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In September, Arkansas Power Electronics International (APEI) announced that an APEI-lead partnership received a $2 million grant to develop new electric motor traction drives for hybrid electric vehicles using technology based on emerging silicon carbide and gallium nitride power semiconductors.

According to Alex Lostetter, president and chief executive officer of APEI, the company’s motor drive technology reduces power losses by more than 50 percent and reduces the size and weight of the motor drive electronics by up to 90 percent.

This US Department of Energy grant, is part of a $45 million push to develop new technologies. It was one of 38 projects awarded.

Partnering with APEI are Toyo-ta Motor Engineering and Manufacturing North America, Inc.; GaN Systems, Inc.; the University of Arkansas’ National Center for Reliable Electric Power Transmission; and the U.S. National Renewable Energy Laboratory.

Tear collection activity at ARTP for Breast Cancer Awareness Month

October is breast cancer awareness month and affiliates at the ARTP can help fight breast cancer by giving a few minutes of their time and a few tears. ARTP employees, family and friends have the opportunity to participate in a pilot study for a new sample collection technique.

The test, currently in development by Ascendant Diagnostics (Ascendant), is a non-invasive way to detect breast cancer through the proteins present in tears.

Dr. Anna Daily, Chief Scientist for Ascendant, said volunteers from 18 - 100 years of age are needed. Men, as well as women, may volunteer since both sexes can get breast cancer.

Daily explained that the sample collections will be taken with a schirmer strip, commonly used to evaluate dry eyes. The volunteer simply sits with his eyes closed for five minutes with the tip of the strip placed in the lower eye lid to absorb the protein. After collection, the samples will be frozen.

The technology is based on preliminary studies from UAMS. The studies were led by breast surgeon Suzanne Klimberg MD.

Ascendant is a VIC Technology Ventures Development company and a Genesis Technology Incubator client in the Park.

Ascendant team members will collect samples from volunteers Monday, October 28th from 11:00 AM - 1:00 PM in the Innovation Center Conference room. A thank you gift will be provided to each volunteer.
Brune to present at PEP conference in January

Dr. Ellen Brune, Chief Scientific Officer for Boston Mountain Biotech (BMB), will present at the Cambridge Healthtech Institute’s (CHI) Peptalk. Known as Protein Science Week, the annual conference will be held January 13-17, 2014 in Palm Springs, CA. Brune is excited about presenting and exhibiting at the conference.

“This conference series provides an excellent platform for BMB to present our new groundbreaking protein purification technology to the industrial and academic world. While exhibiting, we will be able to talk to our future customers and gain their feedback on our development prototype,” Brune explained.

The prototype is the technology that BMB has developed and patented which is a new bacterial cell line that simplifies the development and manufacturing of protein therapeutics. BMB provides protein purification solutions to the pharmaceutical industry that result in new drugs moving from development to patient faster, while simultaneously lowering the cost of healthcare.

ARPT affiliate discusses salmonella issues

Steven C. Ricke, with Sea Star International, a Genesis client company, delivered an invited presentation September 4th at the second International Seminar on Avian Salmonellosis in Medellin, Colombia. Ricke's presentation was titled Emerging and Re-Emerging Strains: Ecology and Impact of Appearances.

"Foodborne salmonellosis continues to be problem not just in our country but globally," Ricke said in a story on the UA Newswire. Ricke focused on the problems caused by the increasing resistance to antibiotics by Salmonella and other pathogens. He said future research into the issue should cover the sources of Salmonella and antibiotic resistance.

Ascendant Diagnostics names medical director

In September, Suzanne Klimberg, director of the breast cancer program at the University of Arkansas for Medical Sciences Winthrop P. Rockefeller Cancer Institute, was named medical director of Ascendant Diagnostics, an ARPT affiliate and a VIC Technology Ventures Development company. According to a recent press release, as well as being a practicing breast surgeon and researcher, Klimberg also is a co-inventor of Ascendant’s first product, MelodyDx, an early-stage breast cancer screening test using the protein profile found in tears.

BiologicsMD adds new CEO position to company

In mid-July BiologicsMD, Inc., (BMD) announced the appointment of J. David Owens to the company’s newly created CEO position. Owens previously was the Chief Business Officer for Novira Therapeutics, Inc., a privately held antiviral drug discovery company. BMD is an early stage therapeutics company that focuses on novel technologies to actively improve bone health. It is a VIC Technology Ventures Development company.
Park affiliate receives several large grants

Arkansas Power Electronics International (APEI) received several grants since mid-July. The largest, a Department of Energy (DOE) matching grant for $2M, utilizes proven high temperature gallium nitride and silicon carbide power devices and module technology to enable low-cost modular, scalable electric traction inverters for commercial hybrid and electric vehicles.

APEI also received a $1M DOE Phase II grant to design and develop a high performance, high voltage silicon carbide multi-chip power module (MCPM) as well as two Department of Defense (DOD) contracts totaling approximately $1.5 M.

The Air Force project is developing modular power electronics for interfacing the battery with a spacecraft distribution bus. The Army project is on an ultra-compact silicon carbide based inverter for electric grids and emergency storage devices.

Socktober begins Park donations for fall

The week of October 14th will begin the annual fall collection to help out others in the community. Thanks to leadership from affiliate company APEI, the ARTP will participate in a new project called Socktober. This event, created by Kid President on Youtube, is a way to collect donations for the homeless in every community.

The APEI-led drive called “Knock Our Socks On” will have a collection box on a table under the stairs in the Innovation Center to gather socks to donate to the 7hills Homeless Center. According to Lauren Kegley, APEI employee, APEI will match each donated item, socks or other clothing items, with a pair of socks (up to $5,000).

Throughout the fall, Park affiliates may donate a variety of items to several non-profit organizations. Simply check the signs or boxes to see what items will be collected. Last year items included coats, hats, gloves, dog and cat food, as well as baby formula. The items were given to three area charities in mid-December.

Green elected new chairman for UATDF

At its annual meeting in September, the University of Arkansas Technology Development Foundation (UATDF) elected Stan Green as its incoming Chairman of the Board. Lee, co-founder of Clear Energy, Inc., has been a member of the UATDF board since 2012.

Green will take over for outgoing chair, Greg Lee. Lee, who became chair in 2007, will remain as a member of the Board. Phillip Stafford, President of the UATDF, voiced his appreciation of Lee’s tenure as Chairman.

“It has been an honor to work with Greg over the past six years as Chairman of the Board. His leadership has been instrumental in sustaining the growth of the ARTP,” Stafford said.

Former CO governor speaks

Bill Ritter, former Colorado governor, was the keynote speaker October 1st at the second annual policy conference of the Arkansas Advanced Energy Association (AAEA) in Little Rock. Ritter is noted for his work in clean energy.

Several Park affiliates attended.

ARK Challenge Demo Day

In early September, the second ARK Challenge Demo Day was held in Bentonville. Three companies were selected by a committee to receive startup funds. The companies were Overwatch, Info Assembly and Langhar. In addition to seed money received earlier, each company was offered $150,000 in an uncapped convertible note.

UofA joins partnership

Jim Rankin, vice provost for research & economic development at the UofA, announced in late August that the University was accepted as a member institution of the University-Industry Demonstration Partnership. The partnership provides a forum for academic and corporate representatives with diverse interests and responsibilities to find better ways to work together.
Yoga with Lauren
Tuesdays through
November 26
6:00-7:00 pm
Innovation Center
Conference Room

Free yoga for ARTP affiliates through November

The ARTP community is full of busy people working on many types of research and technologies. One problem these dedicated professionals often have is taking time for themselves. Now, park affiliates can to do just that every Tuesday night for one hour with free yoga classes.

According to Lauren Kegley, an engineer at Arkansas Power Electronics International (APEI) yoga offers its practitioners a wide range of physical benefits — weight loss, lower blood pressure, increased strength and flexibility. But Kegley said that the mental benefits of yoga often outweigh the physical benefits. Kegley said benefits of the practice includes stress relief, increased confidence, a stronger connection to self, mental endurance, and renewed outlook on a healthy lifestyle.

“From your first savasana (the traditional closing pose known for deep rest) you'll understand why a yoga class is unique to any other physical activity. Each time, you learn how to turn inward and listen to your body — an important tool in today’s increasingly busy world,” Kegley said.

The class is part of Kegley’s Yoga Alliance 200 hour teacher certification program, which she is taking through her local studio, Yoga Deza. Kegley said affiliates are welcome to join this all-levels class, running through Nov. 26th.

For more information, contact Kegley at lauren.kegley@gmail.com.