

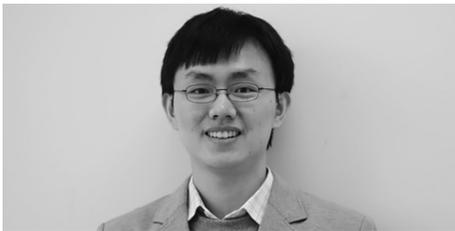
New product launch from Bose tied to UC San Diego startup Hush

Audio equipment giant Bose recently launched noise-masking sleepbuds, and there's a Jacobs School of Engineering connection. In 2016 Bose acquired Hush, a noise-cancelling smart earplug startup launched by undergraduates at the UC San Diego Jacobs School of Engineering. The students conceptualized the ear plugs in the Product Design and Entrepreneurship class taught by mechanical engineering professor Nate Delson. They founded Hush to pursue the idea after the course ended. After the acquisition, Hush's product was integrated into Bose's noise-masking sleepbud line.



Learn more: bit.ly/Sleepbuds

NanoEngineer named an MIT Tech Review top innovator under 35



Sheng Xu, a professor of nanoengineering at UC San Diego, was named one of this year's top innovators under 35 by MIT Technology Review. Xu is being recognized for inventing a clever way to make off-the-shelf electronics stretchable. The goal of his work is to engineer soft, flexible, stretchable electronics that can be comfortably worn on the human body and still perform just as well as today's hard electronic devices. What sets Xu's approach apart is that it makes it possible to merge off-the-shelf rigid electronic components—amps, IC chips, multiplexers, radios, sensors, transducers, etc.—with soft, elastic materials.

Learn more: bit.ly/35Innovators

Rocket engine test stand available for academic use

Undergraduate students in the UC San Diego chapter of Students for the Exploration and Development of Space (SEDS) designed and built a static rocket engine test stand with support from NASA, and recently celebrated the first successful hotfire test of the system in the Mojave Desert. Colossus, as the test stand is called, makes space research more accessible and affordable for academic groups, allowing them to test their rocket engine designs in a rapid and inexpensive manner.



Learn more: bit.ly/Colossus18

Human powered submarine team qualifies for European International Submarine Races

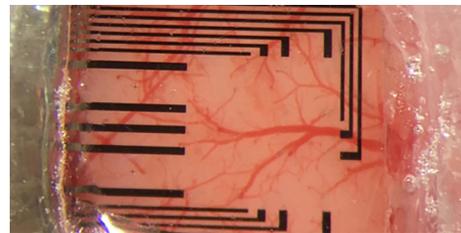


A team of undergraduate students qualified to race the submarine they built at the European International Submarine Races. And this isn't just any sub: it's powered by a student pedaling inside, who also steers the craft. Vaquita, as the sub is called in honor of the critically endangered porpoise species, has a tail that moves up and down like a dolphin's, and a sleek lowrider-car style paint job courtesy of UC San Diego Visual Arts professor and renowned artist Rubén Ortiz-Torres. "I realized that the gaudy materials used to paint lowrider cars are the same that fish are attracted to," Ortiz-Torres said.

Learn more: bit.ly/HumanPoweredSub

A sprinkle of platinum nanoparticles onto graphene makes brain probes more sensitive

Graphene electrodes could enable higher quality imaging of brain cell activity thanks to new research by a team of electrical engineers and neuroscientists at UC San Diego. The researchers developed a technique, using platinum nanoparticles, to lower the impedance of graphene electrodes by 100 times while keeping them transparent. The advance brings graphene electrodes a step closer to being adapted into next-generation brain imaging technologies and various basic neuroscience and medical applications.



Learn more: bit.ly/LowImpedanceGraphene

UC San Diego microgrid, EV-charging projects honored

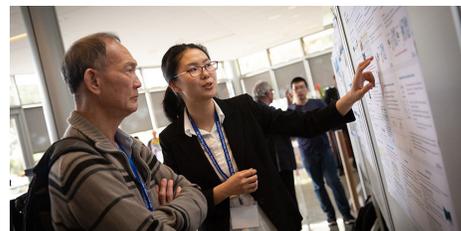


UC San Diego is a hotbed for research, development and commercialization of smart electric vehicle (EV) charging technologies. The university has collaborations with over 18 companies and organizations providing 135 EV charging stations on campus. In May, more than 700 different EVs were charged by UC San Diego's world-renowned microgrid. This collaborative microgrid research environment led UC San Diego to be the first university to be honored with a Grid Edge Innovation Award from Greentech Media. A broad array of industry-academic sustainable energy research is happening through the UC San Diego Sustainable Power and Energy Center, where research extends from the nano-scale all the way to grid-connected systems.

Learn more: bit.ly/EVAward

5G and Beyond

More than 40 leading experts from industry and academia spoke about the emerging technologies that will benefit from fifth generation—or 5G—wireless connectivity at the 5G and Beyond Forum hosted by the Center for Wireless Communications at the Jacobs School of Engineering. Healthcare and smart transportation are two applications expected to dramatically evolve thanks to 5G. At the forum, leaders from Kaiser Permanente, Qualcomm, Samsung Research America, UC San Diego Health and more discussed how 5G will impact these industries, and what technical challenges remain.



Learn more: bit.ly/5GandBeyond



SIGN UP FOR THE
**JACOBS SCHOOL
MONTHLY EMAIL**

A monthly news digest from the UC San Diego Jacobs School of Engineering.

bit.ly/JacobsSchoolEmail



Contact newsletter editor, Daniel Kane: dbkane@ucsd.edu