



We at ASME San Diego want to hear from you. Do you have a suggestion for a program you think ASME should address? Or how you think we can serve better? Email us at sandiego.asme@gmail.com

Chair's Message to the Membership



Last week I attended a fun talk on product design. Ten designers gave a 5 minute talk. Each one had something different to say about their work, its inspiration, and why their designs stood out.

The event was put on by the NewSchool of Architecture and Design. The talk was entitled "Innovation by Design" and was given to celebrate the launch of their new product design program. I've seen the small NSAD campus while driving downtown, but never knew much about it. The internet gave me the basics: they are accredited and have 600 students.

My favorite talk covered 'aspirational' products, like the pretty and functional surf / tide wrist watches made by Nixon in Encinitas. The electronics and their small packaging make the product, but the sleek design sold the watch. It was styled to accentuate its function as a 'surf' watch and hence make it appeal not only to those who surfed, but those who think they might take up the hobby some day. The GoPro camera was also shown - it turns out not everyone who buys one skydives off buildings, but the stylish design (and smart marketing) associate the camera with extreme sports and make the product desirable to people who do little more than go outside on occasion.

Certainly things I design could look a little better. If it's worth sweating the details to do the engineering right it's worth a little time thinking of the buyer and making the product look appealing.

Keep Reading For:

Upcoming Events:

One-day Finite Element Analysis Course, Saturday, January 18, 2014
National Engineers Week, San Diego Awards Banquet, Friday, February 28, 2014

Recent Activities Report:

Submarine Tour

Informational Items (No endorsement is expressed nor implied)

San Diego Solid Works Users Group
ASM International Event

**ASME San Diego Section Presents
A One-day Career Development Course on
Introduction to Finite Element Analysis (FEA)**

When: Saturday, Jan 18, 2014, 8:00 am to 4:00 pm (check-in at 7:30 am)
Where: Solar Turbines, 2200 Pacific Highway, San Diego, CA 92101

Instructor: James B. Powell, P.E., powell_james_b@solarturbines.com, 619-544-2481
Text: Handouts Provided
References: Schaum's Outline, Finite Element Analysis, George R. Buchanan, can be purchased from online vendors for ~\$15 (OPTIONAL, not included in course cost).
Software, Visual FEA/CBT V1.0, Wiley, can be purchased at class for \$45 (OPTIONAL, not included in course cost, for description see www.wiley.com/WileyCDA/WileyTitle/productCd-0471212075.html).

Computer: Bring own laptop, if desired.

Cost: \$80 for ASME Members; \$30 for ASME Student Members; \$120 for Others.
Lunch and refreshments included. \$20 extra if paid on day of class.

Cancellation: Full refund if canceled by San Diego Section or 7 calendar days before, 75% refund if canceled 3 calendar days before, no refund after that date.

Course Content:

- 1) Introduction to finite difference method, variational mechanics, and FEA
- 2) A little mathematics
- 3) FEA, element formulations, energy methods
- 4) Examples from dynamics and heat transfer
- 5) Homework

Education Level: The course assumes basic understanding of Strength of Materials, Materials Science, Thermodynamics, and Heat Transfer typically attained through junior/senior level engineering courses.

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**REGISTRATION FORM—INTRO TO FEA
SATURDAY, January 18, 2014**

Name _____ Phone _____
Address _____ Check One:

ASME Member _____

ASME Student Member _____

Other _____
Email _____ Amount Enclosed _____ (no cash please)

Return Form and Check (payable to ASME San Diego Section) by Jan 2, 2014 to:
James B. Powell, Solar Turbines, P O Box 928007, San Diego, CA 92192-8007

National Engineers Week—San Diego 2014 Awards Banquet

Friday, February 28, 2014, 6:00–9:30pm

The Forum at Hahn University Center

University of San Diego Campus

5998 Alcalá Park, San Diego, CA 92110

(Free parking in any student or faculty lot after 5pm)

Keynote Speaker



Dr. Todd P. Coleman received his BS degrees in electrical engineering and computer engineering from University of Michigan in 2000. He received his MS and PhD degrees in electrical engineering from Massachusetts Institute of Technology (MIT) in 2002 and 2005. During the 2005-2006 academic year, he was a postdoctoral scholar at MIT and Massachusetts General Hospital in computational neuroscience. From Fall 2006 until June 2011 he was an Assistant Professor of Electrical & Computer Engineering and Neuroscience at University of Illinois. Since July 2011 he has been an Associate Professor in the Bioengineering Department of University of California, San Diego.

His research goals include using information theory, neuroscience, machine learning, and bioelectronics to understand—and control—interacting systems with biological and computer parts. Coleman, a National Science Foundation (NSF) Graduate Research Fellowship recipient, was awarded University of Michigan College of Engineering’s Senior Class Prize and was awarded MIT EECS Department’s M. J. Levin Award for Best Masterworks Oral Thesis Presentation. In Fall 2008 he was a co-recipient of University of Illinois College of Engineering’s Grainger Award in Emerging Technologies for development of a novel, practical timing-based technology. Since Fall 2009 Coleman has served as a co-Principal Investigator on a 5-year NSF IGERT interdisciplinary training grant for graduate students, titled “Neuro-engineering: A Unified Educational Program for Systems Engineering and Neuroscience.” He was a Fellow with the University of Illinois Center for Advanced Study for 2010-2011.

Schedule:

6:00-7:00 pm: No Host Reception at The Forum
7:00 pm: Banquet at the Forum
8:00-8:30 pm: Awards Presentations
8:30-9:15 pm: Keynote Speaker

Dinner includes one drink (soda, beer, wine, or mixed drink), Salad, Vegetables, Bread, Dessert, Coffee/Iced Tea/Water, and Choice of Entrée—Chicken, or Salmon, or Vegetarian.

Cost is \$40 per person by February 6 or \$45 after.

RSVP:

Phil Young, 1328 Emerald St, San Diego, CA 92109, youngp@asme.org

Make check payable to: ASME-San Diego Section

Please include your name, phone number, email address, and entrée selection.

DISCOVER



ENGINEERS WEEK

FEBRUARY 16-22, 2014

Recent Activities:

Nov 16 Tour of Submarine (re-scheduled due to government shutdown)



There were 28 in attendance.

"Yes, it was a great tour ... The crew were extremely accommodating."

"They gave us far more of their time -- something like 2.5 hours -- than I expected. Please convey to the appropriate people in the Navy our gratitude for them going far above and beyond the call of duty."

(picture courtesy of Jamie Hogan)

The following announcements are for information only. No endorsement is expressed nor implied.



The San Diego SolidWorks User Group's (<http://www.sdswug.org>) monthly meetings provide an easy way for SolidWorks users to exchange ideas, get answers to problems, and learn more about SolidWorks and its partner applications. Monthly meetings are held on the second Wednesday of each month at 7:00pm. Everyone is welcome; there are no dues, just show up. The meetings are held at 11211 Sorrento Valley Road, Suites F & G, San Diego, 92121. Plan to arrive around 6:30pm and enjoy pizza and soft drinks courtesy of the sponsors. Mingle with the other users until the actual meeting starts.



**San Diego
Chapter**

ASM Technical Meeting at UCSD
Tuesday, January 21, 2014

Professor George Krauss

"The Jominy Test and the Effect of Austenitizing on
Hardenability and Performance of Hardened Steels"

Visit the website for news and announcements.

<http://sandiego.asmeinternational.org/portal/site/sandiego/>

Questions: e-mail <mailto:asmsandiego@gmail.com>

The announcements above are for information only. No endorsement is expressed nor implied.

University News

(Visit each student section's website for more details.)



<http://asme.sdsu.edu/>



<http://asme.ucsd.edu/>



<http://www.sandiego.edu/engineering/current/organizations/asme.php>

Membership Benefit: ASME e-Library



The ASME e-Library is now known as WorkSmart. It is still powered by Knovel and has over 100 interactive volumes available free to ASME members. The library includes general reference volumes and detailed treatises, not only in Mechanical Engineering, but also in other disciplines.

Some titles include:

- Handbook of Fire and Explosion Protection Engineering Principles
- Hydraulic Fluids
- Pressure Vessel Design Manual

To learn more, visit go.asme.org/worksmart



Monthly Executive Committee Meetings are usually held on the first Tuesdays (except summer months) from 5:30 to 6:30 pm at the Serra Mesa Branch of the City Library (9005 Aero Drive, San Diego, 92123). The meetings are open to the public and all members are invited to attend. Please contact Keith Frankie, keithfrankie@asme.org, to confirm the date if you plan to attend or if you would like to address the Executive Committee.

2013-14 CALENDAR

(Please check our website for updates and more details.)

Jan 18 (Sat.), 2014	One-day FEA Course
Feb 28 (Fri.)	National Engineers Week--San Diego, Awards Banquet
Mar 26	Judging at the 60 th Greater San Diego Science and Engineering Fair
Apr 25	San Diego Section Awards Banquet

San Diego Section 13-14 Contacts:

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Tours

Open

k-12 Program

Nip Shah
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Other positions available.

What is your interest?

Can you spare a few hours each YEAR?

ASME Constitution Article C5.1.2: The provisions of the Constitution and By Laws and Society Policies established by the Board of Governors of the Society shall govern the procedure of all units of the Society but no action or obligation of such units shall be considered an action or obligation of the Society as a whole.