



### Message from the Dean

The Engineering and Interdisciplinary Sciences (EIS) Complex construction is well-underway, with the footing excavation starting on February 29, 2016, a week ahead of schedule. The EIS Complex will house state-of-the-art research laboratories for renewable energy systems, biomedical engineering, and wireless communications.

In addition to the Zahn Innovation Platform, several interdisciplinary research centers including the Smart Health Institute, the Viromics Center, and an imaging laboratory for brain research will be housed in the new Complex.

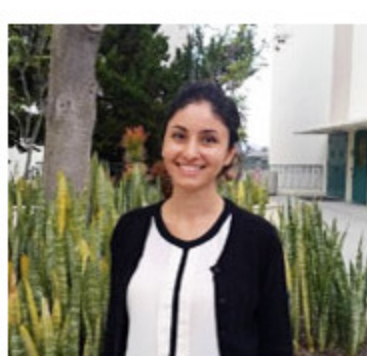


The interior will introduce project and collaborative spaces and 11,500 square feet of instructional space which includes a design studio, a fabrication shop, and several teaching laboratories.

The construction of the EIS Complex will be completed in Fall 2017. A live feed of the construction can be viewed at: <http://130.191.35.82/live.htm> and for more information on the EIS Complex, please visit <http://eis.sdsu.edu>.

Dean Monte Mehrabadi

### Faculty Highlight



Dr. Sahar Ghanipour Machiani, a recent addition to the Civil, Construction and Environmental Engineering Department is trying to make our transportation infrastructure safer. After receiving a Master's Degree in Transportation System Engineering from Sharif University of Technology in Tehran, she moved to the United States in 2010 to earn her Ph.D. in the same field from Virginia Tech. There, she began working with driving simulators to model driver behavior and better understand what's going on inside the minds of those behind the wheel. On the driver behavior side, her research has recently centered on how drivers respond to yellow traffic signals. Dr. Machiani also is beginning to look into how new driver-assistance technologies like collision and lane-shift warnings are influencing driver behavior.

### Faculty Accolades

**Dr. Suchi Ayala**, Associate Dean of the College of Health and Human Service, is the PI on a \$10M endowment from the National Health Institute (NIH) on Minority Health and Health Disparities. **Drs. Morteza Monte Mehrabadi** (Dean of the College of Engineering) and **Kee Moon** (Professor of Mechanical Engineering), were co-PI's along with Drs. Marilyn Newhoff, Stanley Maloy, and Jose Castillo.

**Dr. Chris Mi**, Professor and Chair of Electrical & Computer Engineering, received \$104,359 from the University of Michigan Uncertainty Management and Proactive Maintenance for Lithium Ion Batteries in Electrified Vehicles. As well, \$200,000 from the Nanjin Golden Dragon Bus Manufacturing Company Ltd Joint Laboratory Development and Training.

**Dr. Asfaw Beyene**, Professor of Mechanical Engineering, received \$110,000 from the US Department of Energy Industrial Assessment Center.

**Drs. Kee Moon** (Professor of Mechanical Engineering) and **Yusuf Ozturk** (Professor of Electrical & Computer Engineering), received \$135,078 from the ETRI Electronic and Telecommunications Research Institute Sustainable Power Module for Implantable Medical Devices based on Wireless Power Transfer.

**Dr. Fletcher Miller**, Professor of Mechanical Engineering, was a co-author of "Fire in Microgravity" article (pgs. 44-45), which was featured on the cover of the January-February 2016, American Scientist magazine.

**Dr. Eugene Olevsky**, Professor of Mechanical Engineering, received \$125,000 from the US Department of Energy Fundamentals of Spark-Plasma Sintering: Rapid and Ultra-Rapid Materials Consolidation and Joining.

**Dr. George Yousef**, Assistant Professor of Mechanical Engineering, was selected as one of the 2016 Society of Automotive Engineers (SAE) Ralph R. Teator Award winners. This award is given by SAE to a select few outstanding early career engineering educators.

### Student Accolades



**Associated Engineering Student Council (AESC)**, coordinated and sponsored the First Annual Dean's Ping Pong Tournament, on April 13, 2016, in the Conrad Prebys Aztec Student Union Center, Montezuma Hall. The Tournament was a huge success bringing together the College of Engineering faculty, staff and students, for food, socializing and a friendly game of ping pong.



**American Society of Civil Engineers (ASCE)**, SDSU Engineering Chapter, participated in the ASCE Younger Member Forum sponsored Engineering Design Day at the Chula Vista Mall on February 27, 2016. The event featured a variety of booths with hands-on projects geared towards teaching young students basic engineering concepts such as buoyancy, structural stability and simple calculations.



**ASCE Pacific Southwest (PSW) Conference 2016**, SDSU Civil, Construction and Environmental Engineering (CCEE) students competed in the 2016 PSW Conference, hosted by CSU Long Beach, on March 31-April 2, 2016. The students were accompanied by Dr. Janusz Supernak, Interim Chair of CCEE.

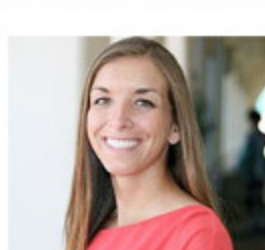
Eighteen other universities attended the conference. Among them: ASU, Cal Poly Pomona, Cal Poly SLO, UCLA, UCSD, UH

Manoa, UNLV, USC, and University of Arizona.

SDSU Women's Concrete Canoe Team placed first in the endurance race. The Concrete Bowling Team and the Tug-of-War Team took first place. The co-ed sprint race and volleyball teams placed second. The Men's Concrete Canoe Team ranked third in the endurance race. The Women's Sprint Race, Transportation Design, and the Impromptu Design teams ranked third.

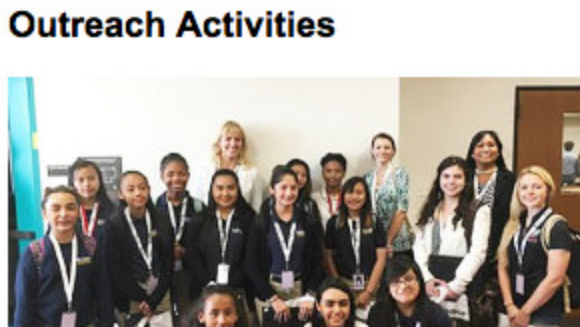


**Diletta Giuntini**, PhD Student in the SDSU/UCSD Joint Doctoral Program in Engineering Sciences, was awarded with an Inamori Fellowship from the Office of Graduate and Research Affairs. Dr. Kazuo Inamori, founder of Kyocera Corporation, has contributed funds to SDSU that provide stipends to degree-seeking graduate students. Ms. Giuntini was also the recipient of the ASM San Diego Chapter 2016 Abe Hurlich Scholarship in recognition of her exemplary achievements in scholarship, leadership and service to the community.



**Anachristina Morino**, Senior, Aerospace Engineering, was one of ten recipients for the 2016 Quest for the Best Award. The "Quest for the Best" awards seek to recognize outstanding student leaders who have typified and promoted the mission of the university. This Vice Presidential Student Service award is given each April to the "best of the best" at SDSU – those students who excel academically and through community and campus involvement. This award recognizes Ms. Morino for her excellence in academics, campus involvement, and community service.

### Outreach Activities

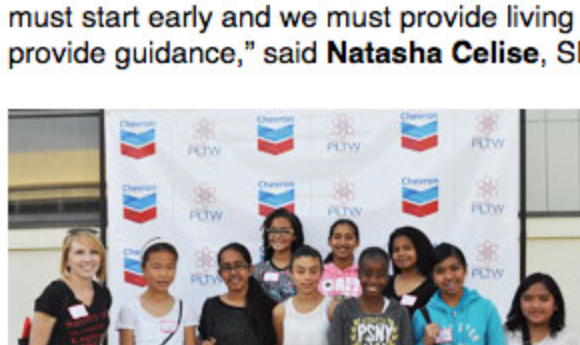


**Mathematics, Engineering, Science Achievement Program (MESA)**  
On Thursday, February 25, 2016, the SDSU MESA Program hosted an event to encourage young women to explore the science, technology, engineering and mathematics fields (STEM). Thirty middle school girls from the MESA Schools Program at O'Farrell Charter School spent the day at SDSU. The day's events included a look at several student engineering

projects led by MESA undergraduates:

- Rocket Project: led by **Jennifer Martin Velazquez**, Aerospace Engineering major
- SDSU Formula SAE Car: led by **Natalie Robertson**, Mechanical Engineering major
- Center for Sensorimotor Neural Engineering – Prosthetic Skateboard Project: led by **Alberto Perez Jr.**, Mechanical Engineering major and **Sonia Fisher**, Computer Engineering major.

"If we are to bridge the gap and increase the number of females entering STEM fields, we must start early and we must provide living examples that can share their experience and provide guidance," said **Natasha Celise**, SDSU MESA Program Director.



### Project Lead the Way (PLTW)

On February 27, 2016, San Diego State University's Society of Women Engineers chapter and Project Lead The Way hosted Project Lead The Way Girl's Day to encourage young girls to be confident in the science, technology, engineering and mathematics (STEM) arena. "An event like this is important to SDSU because it demonstrates our support of increasing diversity in STEM," said Michelle Bunn, Project Lead The Way Affiliate Director in

the College of Engineering. "It also allows students and their parents the opportunity to learn about the SDSU's Colleges of Engineering and Sciences programs and scholarships."

The event included workshops where students completed hands-on STEM-related experiments run by female engineers and scientists. Parents also attended workshops that provided information about other local STEM events and activities for their daughters.

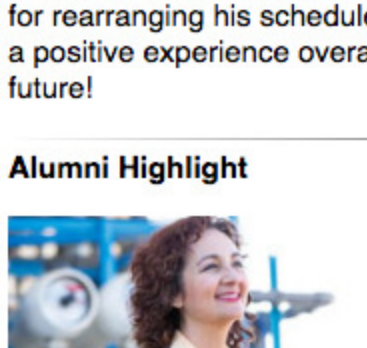


### Troops to Engineers

On Friday, March 11, 2016, Troops to Engineers hosted a small group of Marines from Wounded Warrior Battalion-West. Working with the Society of American Military Engineers (SAME) student chapter leaders, Kyle Wallace (President) and John Michael Hernandez (Vice President), the Marines were introduced to the Engineering program at SDSU. The Marines had the opportunity to attend an ME 240 class lecture, tour the Machine Shop and Structural Engineering and Powder

Technology labs, as well as speaking with members of SAME and two of the SDSU Engineering student clubs: Mechatronics and Baja SAE. Troops to Engineers and SAME extend a special thanks to Dr. Khaled Morsi, Professor, Mechanical Engineering Department, for rearranging his schedule and allowing the Marines to sit in on his lecture. The Marines had a positive experience overall and we hope to see them become Aztec engineers in the near future!

### Alumni Highlight



Halla Razak, '86, sits in the Director's chair at the City of San Diego's Department of Public Utilities, managing a 1,600 employees and a vast water and waste water infrastructure. In November 2015, the San Diego City Council approved plans to reduce its 85-percent dependence on imported water by constructing purification facilities for turning wastewater into drinking water. The decision makes San Diego the largest city in the nation to launch potable water reuse with reservoir augmentation. Christened Pure Water San Diego, the project is expected to provide more than a third of the City's potable water by 2035.

Razak continues to elicit public support for the project, but her more immediate concern is the sharply reduced statewide water consumption objective set by Governor Jerry Brown in response to the California drought. To comply with its 16-percent reduction target, the City of San Diego has imposed mandatory watering restrictions and broadened its Waste No Water campaign encouraging conservation among homeowners and businesses.

### Upcoming Events

**Engineering Advisory Board Meeting**  
Wednesday, May 4, 2016, 8:30am-1:15pm  
Templo Mayor Conference Room, Conrad Prebys Aztec Student Union, SDSU

**Engineering Design Day**  
Wednesday, May 4, 2016, 1:30pm-3:30pm  
Montezuma Hall, Conrad Prebys Aztec Student Union, SDSU

**Engineering Senior Banquet**  
Thursday, May 5, 2016, 5:30pm-7:30pm  
Fowler Family Ballroom, Parma Payne Goodall Alumni Center, SDSU

**Engineering Commencement**  
Saturday, May 14, 2016, 5:30pm-7:30pm  
Viejas Arena, SDSU