

OKLAHOMA INNOVATIONS - OCAST'S OFFICIAL NEWSLETTER

JULY 2016

INNOVATIVE OKLAHOMA COMPANIES FEATURED IN THE OKLAHOMAN

- [Energy's fall creates perfect storm for Magnus, which embraces new manufacturing, markets](#)
 - [Ada company's lead-free general aviation fuel awaits FAA certification](#)
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GE FOUNDATION, OSSM AND OCAST TEAM UP FOR ANOTHER SUMMER SCIENCE ACADEMY



For the 48 students in Oklahoma's 2016 GE Summer Science Academy, the complicated engineering challenge of extracting oil from a reservoir far below the Earth's surface became their problem to solve in just four days.

Provided limited resources and a hard deadline, students from high schools across the state were challenged to figure out a way to pump vegetable oil from an oil-and-coffee grounds mixture from a bucket on the floor into a cup on a table above. For good measure, students had to filter out the coffee grounds.

The GE Global Research Center is located in Oklahoma City's Innovation District, which is directly across the street from OSSM, a public boarding school that attracts some of the state's top high school juniors and seniors with its science- and math-focused curriculum.

The GE Summer Science Academy was sponsored by the GE Foundation as part of a \$400,000 STEM initiative established in partnership with the Oklahoma Center for the Advancement of Science and Technology (OCAST).

Students participating in the Summer Science Academy attended classes on a variety of subjects ranging from calculus to physics to computer programming. The camp also included more light-hearted activities like games

between teams of students and a bowling night out. Still, it was the challenge of pumping oil and separating out impurities that occupied much of the campers' attention throughout the week.

Students began the engineering challenge by sketching out their proposed plans on paper before actually attempting to build a device to pump oil. The effort required multiple attempts for each team.

[See the camp in action](#)

REGIONAL INNOVATION FORUM HELD IN PRYOR



Rogers State University in Pryor served as the proud host to a successful forum on Friday, July 29. The 2016 Regional Innovation & Collaboration Forum lived up to its name with attendance from over 100 individuals representing business, education, communities, government and various leaders.

The event was a collaboration of 14 organizations all with a shared mission of positive economic development in Oklahoma. The Claremore Industrial and Economic Development Authority (CIEDA), a presenting sponsor of the forum, led the effort with OCAST, RSU and over a dozen other entities.

"We see forums such as this as a channel for telling our story about the great work going on in northeast Oklahoma," said Jeri Koehler, executive director of CIEDA. "Successful economies focus on innovation and collaboration within education, business and government," Koehler added.

The event set a record for number of sponsoring entities with 22 sponsors. This was the sixth year for OCAST to partner with economic development organizations across the state to host a similar forum.

SAVE THE DATE FOR 2016 OKLAHOMA TECHNOLOGY SHOWCASE



According to IEEE, the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity, “In the not-so-distant future, we will begin entrusting to robotic systems such vital tasks as driving a car, performing surgery and choosing when to apply lethal force in a war zone. Ever more autonomous machines will present challenges spanning technical, regulatory and even philosophical realms. They will force us to confront deep moral quandaries and might even tweak our sense of who we are.” This year’s Oklahoma Technology Showcase will focus on some of these systems and the companies that research, design, build and sell components for some of the most sophisticated robots in the world.

Plan to attend the 2016 Oklahoma Technology Showcase on November 2 on the Northeastern State University campus in Broken Arrow. Watch for future newsletters and notifications with more details and registration information regarding this event.

SBIR ROADTOUR WRAP-UP



OCAST hosted the second annual SBIR RoadTour: Oklahoma’s 2-Day Conference on Thursday, June 30 and Friday, July 1, 2016, at the Presbyterian Health Foundation Conference Center in Oklahoma City. Sixty-three (63) researchers, company representatives and economic development professionals from the region attended the event. During the first day, attendees learned the ins-and-outs of SBIR from OCAST’s nationally recognized contractor Mark Henry, president of Grow Emerging Companies LLC, and from a panel of local business leaders who have recently won SBIR awards. The panel included Shoab Shaikh, CEO of XploSafe LLC (Stillwater); Carol Curtis, venture advisor at i2E Inc. (Oklahoma City); and Dianne LeBlanc, business manager at Advanced Processing Technology Inc. (Oklahoma City).

On Friday, conference participants heard program overviews by, and were able to meet one-on-one with, 14 federal program managers representing 10 SBIR participating agencies, the SBA and United States Patent and Trademark Office.

The conference served as an introduction to the SBIR program for Sandra Gonzales, president and founder of Docere eLearning Solutions based in Lawton, OK. Following the event, Sandra said, “The conference allowed me to meet with the nationally recognized SBIR consultants and federal program managers face to face. I learned valuable information about the program that would have taken months, or even years, on my own. I gained awareness about the SBIR program and about competitive strategy that has helped me narrow my focus and will be invaluable both during the SBIR process and after.” Docere continues working with Grow Emerging Companies through support from OCAST’s Small Business Research Assistance Program.

The SBIR RoadTour: Oklahoma’s 2-Day Conference was part of a national effort led by the SBA’s Office of Investment and Innovation. Locally, the event was supported by i2E Inc., the Greater Oklahoma City Chamber, the PHF Conference Center and SBA’s Oklahoma District Office.

ALLIED MOTION TECHNOLOGIES HOSTS TOUR

Allied Motion Technologies Inc. recently hosted a tour of their facilities in Tulsa and conducted a meeting with their management and engineering team to review the company’s interests and future plans to see how OCAST might help.

The Tulsa operation is a fast growing, indispensable unit of a large multinational corporation and is involved in the design and manufacture of motor systems and components for applications ranging from missile guidance to satellite guided self-steering units for agricultural vehicles.

They also build motors and servos for surgical robots, pumps so small they are implanted in humans to help deliver blood to a weakened or damaged heart and motors for surgical tools the size of a AAA battery that turn at a rate of up to 60,000 rpm with imperceptible vibration and almost completely silent.

OIC ANNUAL MEETING PROGRAM AUGUST 13



2016 Annual/Business Meeting

Saturday, August 13, 2016

36 Degrees North • 36 Cameron Street, Tulsa, OK

The Oklahoma Inventors Congress (OIC) will hold their 2016 Annual Meeting Saturday, August 13 from 8:15 am to 2:45 pm at 36 Degrees North in Tulsa. Registration starts at 8:15 am.

OIC member presentations of patented or patent pending products or processes being marketed will highlight the day's activities.

Pre-registration is available on-line at: www.oklahomainventors.com