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Customized Briefing for Prof. Khosrow Behbehani, P.E.

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Leading the News

University Of Texas, Arlington Engineers Develop Microscopic Windmill Technology That Could Power Smart Phones.

[CNET Australia](#) (1/14, Starr) reports that researchers at the University of Texas, Arlington have developed micro-windmills about 1/15 of an inch wide that could be used to charge cell phone batteries.

[Forbes](#) (1/13) reported J.C. Chiao, a professor of electrical engineering at UTA, and Smitha Rao, a graduate research associate at the university, developed the "technology based on recent advances in micro-robotic devices." The micro-windmills "can generate electric power from ambient wind." According to a press release, the micro-windmills "blend origami concepts into conventional wafer-scale semiconductor device layouts so complex 3-D moveable mechanical structures can be self-assembled from two-dimensional metal pieces utilizing planar multilayer electroplating techniques."

The [Houston Chronicle](#) (1/14, Alexander) reports Chiao hopes the technology will be acquired "by a developer, potentially raising hundreds of thousands of dollars for" UTA's engineering department. He also said the university has applied for a patent on the technology "and is seeking a commercial partner."

The [Daily Mail \(UK\)](#) (1/14) and other media sources also cover the story.

Higher Education

University Of Southern California Receives \$50-Million Gift To Establish Bioscience Center.

The [Los Angeles Times](#) (1/13, Gordon) "LA Now" blog reported the University of Southern California has received a \$50 million gift to fund a bioscience center.

The [AP](#) (1/14, Weber) reports university officials said the donation by Dr. Gary K. Michelson, an orthopedic spinal surgeon turned philanthropist, will go toward building a facility with "laboratories that will include microscopy imaging machines that can take precise measurements inside cells." USC President C. L. Max Nikias said in a statement, "Dr. Michelson's generous gift is truly visionary, as it will bridge USC's strengths in a broad range of disciplines, including the sciences, engineering, medicine, mathematics, and computer science."

The [Chronicle of Higher Education](#) (1/13) "Bottom Line" blog also covered the story.

Siemens President: Companies Must Invest In STEM.

In [The Hill](#) (1/13) "Congress Blog" blog Eric Spiegel, President and CEO of Siemens Corporation, and David D. Etzwiler, CEO of the Siemens Foundation, wrote that the US needs "an education system that supports and encourages" the innovators of the future. Spiegel and Etzwiler wrote that companies must invest in STEM. "That investment could include sponsoring research programs" and "donating equipment and curriculum to colleges and universities."

From ASEE

VIDEOS



Watch the Forum from the National Academy of Engineering annual meeting, "[The Importance of Engineering Talent to the Prosperity and Security of the Nation](#)," featuring Subra Suresh, President, Carnegie Mellon University and Former Director, National Science Foundation; Alec N. Boers, House of Lords, and Past President, Royal Academy of Engineering, among others.

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Elementary/Secondary Education



High School Students Display TechHive Projects At UC Berkeley's Lawrence Hall Of Science.

The [San Jose \(CA\) Mercury News](#)   (1/14, Mitchell) reports Bay Area high school students displayed "their technology-based exhibits" at UC Berkeley's Lawrence Hall of Science on January 11. The students are part of a program that helps them get excited about STEM. The teenagers worked "with engineering students from UC Berkeley and staff from the Hall of Science to develop the" projects.



Virginia Middle School Girls Recognized For Excellence In Math, Science.

On its website, [WCAV-TV Charlottesville \(VA\)](#)   Charlottesville, VA (1/14) reports twenty-five middle school girls were honored on January 12 at the third annual Rising Stars event sponsored by the American Association of University Women | Charlottesville/UVA Branch. The event featured a keynote address by Dr. Teresa Culver, associate professor of environmental and water resources engineering at the University of Virginia. Also, fourth-year civil engineering and math major Sydney Schrider and third-year systems engineering student Apoorva Lonkar gave the girls a tour of the university's lab.



Spring-Ford Area School District Awarded Grant For Engineering Courses.

The [Pottstown \(PA\) Mercury](#)   (1/13, Otto) reported the Bemis Company has given a grant of \$35,000 to the Spring-Ford Area School District's "Pathway to Engineering" program. The PTE program will allow students to use "the same industry-leading technology and software as the world's top companies," according to a press release from the school district. Kimberly Bast, Spring-Ford's assistant director of curriculum, said, "The first class is called Introduction to Engineering Design (IED). Designed for 9th or 10th grade students, the major focus of IED is the design process and its application."



Adelanto School District May Convert New Elementary School To STEM Charter.

The [Victorville \(CA\) Daily Press](#)   (1/13, Self) reported the Adelanto School District may convert the new Gus Franklin Jr. Elementary into a STEM charter school. Superintendent Dr. Lily Matos DeBlieux "said the meeting was 'simply information only.'" DeBlieux and her cabinet will make a recommendation to the school board at a meeting on January 21.



Republican Gubernatorial Candidate's Education Plan Focuses On Computer Science.



The [Fort Smith \(AR\) City Wire](#)   (1/14, Saylor) reports Republican gubernatorial candidate Asa Hutchinson education plan focuses heavily on computer science. The main points of the plan include making computer science courses "available to students in every high school in Arkansas" and making computer science courses count "toward core graduation requirements."

Argonne, Fermilab Among Partners Of Planned STEM School.



The [Chicago Tribune](#)   (1/14, McCarthy) reports that "exposed steel beams and cinder block walls suggest slow progress toward construction of a new science and technology elementary school on Aurora's west side." But John C. Dunham STEM Partnership School at Aurora University officials "say work is progressing just fine despite recent extreme cold weather and that the school will open on time in August." According to the Tribune, "the trailblazing project enters a key phase this month as four local school boards take up proposals to help fund and establish criteria for its student body and teaching staff when the school comes to life this August." Some of the partners of the project "include local and national companies, technology firms, corporate foundations, Argonne and Fermilab national laboratories and non-profit institutions."

Students Present Results For 21st Century Community Learning Center STEM Challenges.



The [Roanoke \(VA\) Times](#)   (1/14, McCallum) reports on the "culmination" of the Department of Education's 21st Century Community Learning Center STEM Challenges, a joint project with NASA. The article focused on a team from Stonewall Jackson Middle School, one of four which presented experimental findings to officials from both agencies on what materials could help shield astronauts from radiation. NASA Associate Administrator for Education Leland Melvin reportedly was "impressed" by the students. When asked by the team what they should study in college to become astronauts, Melvin said that while the sciences are important, "don't forget to learn creative things, too, besides the science and engineering."

The [WSEI-TV](#)   Lynchburg, VA (1/14, 1ate) website also covers the story.

Society Of Women Engineers To Hold Girls Engineer It Day Event On February 1.

The [Savannah \(GA\) Morning News](#)   (1/14, Few) reports the Society of Women Engineers will host Girls Engineer It Day on February 1 at Woodville Tompkins Technical and Career High School in Savannah, Georgia for middle and high school girls. Professional engineers will conduct hands-on projects designed to introduce the girls to engineering.

President Of Society of Women Engineers To Visit Berea, Ohio Schools On January 21 And 22.

The [Cleveland Plain Dealer](#)   (1/14, Segall) reports the president of the Society of Women Engineers, Stacey Minch DelVecchio, will visit schools in Berea, Ohio on January 21 and 22 to promote engineering. DelVecchio wants more females to pursue engineering careers. She says more women are currently entering the field, "but many still leave the field prematurely."

Monday's Lead Stories

- [Washington State University Launching Online Engineering Master's Degree Program.](#)
- [University Of Wisconsin-Madison Wants To Turn Research Into Economic Growth.](#)
- [New General Motor CEO Hopes Her Appointment Will Inspire STEM Students.](#)
- [Aiken County High School Students Take Engineering Course At Aiken Technical College.](#)

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