daughter, and two grandchildren. In lieu of flowers, contributions may be made to the <u>National</u> Parkinson Foundation.

American Society for Engineering Management

The society that speaks for the engineering management profession across the world



www.asem.org asem-hq@mst.edu

Missouri Science & Technology 223 Engineering Management Bldg. 600 W. 14th St., Rolla, MO 65409 USA (573) 341-6228

Newsletter Editors:

Dr. Susan Murray (<u>murray@mst.edu</u>)

Dr. Ean Ng (ean.ng@oregonstate.edu)