

COLLEGE HAPPENINGS

April 30, 2024

FROM THE INTERIM DEAN

Honoring the Class of 2024

As we approach the culmination of another academic year, I want to take a moment to reflect on the incredible journey of our graduating seniors. These students have dedicated themselves to their studies, shown resilience in the face of challenges, and contributed to the vibrant tapestry of our college community.

It is essential that we take the time to recognize and honor their achievements. They have worked tirelessly to reach this milestone, and their accomplishments deserve to be celebrated. Their hard work, determination, and passion have not only enriched our campus but will also undoubtedly leave a lasting impact on our society.

I encourage each of you to join me in acknowledging their dedication and perseverance. Whether through heartfelt congratulations, attending commencement ceremonies, or participating in special events organized in their honor, let us show our appreciation for their commitment to excellence.

The College is hosting several events to celebrate and honor our graduating seniors over the next two weeks. Our Spring Senior Design Expo is being held Thursday, May 2 from Noon – 3 p.m. in the NDSU Oceti Sakowin Ballroom. This event will showcase more than 70 capstone projects from every department in the College.

The biannual Ring and Pin Ceremony, a blending of two significant and celebratory events, the Order of the Engineer and the Pledge of the Computing Professional, will be held Friday, May 10 at 3:00 p.m. in the NDSU Oceti Sakowin Ballroom.

And the Commencement Ceremony for College of Engineering Spring 2024 graduates and their guests will be held Saturday, May 11 at 2:00 p.m. in the Fargodome.

Additionally, I urge all faculty and staff to continue supporting our graduating seniors beyond graduation day. As they embark on the next chapter of their lives, let us offer guidance, mentorship, and encouragement as they pursue their future endeavors.

Alan R. Kallmeyer, Ph.D.

Interim Dean | College of Engineering

IN THE NEWS

[‘He has been dead set on coming to NDSU’](#)

[Battle of the Cent-es sets record](#)

[Winners of Bison Leader Awards announced](#)

[Why choose NDSU?](#)

CONGRATULATIONS

Hanmant Gaikwad, Sharad Jaswandkar and Preetham Ravi, graduate students in the **Department of Civil, Construction and Environmental Engineering** received 1st prize in the 2024 YouTube Video Contest of the American Ceramic Society Bioceramics Division. [Watch their video here.](#)

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

UPCOMING EVENTS

Thursday, May 2, **Spring Senior Design Expo**. The Spring Senior Design Expo will showcase capstone projects from all departments in the College of Engineering and give you the chance to interact with our amazing students and learn more about their work. 12 – 3 p.m. in the NDSU Oceti Sakowin Ballroom.

Tuesday, May 7, **Air Force Research Laboratory Visit**. Join Stacy Manni, PhD, Director of AFRL Midwest for an informative presentation and discussion about the organization and how its work could integrate with research at NDSU. 9:30 – 11:00 a.m. in the NDSU Memorial Union, Room of Nations.

Friday, May 10, **Spring Ring and Pin Ceremony**. The biannual Ring and Pin Ceremony is a blending of two significant and celebratory events, the [Order of the Engineer](#) and the [Pledge of the Computing Professional](#).

Saturday, May 11, **Spring Commencement**. 2:00 p.m. at the Fargodome. Faculty and staff who wish to participate in the academic procession along with our graduation class will wear caps and gowns. [Register to participate.](#)

GREAT PLAINS I-CORPS HUB SEMINAR AND SUMMER COHORT

You're invited to join the Great Plains I-Corps Hub's upcoming seminar, **From Lab to Market: Applying I-Corps to Your Research** on Friday, May 03 from 1:00pm - 1:30pm (CDT).

This event will be a 30-minute seminar hosted via Zoom, where we will talk about how the National Science Foundation's I-Corps training teaches researchers, innovators, and entrepreneurs to use customer discovery to gain a stronger understanding of the ecosystem, decision makers, and stakeholders surrounding their technology. [Register for the seminar >>](#)

The Great Plains I-Corps Hub is now accepting applications for summer cohorts. The regional I-Corps training is a free, five-week program aimed at teaching graduate students, post-docs, researchers, and faculty the best practices of customer discovery and how to apply what they learn to their research/innovations. In the Regional I-Corps program, teams can qualify for up to \$1,000 to be used towards customer discovery. [Learn more and apply for upcoming cohorts >>](#)

PROPOSALS FOR ANNUAL FACULTY AND STAFF CONFERENCE

You are invited to [submit a proposal](#) for the annual Faculty & Staff Academic Conference to be held, Friday, August 23rd. NDSU's annual Faculty & Staff Conference is an opportunity to share ideas and developments across research, instruction, and other topics of interest to faculty and staff. The concurrent sessions will be 45 minutes in length, and should support faculty and/or staff development.

Proposals are due by Monday, June 17th.

Visit the Office of Teaching and Learning's [conference website](#) to learn more about this year's conference. Questions can be directed to Stacy.Duffield@ndsu.edu

FUNDING OPPORTUNITIES

Air Force Fiscal Year 2025 Young Investigator Program

The Fiscal Year 2025 Air Force Young Investigator Research Program (YIP) intends to support individual early in career scientists and engineers who have received Ph.D. or equivalent degrees by 01 April 2017 or later showing exceptional ability and promise for conducting basic research. The program objective is to foster creative basic research in science and engineering; enhance early career development of outstanding young investigators; and increase opportunities for the young investigator to recognize the Air Force and Space Force mission and related challenges in science and engineering.

Individual awards are made to U.S. institutions of higher education, industrial laboratories, for-profit, or non-profit research organizations where the principal investigator (PI) is employed on a full-time basis and holds a regular, non-contractor position. A YIP PI must be a U.S. citizen, national, or permanent resident. Researchers working at a Federally Funded Research and Development Center, or a Department of Defense (DoD) Laboratory are not eligible for this competition.

Deadline: June 21, 2024 | [Learn more and apply >>](#)

DOE: Reaching a New Energy Sciences Workforce

Reaching a New Energy Sciences Workforce (RENEW) aims to build foundations for Office of Science (SC) research through traineeships at academic institutions that have been historically underrepresented in the SC portfolio. RENEW leverages SC's unique national laboratories, user facilities, and other research infrastructure to provide training opportunities for students and postdoctoral researchers from these institutions. The hands-on experiences gained through RENEW will open new career avenues for trainees, forming a nucleus for a future pool of talented young scientists, engineers, and technicians with the critical skills and expertise needed for the full breadth of SC research activities.

Deadline: July 23, 2024 | [Learn more and apply >>](#)

RECENTLY AWARDED GRANTS

- Clairmont Clementson (Principal Investigator), Ademola Monsur Hammed (Co-PI). Extraction, fractionation and purification of value-added production from soybean meal. \$34,748 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Xiaoyu Feng (Principal Investigator), Ademola Ayodeji Ajayi-Banji (Co-PI). Anaerobic Digestion of Soybean Meal for Biogas and Biofertilizer Productions: A Life Cycle Assessment. \$34,704 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Ademola Monsur Hammed (Principal Investigator), Ewumbua Monono (Co-PI), Niloy Chandra Sarker (Co-PI). Upscaling, formulation and techno-economic assessment of biofertilizer from soybean meal. \$67,203 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Jiale Xu (Principal Investigator). Remediation of brine spills by soybean fiber-activated materials. \$43,900 from the ND Soybean Council. 7/1/2024 - 6/30/2025.
- Jiale Xu (Principal Investigator). Extra Benefit of Herbicide Safeners in Controlling Carryover to Protect Corn. \$44,136 from the ND Corn Utilization Council. 7/1/2024 - 6/30/2025.
- Ewumbua Monono (Principal Investigator), Mijia Yang (Co-PI), Niloy Chandra Sarker (Co-PI). Improve the Physical Properties of CoRncrete and its Application as a Preform. \$14,475 from the ND Corn Utilization Council. 7/1/2024 - 6/30/2025.
- Lindsay Malone (Principal Investigator), Joao Paulo Cassol Flores (Co-PI). Quantifying in-field variability to support sustainable corn production. \$15,709 from the ND Corn Utilization Council. 7/1/2024 - 6/30/2025.

- Long Jiang (Principal Investigator), Raj Shankar Hazra (Co-PI). Starch-based, long-lasting bactericide for crop disease management. \$45,120 from the ND Corn Utilization Council. 7/1/2024 - 6/30/2025.

RECENTLY SUBMITTED PROPOSALS

- Abodunrin Tirmidhi Tijani (Principal Investigator), Ademola Monsur Hammed (Co-PI). Waxing of Poly (vinyl alcohol) to produce waterproof film for bale-net wrap. \$20,000 from the National Institute of Food & Agriculture. 9/1/2024 - 8/31/2025.
- Kambiz Farahmand (Principal Investigator), Armstrong Aboah (Co-PI). A Mixed-Reality CDL Simulation Environment for Safe CDL Training. \$195,148 from the Federal Motor Carrier Safety Administration. 9/1/2024 - 8/31/2027.

RECENT PUBLICATIONS

For 2024, 49 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:

- Awuku, Bright, Ying Huang, Nita Yodo, and Eric Asa. 2024. “Interpretable Machine Learning Models for Failure Cause Prediction in Imbalanced Oil Pipeline Data.” *MEASUREMENT SCIENCE AND TECHNOLOGY* 35 (7): 076006. <https://doi.org/10.1088/1361-6501/ad3570>.
- Bozorg-Haddad, Omid, Mahdi Bahrami, Ayda Gholami, Xuefeng Chu, and Hugo A. Loaiciga. 2024. “Investigation and Classification of Water Resources Management Strategies: Possible Threats and Solutions.” *NATURAL HAZARDS*, April. <https://doi.org/10.1007/s11069-024-06589-y>.
- Kuang, Yihang, Fujian Tang, Weiwei Lin, and Zhibin Lin. 2024. “Bond Performance of Quartz Sand Modified Enamel Coated Plain Steel Bars with Concrete under Reversed Cyclic Loading.” *CONSTRUCTION AND BUILDING MATERIALS* 421 (March): 135676. <https://doi.org/10.1016/j.conbuildmat.2024.135676>.
- Min, Sojin, Hosung Lee, Lijuan Deng, Wenshan Guo, Boyan Xu, Ch Tahir Mehmood, Ziyi Zhong, et al. 2024. “Advanced Strategies for Mitigation of Membrane Fouling in Anaerobic Membrane Bioreactors for Sustainable Wastewater Treatment.” *CHEMICAL ENGINEERING JOURNAL* 485 (April): 149996. <https://doi.org/10.1016/j.cej.2024.149996>.

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.

