# NDSU COLLEGE OF ENGINEERING COLLEGE HAPPENINGS

June 14, 2022

# FROM THE DEAN

#### New Faculty and Staff in the College of Engineering

I hope you all are enjoying this season of warm weather and long summer evenings as much as I am.

This is also a season when we have wrapped up several important faculty searches. I'm pleased to share some of the new faculty joining our College in the next few months.

- **Clairmont Clementson** will be joining the *Department of Agricultural and Biosystems Engineering* as an assistant professor on June 20. Dr. Clementson's area of focus is bioprocess engineering. He received his Ph.D. in Agricultural Engineering from Purdue University and his M.S. from the University of Illinois at Urbana-Champaign. He has been a research associate and laboratory manager at Purdue University since 2018. Before that, he spent six years as a research scientist for the Ministry of Agriculture in Georgetown, Guyana. [Clementson's LinkedIn Profile]
- **Iris Feng** will be joining the *Department of Agricultural and Biosystems Engineering* as an assistant professor on July 25. Dr. Feng's area is bioenvironmental engineering. Her Ph.D. is in Agricultural and Biological Engineering from Purdue University. She is currently a research associate in the Department of Biological Systems Engineering at the University of Wisconsin-Madison. Before that, she was a postdoctoral fellow at the University of California-Davis. [Feng's LinkedIn Profile]
- **Surya S C Congress** will be joining the *Department of Civil, Construction, and Environmental Engineering* as an assistant professor on August 16. Dr. Congress is a geotechnical engineer focusing on soil stabilization and monitoring infrastructure using innovative aerial sensors on UAVs. He joins us from Texas A&M University, where he works as a senior research engineer. His Ph.D. is in Civil Engineering from the University of Texas at Arlington. [Congress's LinkedIn Profile]
- **Grant Lebahn** will be joining the *Department of Civil, Construction, and Environmental Engineering* as an assistant professor of practice on August 16. Mr. Lebahn received his B.S. in Civil Engineering in 1996 from NDSU. He has worked as a project engineer ('97-'00), project manager ('00-'06), and operations manager ('06-'18) for Hensel Phelps Construction and as the owner of Resource Gravity, LLC since 2018. [Lebahn's LinkedIn Profile]
- **Jiale Xu** will be joining the *Department of Civil, Construction, and Environmental Engineering* as an assistant professor on August 16. Dr. Xu is an environmental engineer focusing on assessing and controlling the impacts of nitrogenous contaminants on drinking water quality using experimental and computational tools. He received his M.S. in Environmental Engineering from the University of Illinois at Urbana-Champaign and his Ph.D. in Civil

Engineering from the University at Buffalo. He had two postdocs, one at the University of Arizona and the second at Georgia Tech. [Xu's LinkedIn Profile]

- **Ajay Kumar Jha** will be joining the *Department of Computer Science* as an assistant professor on August 16. Dr. Jha's focus is on software engineering and mobile security. He joins us from the University of Alberta, where he has been a postdoctoral fellow since 2020. He received his M.S. and Ph.D. in Computer Science from Kyungpook National University in South Korea. [Jha's LinkedIn Profile]
- **Diana Lopez-Soto** will be joining the *Department of Industrial and Manufacturing Engineering* as an assistant professor on August 16. Dr. Lopez-Soto's research is in process improvement through implementing Lean Six Sigma methodology, and solving complex engineering problems using mathematical, statistical and data analysis methods. She is currently an assistant professor at Tecnologico de Monterrey in Mexico. She completed both her Ph.D. in Industrial Systems Engineering and her M.S. in Quality Systems and Productivity at Tecnologico de Monterrey and completed a postdoctoral fellowship at Purdue University. [Lopez-Soto's LinkedIn Profile]
- **Reza Maleki** will be joining the *Department of Industrial and Manufacturing Engineering* as an associate professor of practice on August 16. Dr. Maleki has been working, since 2013, as a senior business advisor for IMPACT DAKOTA, an affiliate of the National Institute of Standards and Technology, where he has worked with client companies across North Dakota and beyond. From 2002 to 2012, he was an Enterprise Scholar Faculty in the Department of Industrial and Manufacturing Engineering at NDSU. From 1998 to 2002, he was the Director of the Polytechnic Center of Excellence and Head of the Engineering Technology and Management Department at South Dakota State University. He received all three of his degrees from NDSU, with his B.S. and M.S. in Industrial Engineering and Management and his Ph.D. in Engineering. [Maleki's LinkedIn Profile]
- **Harun Pirim** will be joining the *Department of Industrial and Manufacturing Engineering* as an assistant professor on August 16. Dr. Pirim's research interests include graph theory, discrete optimization, machine learning with applications in biological networks, social networks, data analytics, and clustering. He received his Ph.D. from Mississippi State University in Industrial and Systems Engineering. From 2012 to 2019, he was an assistant professor at King Fahd University of Petroleum and Minerals, and since 2019 has worked at Mississippi State University as an assistant clinical professor. [Pirim's LinkedIn Profile]
- **S. Prakash Parthiban** will be joining the *Department of Mechanical Engineering* as an assistant professor. Dr. Parthiban's research is in biomaterials science. His interests include vascular tissue engineering, fundamental mechanisms of vessel formation, biomineralization of bone and teeth, fundamental mechanisms of mineral formation, and 3D bioprinting. He'll be joining us from the Department of Mechanical Engineering at the University of Colorado at Boulder, where he's been a research associate since 2020. Before that, he was a research associate in the School of Dentistry at the Oregon Health and Science University. His Ph.D. in Materials Science is from Nagoya University in Japan. [Parthiban's LinkedIn Profile]

We also are pleased to welcome several new staff members to the College of Engineering, including

- Michael Sylskar, Center Coordinator, Center for Bioplastics and Biocomposites, 2/25/22. [Sylskar's LinkedIn Profile]
- **Kirstin Saulsbury**, Project Coordinator, *Department of Civil, Construction, and Environmental Engineering*, 5/17/22. [Saulsbury's LinkedIn Profile]
- Deborah Kvittum, Academic Assistant, Department of Computer Science, 5/30/22. [Kvittum's LinkedIn Profile]
- Eric Hall, Research Engineer, Department of Mechanical Engineering, 6/1/22. [Hall's LinkedIn Profile]

Finally, I'd like to congratulate **Simone Ludwig** on being appointed the permanent Chair of the *Department of Computer Science*, effective July 1.

Which Kigh

IN THE NEWS <u>Student receives Astronaut Scholarship</u> <u>'Empower the next generation of leaders'</u> <u>BisonCyber camp to teach technology skills</u> <u>Making an impact on the future</u>

#### CONGRATULATIONS

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

#### **UPCOMING EVENTS**

Wednesday, August 10, Academic Leaders Orientation and Retreat for Department Chairs/Heads and Deans.

Tuesday, August 16, **New Faculty Orientation**. The New Faculty Orientation is intended for faculty that have started at NDSU since last year's conferences. <u>Register here</u>.

Wednesday, August 17, Annual Faculty/Academic Staff Conference. Register here.

### **OPTIONAL SYLLABUS LANGUAGE**

During the 21-22 academic year, the <u>Equal Opportunity and Title IX Compliance Office</u> and the <u>President's Council for</u> <u>Campus Well-being</u> initiated work on syllabus statement language that focuses on mental health, student resources, and the requirement of mandatory reporting.

The intent of this work was to provide faculty and other instructors with language that acknowledges students may have personal challenges or needs that can be met by a variety of campus resources, and to show care for those needing that type of support. For general information on mandatory reporting for instances of discrimination, harassment, retaliation, or sexual misconduct, please find a syllabi statement you can use from the Equal Opportunity and Title IX Compliance Office <u>here</u>.

Three other variations of the syllabi statement that focus on mental health and student resources can be found <u>here</u>. As we all work toward increased well-being on our campus, the President's Council for Campus Well-being encourages you to consider adding one of the statements for all future syllabi.

### 2022-23 PROMOTION, TENURE AND EVALUATION

The 2022-23 Faculty Promotion, Tenure, and Evaluation (PTE) Materials are now available to download from the Promotion and Tenure website at: <u>https://www.ndsu.edu/facultyaffairs/pte/</u>

This website contains the NDSU PTE Timeline, Guidelines for Promotion and Tenure Portfolio Preparation, Probationary Period Extension Form (per NDSU Policy 352, 3.6), Policy and Procedure Checklist, the Portfolio Cover Sheet, and Information on University-Wide PTE Advisory Committee.

# **Portfolios are due to the Office of the Provost/Faculty Affairs no later than December 30, 2022**. If you have any questions regarding PTE, please contact Canan Bilen-Green (<u>canan.bilen.green@ndsu.edu</u>).

# **FUNDING OPPORTUNITIES**

#### **DEPSCoR: Research Collaboration**

The Department of Defense (DoD) announces the fiscal year 2022 (FY22) Defense Established Program to Stimulate Competitive Research (DEPSCoR) – Research Collaboration (RC).

This funding opportunity [FOA-AFRL-AFOSR-2022-0006] aims to create basic research collaborations between a **pair** of researchers, namely 1) Applicant / Principal Investigator (PI), a full-time faculty member who has never served as a PI on a prior DoD directly funded research Prime award and 2) Collaborator / co-Principal Investigator (co-PI), an investigator who will provide mentorship to the Applicant and has served as a PI on a DoD directly funded research Prime award active between 1 October 2015 and 30 September 2022. This structure is aimed at introducing potential applicants to the DoD's unique research challenges and its supportive research ecosystem.

#### White paper deadline: September 19, 2022

# DoD: C4ISR, Information Operations, Cyberspace Operations and Information Technology System Research, Cryogenics & Quantum

The Naval Information Warfare Center, Pacific (NIWC Pacific) is soliciting white papers and proposals for areas relating to the advancement of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities, enabling technologies for Information Operations and Cyberspace Operations, and Information Technology systems. This BAA [<u>N66001-22-S-4703</u>] is for procurement contracts, grants, cooperative agreements, and other transactions. Proposed research should investigate unique and innovative approaches for defining and developing next generation integratable C4ISR capabilities and command suites.

This BAA is open through June 2023

## **RECENTLY FUNDED GRANTS**

- Shuvashis Dey (PI). Development of Low-Cost, Printable Chipless Radio Frequency Identification (RFID) based Sensors for Leaf Wetness Detection. \$4,400 from the NDSU Foundation & Alumni Association. 6/1/2022 -11/30/2023.
- Shuvashis Dey (PI). Non-Invasive Monitoring of Arterial Waveform to Determine Biophysiological Parameters using Radio Frequency Identification (RFID) Based Sensing Technique. \$5,000 from the NDSU Foundation & Alumni Association. 6/1/2022 11/30/2023.
- Shuvashis Dey (PI). Enabling Outdoor Measurement and Field Analysis of RF Antennas and Sensors for Internet of Things (IoT) Applications. \$1,000 from the NDSU Foundation & Alumni Association. 6/1/2022 11/30/2023.
- Di Wu (PI). Assessing grid-accommodable capacity with oscillation stability constraints in power systems with high penetration of renewable resources. \$1,000 from the NDSU Foundation & Alumni Association. 6/1/2022 5/31/2023.
- Xiangfa Wu (PI), Oksana Zholobko (CPI). Direct generation of electricity from agricultural residues-Biomass flow fuel cells. \$5,000 from the NDSU Foundation & Alumni Association. 7/1/2022 6/30/2023.
- Jeremy A Straub (PI). NDDPI Funding to support Bison Cyber Camp in 2022. \$20,000 from the ND Department of Public Instruction. 5/1/2022 9/30/2022.

# **RECENTLY SUBMITTED PROPOSALS**

- Long Jiang (PI). Development of soymeal-based baling twine with high digestibility. \$47,962 from the ND Soybean Council. 7/1/2022 6/30/2023.
- Leon George Schumacher (PI), Joao Paulo Cassol Flores (CPI), Kenneth Hellevang (CPI), Xin Sun (CPI).
  Enhancing educational opportunities for the next generation of precision agriculture practitioners. \$308,948 from the CHS Foundation. 7/1/2022 6/30/2023.
- Ademola Monsur Hammed (PI), Niloy Chandra Sarker (CPI). Scaleup optimization of green ammonia fermentation processes for organic and biofertilizer production. \$75,000 from the Foundation for Food & Agricultural Research. 1/1/2023 12/31/2024.
- Danling Wang (PI). A Miniaturized Breath Ketone Sensor for Diabetes Employing Novel Functionalized Nanomaterials and Simple MEMS-based Readout Techniques. \$199,224 from the National Institutes of Health. 4/1/2023 - 3/31/2025.

# **RECENT PUBLICATIONS**

For 2022, 65 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:

- Rudie, Anna, Anna Marie Schornack, Qiang Wu, Qifeng Zhang, and Danling Wang. 2022. "Two-Dimensional Ti<sub>3</sub>C2 MXene-Based Novel Nanocomposites for Breath Sensors for Early Detection of Diabetes Mellitus." *Biosensors-Basel* 12 (5): 332. <u>https://doi.org/10.3390/bios12050332</u>.
- Straub, Jeremy, Matthew Spradling, and Bob Fedor. 2022. "Assessment of Consumer Perception of Online Content Label Efficacy by Income Level, Party Affiliation and Online Use Levels." *Information* 13 (5): 252. <u>https://doi.org/10.3390/info13050252</u>.

See your name on this list? Help us get the word out about your amazing work by submitting it as a **Breakthrough Alert**. <u>This online form</u> 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.

