

COLLEGE HAPPENINGS

July 25, 2023

IN THE NEWS

[NDSU part of \\$4 million tribal energy grant](#)

[EPA funds North Dakota State University student project](#)

[Computer science prepares students to succeed](#)

[Faculty member speaks at banking event](#)

[Students earns fourth at cybersecurity competition](#)

[FARMS partnership group reaches finals of NSF competition](#)

CONGRATULATIONS

Di Wu, associate professor of electrical and computer engineering, and his research team earned the **Best Paper Award** at the 2023 IEEE Power and Energy Society General Meeting, which is one of the most reputational conferences in the power system area every year.

Di Wu, associate professor of electrical and computer engineering, was awarded an **NSF EAGER grant** for his project “Toward a Network-Based Framework for Analysis and Control of Inverter-Dominated Power Grids.” The project aims to understand how interconnected inverters collectively cause these oscillations, and how to design control strategies to mitigate them.

Zahid Anwar, associate professor of computer science and Challey Scholar, was named **2023 Innovation in Teaching Award** recipient from the NDSU Office of Teaching and Learning. This award was presented at the 2023 Teaching and Learning Conference.

The U.S. Environmental Protection Agency, EPA, granted \$24,982 to a team of NDSU engineering students for their proposed [landfill pollution removal project](#). As part of [EPA’s People, Prosperity and the Planet Program, or P3](#), the award will provide funding for the project through July 31, 2024. The students' proposed project aims to improve water quality in North Dakota and includes a plan to educate young people about water pollution

Please let [College Happenings](#) know about honors, awards, new grants and other announcements so we can share them with other faculty and staff.

NEW HIRES

Deb Moen has been hired as a new Academic Advisor for the College of Engineering. She'll be working with students in Industrial Engineering and Management, Manufacturing Engineering, Agriculture and Biosystems Engineering and possibly some students in the new Software Engineering program.

Will Refling has joined the Department of Mechanical Engineering as a Professor of Practice in the area of Energy Stewardship.

UPCOMING EVENTS

Wednesday, August 9, **Academic Leaders Orientation and Retreat** for Department Chairs/Heads and Deans.

Tuesday, August 15, **New Faculty Orientation**. This event is intended for faculty that have started at NDSU since August 16, 2022. [Register Here](#)

Wednesday, August 16, **Annual Faculty/Academic Staff Conference**. Presentations by NDSU faculty and staff demonstrating best practices for research, instruction, advising, assessment, campus climate, inclusion, mentoring, leadership, and classroom technologies. [Register Here](#)

Monday, August 21, **NDSU Welcome Week Academic College Meetings**, this is an opportunity for new students to make connections and learn about the many opportunities for involvement and support to help make them successful throughout their NDSU experience. The College of Engineering meeting starts at 8:30 in the Bentson Bunker Fieldhouse.

Monday, August 21, **Walking Through the Gates**. Join us to celebrate and welcome new students as they join the NDSU community. All you have to do is come and cheer! 10:10 a.m. on the corner of 12th Avenue and University Drive.

MOVE-IN DAY AND WELCOME WEEK

We are still in need of faculty and staff volunteers for Move-In Day and Welcome Week. These events are some of the most exciting days of the year.

Volunteer opportunities are as short as two hours long and involve a variety of different opportunities including: guiding traffic during move-in, helping students find their class materials in the bookstore, and assisting with various other Welcome Week events. [Select your volunteer shift\(s\) here](#) and [visit the volunteer website](#) here for more information.

Additional Welcome Week Engagement Opportunities:

- Walking Through the Gates | Monday, August 21, 2023 at 10:10am
 - Join us to celebrate and welcome new students as they join the NDSU community. All you have to do is come and cheer!
- This year we will continue the Focus on 5 initiative that began in 2021. "Focus on 5" means connecting with five students, for five minutes each, for the first five days of the academic year. This small act of outreach has the potential to make a big positive impact on a student's NDSU experience! We would like to challenge you to "Focus on 5" during the first week of the semester.

Let's show our Bison Pride and help our new students feel welcome!

CCAST ADVANCED RESEARCH COMPUTING TRAINING PROGRAM

FREE training workshops offered by CCAST/NDSU. ***Pre-registration is required!***

The NDSU Center for Computationally Assisted Science and Technology ([CCAST](#)) is offering a workshop series to introduce advanced research computing to faculty, staff, and students at NDSU and beyond. This series aims to provide researchers with basic knowledge and hands-on skills that help them make the best use of local and national high-performance computing (HPC) facilities, and ultimately to advance their research capabilities.

Workshops will be offered both in person (*preferred*) and via Zoom, and will include lectures, demonstrations, and hands-on tutorials where participants will have opportunities to perform simple and not-so-simple tasks on CCAST's HPC systems. Recordings and workshop materials will be available for those who cannot attend live. *There are no prerequisites, except a strong willingness to learn. Some familiarity with computer programming and Linux shell scripting would be helpful, but not required.*

[See the full class schedule and register here.](#)

NDSU'S FINANCIAL TRANSFORMATION

Last week, NDSU officially began the transition to the new operating model for financial activities across the university. As part of this transition, the [Accounting Service Center Website](#) has been refreshed to provide a more streamlined and user-friendly experience for those seeking financial assistance. This website currently includes:

- Frequently Asked Questions about P-Cards, Purchasing, Travel & Expense, and other items
- Key forms to utilize when completing various financial tasks
- Contact information for the centers and staff
- An outline of reorganization responsibilities.

Additionally, a website featuring details about the [College of Engineering Business Center](#) has been created. Similarly to the Accounting Service Center website, the CoE Business Center page will provide you with pathways of contact for general and specific inquiries related to financial activities specific to our college and departments.

The CoE Business Center page is maintained and updated by NDSU Finance and Administration. Links to it can be found on the College of Engineering website under the Faculty and Staff tab.

UNDERGRADUATE RESEARCH WRITING AND MENTORING CAMP

The first NDSU Undergraduate Research Writing and Mentoring Camp will be held on September 8th 2023 from 11 am to 4 pm. This program provides undergraduate researchers practical advice and experiential learning activities on writing from research and creating effective professional materials. Participants will also learn approaches to enhance research mentoring experiences with mentors and peers and applying graduate programs.

The camp is free, but space is limited. Please encourage your undergraduate researchers to register before September 1, 2023 if they are interested. Register here:



FUNDING OPPORTUNITIES

DOE: Materials, Operation and Recycling of Photovoltaics (More PV)

Through this Funding Opportunity (FO) [[DE-FOA-0002985](#)], the Solar Energy Technologies Office (SETO) will provide funding for multi-stakeholder collaborations to reduce material usage, improve installation quality and resilience of PV systems, and address handling of PV systems at the end of life. This FO calls for diverse teams to assess impact of the developed technologies on all the life stages of PV systems in terms of energy use, cost, and environmental impact.

Topic Area 1: MORE Connection – Connecting PV Materials, Design, Installation, Performance and End of Life

Topic Area 2: Solar partnership to Advance Recycling and Circularity (Solar PARC)

Letter of Intent Deadline: September 6, 2023; 4PM

NSF: Broadening Participation in Engineering

Through the Broadening Participation in Engineering (BPE) Program [[NSF 22-514](#)], NSF seeks to strengthen the future U.S. engineering workforce by enabling and encouraging the participation of all citizens in the engineering enterprise. The BPE Program seeks to support not only research in the science of broadening participation and equity in engineering, but also collaborative endeavors which foster the professional development of a diverse and well-prepared engineering workforce as well as innovative, if not revolutionary, approaches to building capacity through inclusivity and equity within the engineering academic experience.

To solicit the best ideas for these activities, both in formation and enactment, the BPE Program will support projects at various levels of readiness and complexity through the following four tracks:

- **Track 1: Planning and Conference Grants**
Deadline: Proposals accepted ANYTIME
- **Track 2: Research in Broadening Participation in Engineering**
Deadline: Proposals accepted ANYTIME
- **Track 3: Inclusive Mentoring Hubs (IM Hubs)**
Deadline: November 15, 2023
- **Track 4: Centers for Equity in Engineering (CEE)**
LOI Deadline: September 20, 2023 (Strongly recommended)
Full Proposal Deadline: November 15, 2023

RECENT PUBLICATIONS

For 2023, 154 publications by authors with the College of Engineering affiliation have appeared in various journals, according to the ISI Web of Science and submissions from faculty. Here are some of the most recent publications:

- Abusaqer, Muhammad, M. Benaoumeur Senouci, and Kenneth Magel. 2023. “Twitter User Sentiments Analysis: Health System Cyberattacks Case Study.” In *2023 International Conference on Artificial Intelligence in Information and Communication (ICAIIIC)*, 018–024. Bali, Indonesia: IEEE.
<https://doi.org/10.1109/ICAIIIC57133.2023.10067026>.
- Cao, Qi, Haibo Zheng, He Ju, Zhibin Lin, Changjun Zhou, and Jinqing Jia. 2023. “Early-Age Cracking Resistance of Multiscale Fiber-Reinforced Concrete with Steel Fiber, Sisal Fiber, and Nanofibrillated Cellulose.” *JOURNAL OF MATERIALS IN CIVIL ENGINEERING* 35 (5). [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0004718](https://doi.org/10.1061/(ASCE)MT.1943-5533.0004718).
- Dey, Arup, Md Mahbubar Rahman, Anunay Gupta, Nita Yodo, and Chiwon W. Lee. 2023. “A Performance Study on 3D-Printed Bioplastic Pots from Soybean By-Products.” *SUSTAINABILITY* 15 (13): 10535.
<https://doi.org/10.3390/su151310535>.

- Dey, Arup, Md Mahbubur Rahman, Nita Yodo, and David Grewell. 2023. “Development of Biocomposite Filament for Fused Filament Fabrication from Soy Hulls and Soy Protein Isolate.” *MATERIALS TODAY COMMUNICATIONS* 34 (March): 105316. <https://doi.org/10.1016/j.mtcomm.2023.105316>.
- Saraswat, Anuj, Shri Ram, Md Basit Raza, Sadikul Islam, Sonal Sharma, Michael E. Omeke, Biswaranjan Behera, Roomesh K. Jena, Abdur Rashid, and Debasis Golui. 2023. “Potentially Toxic Metals Contamination, Health Risk, and Source Apportionment in the Agricultural Soils around Industrial Areas, Firozabad, Uttar Pradesh, India: A Multivariate Statistical Approach.” *ENVIRONMENTAL MONITORING AND ASSESSMENT* 195 (7): 863. <https://doi.org/10.1007/s10661-023-11476-3>.
- Wang, Junyue, Jiale Xu, Juhee Kim, and Ching-Hua Huang. 2023. “Mechanistic Insight for Disinfection Byproduct Formation Potential of Peracetic Acid and Performic Acid in Halide-Containing Water.” *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, July. <https://doi.org/10.1021/acs.est.3c00670>.
- Wang, Ning, and Xuefeng Chu. 2023. “A Modified SCS Curve Number Method for Temporally Varying Rainfall Excess Simulation.” *Water* 15 (13): 2374. <https://doi.org/10.3390/w15132374>.
- Xu, Luyang, Shuomang Shi, Xingyu Wang, Fei Yan, and Ying Huang. 2023. “Investigating Combined Effects between Dynamic Mechanical Loads and Corrosion on Epoxy Coated Steel Using Distributed Fiber Optic Sensors.” In *OPTICAL WAVEGUIDE AND LASER SENSORS II*, edited by R. A. Lieberman, G. A. Sanders, and I. U. Scheel, 12532:125320A. Proceedings of SPIE. Bellingham: SPIE-Int Soc Optical Engineering. <https://doi.org/10.1117/1.1117/12.2665241>.
- Zhou, Guoshuai, Fujian Tang, Gang Li, Zhibin Lin, and Hong-Nan Li. 2023. “Long-Period Grating Fiber Optic Sensors Coated With Gold Film and Pulse-Electroplated Iron-Carbon Layer for Reinforcing Steel Corrosion Monitoring.” *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT* 72: 7004511. <https://doi.org/10.1109/TIM.2023.3284925>.

See your name on this list? Help us get the word out about your amazing work by submitting it as a **Breakthrough Alert**. [This online form](#) is an easy, step-by-step guide for summarizing published research for the general public.

College Happenings is distributed to the NDSU College of Engineering staff and faculty every other Tuesday.

Read past issues of *College Happenings* [here](#).

Deadline for submissions to *College Happenings* is 12:00 p.m. Fridays.

Contact kyle.bosch@ndsu.edu to submit items for *College Happenings*.

Follow the College of Engineering on social media.

