IN THE NEWS

NDSU students shine at national cybersecurity competition

Commencement speaker: Every collegiate journey is special

Spring 2022 grads share memorable NDSU experiences

College of Engineering hosts Senior Design Expo

Faculty member quoted in MoneyGeek article

NDSU students excel in cybersecurity competition

CONGRATULATIONS

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

NSF VIRTUAL GRANTS CONFERENCE

Join the National Science Foundation for the Spring 2022 NSF Virtual Grants Conference, to be held during the week of June 6-10, 2022.

The conference is designed to give new faculty, researchers, and administrators key insights into a wide range of current issues at NSF. NSF program officers will provide up-to-date information about specific funding opportunities and answer attendee questions.

Registration will be free of charge and opens on Wednesday, May 11, 2022 at 11am. For those who cannot attend the live conference, all conference sessions will be available on-demand shortly after the event.

WRITE WINNING GRANT PROPOSALS VIRTUAL WORKSHOP

June 1-2, 2022 | 8:30 a.m. – 12:00 p.m.

Grant Writers Seminars and Workshops (GWSW), will present a virtual seminar titled "Write Winning Grant Proposals."

This workshop, presented over two half-days by John Robertson, PhD, comprehensively addresses the practical, conceptual, and rhetorical aspects of writing competitive grant proposals, including:

- critical steps for organizing and planning your proposal,
understanding the role (and mindset) of your reviewers,
strategy for writing a compelling specific aims (NIH), overview and objectives (NSF), or equivalent section, and
specific strategies and tips for each major section of a grant proposal.

Register to participate >>

FUNDING OPPORTUNITIES

Corrosion Control and Innovative Coating Systems and Applications

NDSU faculty and research teams have an opportunity to work on an anticipated NDSU program with the Army’s Construction Engineering Research Laboratory (CERL) on R&D related to two BAA areas:

1. Corrosion Control
2. Innovative Coating Systems and Applications

This call for white papers is for potential seed funding to generate research programs relevant to these BAA areas. The long-term goal is to develop productive collaborations to advance research in the identified areas and increase the competitiveness of teams to build research capacity.

It is anticipated that projects will be funded for a 2-year duration. Project funding can be up to $300,000 total cost (direct and indirect).

Learn more and read the white paper requirements here.

White papers must be submitted to ndsu.researchdev@ndsu.edu by June 1, 2022.

Seed Research Proposals on Artificial Intelligence in Energy and Related Infrastructure

The AI SUSTEIN program funded by NSF Track-2 EPSCoR is calling for seed research proposal for 2022-2023 year.

Eligibility:

1. Tenure-track assistant professor at NDSU in STEM areas. Women, and members of other underrepresented populations are highly encouraged to apply.
2. U.S. citizenship and permanent residency are not required.
3. Research experience in energy related infrastructure and/or artificial intelligence.

Funding Information:

1. $15,000 (net/not subjected to F&A) for one year.
2. Number of awards: at least 1.
3. Award period: August 15, 2022 to August 14, 2023 and no extension expected.

Application Submission:

Please e-mail a single pdf copy of the application package to Ying Huang at ying.huang@ndsu.edu by 5:00 PM on June 15, 2022 (Email Subject: 2022 AI SUSTEIN seed grant application). Incomplete or late applications will be returned without review.

The applicants will be notified of the application outcome via e-mail by July 31, 2022. A brief review will be provided along with the notification.

Equipment Repair Match Funding
The Research and Creative Activity Office has a small pool of funds available to provide match to researchers for equipment repair that can be completed by June 15, 2022. If interested in accessing these funds, submit a request and please include:

- details of the equipment to be repaired,
- its use (departmental, college, institution-wide), and
- an estimate / quote of the repair cost.

For departmental / unit requests, priority will be given to equipment that is used by multiple researchers and that has a match of at least 33%. For Service / Recharge Centers and Core Facilities, priority will be given to requests that have at least a 50% match. Funds must be spent no later than June 15, 2022.

Please submit your request to Becky Hellman Tangen (becky.hellman@ndsu.edu).

RECENTLY FUNDED GRANTS


RECENTLY SUBMITTED PROPOSALS

- Xiangfa Wu (PI), Oksana Zholobko (CPI). Degradation mechanisms and durability growth of intermediate-temperature polymer-inorganic composite proton exchange membranes. $531,283 from the National Science Foundation. 9/1/2022 8/31/2025.
- Mijia Yang (PI). BRITE Synergy: AI based bridge network monitoring and maintenance through coupled dynamics among bridge, vehicle, and environmental factors. $310,184 from the National Science Foundation. 1/1/2023 - 12/31/2024.
- Jeremy A Straub (PI). NDDPI Funding to support Bison Cyber Camp in 2022. $19,825 from the ND Department of Public Instruction. 5/1/2022 - 9/30/2022.
- Shuvashis Dey (PI). Incorporation of Deep Learning with Surface Acoustic Wave (SAW) based Radio Frequency (RF) sensors for wireless monitoring of mining truck tyre structural integrity. $79,310 from the Australian Research Admin Pty Ltd. 3/1/2023 - 2/28/2025.
- Shuvashis Dey (PI). Radio Frequency (RF) sensor and Deep Learning based wireless monitoring of conveyor belt structural health for open cut coal mines. $79,310 from the Australian Research Admin Pty Ltd. 3/1/2023 - 2/28/2025.
• Jessica Lynne Lattimer Vold (PI), Ali Amiri (CPI), Yildirim Bora Suzen (CPI). M2M X-Hab Move that Goo. $49,999 from the National Aeronautics and Space Administration. 8/1/2022 - 5/31/2023.
• Zhibin Lin (PI), Hong Pan (CPI), Xingyu Wang (CPI). Accelerating Transition towards Sustainable, Precise, Reliable Hydrogen Infrastructure (Super-H2): Holistic Risk Assessment, Mitigation Measures, and Decision Support Platforms. $1,000,000 from the Department of Transportation. 10/1/2022 - 9/30/2025.
• Mijia Yang (PI). CIVIC-PG Track A: Understanding Failure of Metal Roofs for Extreme Loads Induced by Climate Changes. $50,000 from the National Science Foundation. 11/1/2022 - 4/30/2023.
• Omid Beik (PI) RII Track-4: NSF: An MVDC Wind Generation Scheme with a Multilevel Conversion System: A Partnership with PNNL. $208,750 from the National Science Foundation. 4/17/2023 - 4/16/2025.

RECENT PUBLICATIONS

For 2022, 59 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:


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.