

# COLLEGE OF ENGINEERING

## FACULTY/STAFF E-NEWSLETTER



SAN DIEGO STATE  
UNIVERSITY  
College of Engineering

**MARCH 2009**

### In The Spotlight.

- All Staff Meeting to be Held. On March 10th at 9:00 a.m. in the Dean's Conference room an all staff meeting will be held to keep the entire staff up-to-date on various issues affecting the College.

## SWE Hosts "Evening With Industry" Annual Event Peggy Johnson to be Key Note Speaker

The Society of Women Engineers Chapters at SDSU and USD will be hosting their annual "Evening with Industry" on Wednesday, March 4 2009 in Montezuma Hall. This event will be made up of a Career Fair, dinner and a keynote speech by San Diego State Engineering Alum and Monty Award Winner Peggy Johnson. Peggy currently serves as Executive Vice President of the Americas and India. She is responsible for global development, including working with partners to drive the adoption of 3G-Wireless Broadband in these regions. Johnson serves as a member of Qualcomm's Executive Committee and is an Electrical Engineering Alumni of San Diego State University. Tickets for faculty and students interested in attending are free of charge and can be picked up in front of the Engineering Building on Monday from 10-2PM or 3:30-6PM, Tuesday from 11:30-12:30, and 8-2PM on Wednesday or obtained by contacting SDSU SWE President Shannan Nyberg at [sweSDSUpresident@gmail.com](mailto:sweSDSUpresident@gmail.com).

Companies attending the Career Fair and sponsoring the event include BAE Systems, CIA, General Dynamics-NASSCO, Golden Eagle Insurance, Hamilton Sunstrand, Johnson Controls, L-3 Communications, Navy Recruiting District, Raytheon and Solar Turbines.

All SDSU Engineering Students and Faculty are welcome to attend.



### Tracking the Dean

3/2	Dean Hayhurst will attend the Edward Larson Lecture: From Darwin to Dawkins: 150 Years of Debating the Evolution at Montezuma Hall
3/4	Dean Hayhurst will attend the SWE "Evening with Industry" dinner and keynote lecture by SDSU Alum Peggy
3/5	Dean Hayhurst will attend the EDC Special Breakfast with the Honorable Jay Cohen
3/5	Dean Hayhurst will attend Reception to welcome Tom Karlo, KPBS General Manager, at the KPBS Building
3/6	Dean Hayhurst will give the keynote presentation at the 2009 San Diego Regional FIRST Robotics Competition at the San Diego Sports Arena
3/19	Dean Hayhurst will give the keynote presentation at the 2009 Annual meeting of ASEE Pacific Southwest Section
3/21	Dean Hayhurst will attend Explore SDSU Day and meet with SDSU Engineering Alumni and prospective students
3/22	Dean Hayhurst will attend the Engineering Dean's Institute in Boston
3/27	Dean Hayhurst will attend

### March is SDSU Month

Every year, in March, San Diego State University celebrates its rich and dynamic relationship with the San Diego community. SDSU Month offers a wonderful opportunity to recognize the critical link between the university and the greater community, as well as the innumerable achievements of the university's faculty, staff, students and alumni. The month-long celebration is a highlight of the year with its many art exhibits, academic and athletic events and special offers.

A long-time SDSU Month tradition is Explore SDSU: Open House. On **Saturday, March 21**, prospective students and community members have an opportunity to visit campus and learn all about what SDSU has to offer. This year's open house will feature information booths, free exhibits, tours, live entertainment and a Family Zone, including some of KPBS' most popular characters.

More information on SDSU Month 2009, including events, sponsors, media partners and special offers, will be available in February at [www.sdsuonth.com](http://www.sdsuonth.com)

### Pete and Beth Garcia Meet with Students

Pete and Beth Garcia had a chance to meet and have lunch with the 2008-2009 recipients of the Pete and Beth Garcia Scholarship this past month. The scholarship is available to new freshman who are the first in their family to attend college. Each recipient was chosen based upon an essay submitted stating why he or she wanted to study engineering.

During the meeting, Pete gave the young women an overview of his personal experiences in the engineering world and advice on navigating college life and the academic challenges to come.

Mr. and Mrs. Garcia also discussed potential internship and employment opportunities for the upcoming summer break.



### Qualcomm Master of Engineering Program Kicks Off

The QUALCOMM, Inc. Master of Engineering Program kicked off on February 17th, 2009 with 37 QUALCOMM employees participating. This program is a great start and potential template to what is hoped to become a larger network of SDSU/Corporate Partnerships that offer industry

### Dr. German to Co-Chair MPIF Workshop

Along with former colleague Seong Jin Park Dr. Rand German is Co-Chairing the 2009 Workshop for Scientific Issues on Medical Applications of Micro/Nano Powder Injection Molding-Molding, Sintering, Modeling, and Commercial Applications, held at the Royal Plaza Hotel in Orlando, FL. This workshop is held in conjunction

3/27 Dean Hayhurst will attend the ARCS 2009 Scientist of the Year Dinner and Program

COALCOMM employees participating. This program is a great start and potential template to what is hoped to become a larger network of SDSU/Corporate Partnerships that offer industry tailored degree programs for company employees and bring resources into the SDSU Engineering Departments supporting the programs.

Injection Molding-Molding, Sintering, Modeling, and Commercial Applications, held at the Royal Plaza Hotel in Orlando, FL. This workshop is held in conjunction with the PIM 2009 Conference and is supported by NSF and KUSCO, which supports conferences, workshops, and seminars aimed at promoting scientific collaboration between Korea and the United States.

### Research Corner—Projects Submitted & Awards Granted in February

Name	Dept.	Title of Project	FA	Status
Dr. Ed Beighley	CCEE	1. Large Scale Erosion Control Experiments Using ECTC Standards	ECTC	Submitted
		2. Flood Risk Analysis for the Continental United States using Pfafstetter Flood Cell Boundaries	FMIC	Submitted
		3. San Diego's Water Resources in 2100	TSDF	Submitted
Dr. Asfaw Beyene, Co-pi Dr. Walter Oechel	ME	Energy, Water, and Global Change as a Regional Agenda of the Americas	NSF	Submitted
Dr. Fatih Buyuksonmez, Co-pi(s) Dr. Colin Milberg, Dr. R Edward Beighley	CCEE	1. Addressing Emissions of Green House Gases from Composting Operations	TSDF	Submitted
		2. Emissions of GHGs Resulting from Green Waste Composting	SJVUAPC	Submitted
Dr. Randall German	ME	Workshop for Scientific Issues on Medical Applications of Micro/Nano Powder Injection Molding-Molding, Sintering, Modeling, and Commercial Applications	NSF	Prior
Dr. Temesgen Garoma	CCEE	1. BRIGE:Ozone/H2O2 Treatment of Bishenol A: Mathematical Modeling and Experimental Approach	NSF	Submitted
		2. Influence of Ethanol on BTEX Compounds Adsorption, Desorption, and Advective and Dispersive Transport in Soil Media	NSF	Submitted
		3. Effects of Ethanol on Adsorption and Desorption of Gasoline Components in the Subsurface	TSDF	Submitted
Dr. Samuel Kassegne, Co-pi(s) Dr. Khaled Morsi, Dr. Kee Moon	ME	1. Investigation of Long-Term Viability of DNA Wires in Carbon Electrode Based Bio-NanoElectronic through Tip-Based Modulation	NSF	Submitted
		2. Novel High-Efficiency 3-D Photovoltaic Cells Based on Carbon Electrodes	TSDF	Submitted
Dr. Samuel Kassegne	ME	Integrated Milliwatt-Level On-Chip Power Generated Using Carbon MEMS/NEMS Based PV Technology for Complex Microsystems Deployed in Extended Period Outdoor Environments	DOD	Submitted
Dr. Gordon Lee, Co-pi(s) Dr. Eric Frost, Dr. Barry Janov	ECE	Theoretical Analysis, Explanatory Studies and Technical Services	DOD/ SPAWAR	Awarded
Dr. Karen May-Newman, Co-pi(s) Andrew Szeto	ME	Senior Design Projects Developing Assistive Technology at San Diego State University	NSF	Awarded
Dr. Kee Moon, Co-pi(s) Dr. Samuel Kassegne, Dr. Khaled Morsi, Dr. Randall German	ME	MRI: Development of a Nano-scale Current-activated Tip-based Sintering (NanoCATS) Testbed for Fundamental Nano-scale Sintering Research	NSF	Submitted
Dr. Khaled Morsi, Co-pi(s) Dr. Kris Stewart, Dr. Marilee Bresciani	ME	Accessibility of Materials Laboratory Experience for Engineering Undergraduates	NSF	Awarded
Dr. Satish Sharma	ECE	Platform Independent Omni-directional Antennas	NGA	Awarded
Dr. Yusuf Ozturk	ECE	Mobile Developer Days San Diego Workshop	Nokia	Submitted
Dr. Kenneth Walsh	CCEE	1. An Integrated Framework for Creation and Assessment of Sustainable Construction Processes	ASU	Submitted
		2. Collaborative Proposal: Effective Depth of Wetting as Related to Mitigation of Collapsible and Expansive Soil Geo-Hazards	NSF	Submitted

ECTC = Erosion Control Technology Council

FMIC = Factory Mutual Insurance Company

TSDF = The San Diego Foundation

SJVUAPC = San Joaquin Valley Union Air Pollution Control District

NGA = NextGen Aeronautics

ASU = Arizona State University

Story ideas, award notifications, suggestions and comments can be sent to Carly House at [chouse@mail.sdsu.edu](mailto:chouse@mail.sdsu.edu)