The ME Connection

UE Mechanical Engineering Newsletter

August 2024

"Believe in yourself and all that you are. Know that there is something inside you greater than any obstacle." *- Simone Biles*

It's Almost Here!

Only 12 more days until the Fall semester begins! We look forward to seeing all the new and returning faces on campus! Just this week, UE held a grand opening ceremony for the student apartments in the Lincoln Commons. Conveniently located across Weinbach Avenue from the Koch Center, the first floor of the new building will include retail dining space leased to both Qdoba and Orange Leaf. Outdoor seating will also be available.

As near-campus dining options expand, we continue looking for new ways to engage local alumni and provide opportunities to connect with current students in an informal setting. If you, or your organization, is interested in hosting a "***Meet ME @...***" event like those described in our June newsletter, please email us for more info!

Congratulations Corner

Congratulations to Dr. Douglas Stamps on being awarded the School of Engineering and Computer Science Dean's Research Award for the 2023-24 academic year! Dr. Stamps supports student research on campus as Chair of the university's Undergraduate Research Committee and faculty advisor for the ME Thermosiphon Research Team.

ME Students Volunteer at Barn Blitz

Earlier this year, UE's Habitat for Humanity student organization hosted their annual "Barn Blitz" build day. Member of campus formed teams to help build 20 yard barns on a Saturday in late April. Several ME students joined teams and participated in the build event, including Brendan Ulewicz (*Class of 2027*), who said, *"It was a fun experience, and I enjoyed the time I got to spend with the people there."* The barns will be given to families receiving a new home from Habitat for Humanity of Evansville.

ME Faculty Presents at Annual ASEE Conference

Dr. Jessie Lofton attended the 2024 Annual American Society for Engineering Education (ASEE) Conference & Exposition in Portland, Oregon this summer. She presented her work on modified concept maps as a teaching tool with decision-tree features to help guide students in their analysis of undergraduate heat transfer problems. The tools connect course concepts with simplifying assumptions and corresponding textbook equations.

We'd love to share what our alumni are doing!
Please submit a photo and short blurb to: mechanicalengineering@evansville.edu

Alumni Spotlight: Danielle Murphy, PhD (Class of 2008)

While at UE, Danielle "Dani" Murphy was a mechanical engineering student and athlete for the Ace's softball team. After graduation, Dani went on to complete a PhD studying fuel reforming for solid oxide fuel cells at Colorado School of Mines. From there, she entered a career in forensic engineering, investigating failures and the cause and origin of fires and explosions. Pursuing a passion, Dani and her husband then took time off from their careers to travel internationally for a couple of years. This was the part of her journey that was most impactful and which she is most proud of, as it set an intentional path for her future work and life.

After returning to the US, Dani worked for the National Renewable Energy Laboratory (NREL) in Golden, Colorado conducting research on hydrogen infrastructure and production technologies. For the last 5 years, Dani has combined her interests and now leads WHA International's hydrogen services group as a Principal Engineer. At WHA, Dani conducts failure analysis investigations, provides technical training, and performs and participates in hazards analysis and design review as a specialist in hazardous fluid safety and combustion science. She also provides consulting and custom testing services for hydrogen and hydrogen blended gas systems in a variety of applications including chemical processes, transportation, electolyzers, fuel cells, and novel hydrogen systems and applications. Dani is a member of the US Department of Energy (DOE) Hydrogen Safety Panel and track chair for ASME's upcoming HyRRAC Hydrogen Risk and Reliability Analysis Conference.

Away from hydrogen, Dani enjoys family adventures with her husband, Andy, and 3-year-old son, Blake. They live in the foothills in Colorado and enjoy skiing, mountain biking, canyoneering, camping and of course, traveling.

Q: Why didn't the engineering get up from the couch?

A: They weren't being lazy; they were storing potential energy!