

COLLEGE HAPPENINGS

August 21, 2018

FROM THE DEAN

Welcoming New Faces to the College

The start of the new academic year is one of the most exciting times on campus as a new crop of undergraduate and graduate students begin their careers as Bison engineers. Yesterday we welcomed nearly 500 new undergraduate and transfer students to the College of Engineering at the New Student Welcome event in the Bentson-Bunker Fieldhouse. Thanks to all who helped welcome the new and returning students to campus, and please continue to point any lost young scholars you may happen upon to where they need to go as they transition to their new college home.

There are also a number of new faces among the faculty and staff in the college.

- In the dean's office, we will be welcoming **Jill Stevens** as the new *Office Coordinator and Assistant to the Dean*, replacing Sheri Eberle. Jill, who has worked as an office assistant in Human Resources and Payroll at NDSU for the past five years, will begin her new role in the College of Engineering on August 27. She obtained her Bachelor of Music degree from Moorhead State University.
- In the Department of Construction Management and Engineering, I'm pleased to welcome **Kayla Dewey** as the new *Assistant to the Chair*, replacing Ann Denney. Kayla, who attended Shanley High School in Fargo and then went on to earn her BS in Business Management and Business Marketing from University of Minnesota Crookston, spent the past five years as an accountant at Archway Marketing Services at Microsoft. She began her new role at NDSU on August 16.
- In addition to new *department chair* **David Steward**, who arrived from Kansas State University on July 1, the Department of Civil and Environmental Engineering is pleased to welcome three new assistant professors. **Trung Le** joined the college as an *Assistant Professor* on August 16. Trung obtained his Ph.D. from University of Minnesota in 2011 and has worked most recently as a research scientist at the Medical College of Wisconsin. His research interests are in high performance computing, computational fluid dynamics and fluid-structure interactions. **Beena Ajmera** also joined the college as an *Assistant Professor* on August 16. Beena received her Ph.D. from Virginia Tech in 2015 and has worked since 2015 as an assistant professor at California State University, Fullerton. She has worked on a wide range of projects related to geotechnical engineering and engineering education. Finally, **Wenjie Xia** joined the college as *Assistant Professor* on August 16. Wenjie earned his Ph.D. at Northwestern University (NU) in 2016. He joins us from a joint postdoctoral fellowship at National Institute of Standards and Technology (NIST) and NU. His research expertise is in multi-scale modeling of materials and mechanics with an emphasis on multiphysics problems for modern applications in structure/infrastructure, bioengineering and energy.
- The Electrical and Computer Engineering (ECE) Department welcomes **Sayan Roy** as a *Visiting Assistant Professor* effective August 16. Sayan obtained his PhD in Electrical and Computer Engineering at NDSU in 2017

and spent the past year as a postdoctoral fellow at the University of North Dakota. He was hired to fill a hole in the ECE department following the recent and relatively sudden resignations of Debasis Dawn, Na Gong and Jinhui Wang. In addition, we have hired **Dali Sun** as an *Assistant Professor* effective December 31, 2018. Dali is currently a postdoctoral research associate at Arizona State University's Biodesign Institute. He obtained his Ph.D. in Bioengineering at the University of Tokyo in 2015. Prior to his academic career he had five years of industrial experience focusing on sensor electronics.

- In addition to the new *department chair* **David Grewell**, who arrived from Iowa State University on August 1, the Department of Industrial and Manufacturing Engineering is pleased to welcome **Trung Le** (he goes by **Tim**, which will help to prevent confusion with the other Trung Le in CEE). Tim received his Ph.D. from Oklahoma State University in 2013. After a postdoctoral appointment at Texas A&M, he has spent the past three years as an assistant professor at Vietnam National University. His research is focused on advanced analytics with an emphasis on smart health systems and prognostic analytics in healthcare.
- The newest faculty member in the Department of Agricultural and Biosystems Engineering (ABEN) Department is **Nurun Nahar**, an *assistant professor of practice*. She will be teaching courses in post-harvest technology, bioenergy and other agricultural system related courses. Her research focuses on agricultural product utilization and bioenergy. She received a Ph.D. from NDSU in 2017 in Environmental Sciences and Conservation (ECS).
- In the Department of Mechanical Engineering, we are pleased to welcome **Zhegping Zhou** as an *Assistant Research Professor* effective August 16, 2018. Zhengping, who obtained his PhD in the Materials and Nanotechnology program at NDSU in 2014, has spent the past three years as a senior research associate at Virginia Tech. He is working with Professor Xiangfa Wu on a Department of Energy funded project on low-pressure electrolytic ammonia production.



IN THE NEWS

[Student cybersecurity teams compete nationally](#)

[Professor named Professional Engineer of the Year](#)

[Students awarded Minnesota Surveyors and Engineers Society scholarships](#)

[Moore Engineering's Lysne named ACEC Young Professional of the Year](#)

CONGRATULATIONS

Professor **Ken Hellevang** from the **Department of Agricultural and Biosystems Engineering** was [named the Professional Engineer of the Year](#) by the American Society of Agricultural and Biological Engineers. Hellevang was recognized for his application of engineering principles to crop postharvest engineering, energy efficiency, building moisture and mold problems, and restoration of flooded buildings.

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

Friday, August 24th, **ABEN Seminar Series**. Dr. Sindhuja Sankaran from Washington State University will be presenting her talk “**Professional Journey from Graduate School to Academic Career.**” 10:00 a.m. NDSU Memorial Union Meadow Lark room.

GATEWAYS-ND PROGRAM

Applications for the [Gateways-ND program](#), Cohort Four, are **due Friday, September 14, 2018**. The program offers 30 total spots for STEM faculty. Faculty from ALL STEM disciplines are invited to apply. More than a dozen current COE faculty have participated in the program.

About Gateways-ND

Gateways-ND is a five-year National Science Foundation-funded faculty and staff instructional development program, hosted by NDSU's Office of Teaching and Learning, designed to offer relevant, collaborative, and sustained support to NDSU educators. [Apply here](#).

NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM

Seniors or 1st/2nd-year graduate students who are capable researchers should consider applying for the prestigious National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP), which provides an annual \$34,000 stipend and \$12,000 to the institution for three years of graduate school.

The NDSU Center for Writers offers an 8-week, 1 credit class, UNIV 440/640, which helps students to plan and write their applications. In the last 3 years, 5 students who took the class were awarded GRFPs.

Applications are due at the end of October. More information about the GRFP can be found [HERE](#).

More information about the class can be found [HERE](#), or by contacting Enrico Sassi (enrico.sassi@ndsu.edu).

FUNDING OPPORTUNITIES

DOE ARPA-E: Novel Heat Exchanger Technologies

The Advanced Research Projects Agency – Energy (ARPA-E) has issued a funding opportunity announcement (FOA) of up to \$35 million for the High Intensity Thermal Exchange through Materials and Manufacturing Processes ([HITEMMP](#)) program, to develop new approaches and technologies for the design and manufacture of high temperature, high pressure, and highly compact heat exchangers.

Additional information, including the full FOA ([DE-FOA-0001970](#)) and how to find project teaming partners, is available on ARPA-E's online application portal, [ARPA-E eXCHANGE](#).

Concept Paper deadline: 8:30 a.m. on September 12, 2018

FACULTY AWARD NOMINATIONS

Nominations are open for faculty awards processed through the Office of the Provost.

The deadline for nominations for the [Phi Kappa Phi Faculty Lectureship Award](#) is August 28, 2018.

The deadline for nominations for the [Engberg, Hogoboom, Gehrts Professorships](#) is September 28, 2018.

Nominations may be submitted by faculty, staff, students, alumni, unit administrators or deans. For information on faculty awards please see the [awards page](#).

PROMOTION AND TENURE

The 2018-19 PTE Materials are now available to download from the [Promotion and Tenure website](#). This website contains the Guidelines for Promotion and Tenure Portfolio Preparation, Policy and Procedure Checklist, the Portfolio Cover Sheet, and the NDSU PTE Timeline.

There are also several PTE Information and Training Sessions scheduled:

Information Session for Candidates (*those who will apply for promotion and/or tenure this academic year*).

- Friday August 24, 12:00-1:00 pm, Badlands, MU. [Register here](#).
- Tuesday August 28, 3:30-4:30 pm, Mandan, MU. [Register here](#).

PTE Training for Reviewers

- Wednesday August 29, 2:00-4:00 pm, Mandan, MU. [Register here](#).
- Thursday September 6, 2:30-4:30 pm, Mandan, MU. [Register here](#).
- Tuesday September 11, 9:30-11:30 am, Mandan, MU. [Register here](#).
- Wednesday September 19, 9:00-11:00 am, Rose, MU. [Register here](#).

New Faculty PTE Session

- Wednesday November 7, 3:00-4:00 pm, Rose, MU. [Register here](#).
- Thursday November 8, 3:30-4:30 pm, Mandan, MU. [Register here](#).

RECENTLY SUBMITTED PROPOSALS

- Mijia Yang (PI). REU Site: Research Experiences for Undergraduate Students on Biological Concrete Materials. \$383,493 from the National Science Foundation. 08/01/2019 – 07/31/2022.
- Benjamin Davis Braaten (PI). Electronically Tunable Materials and Devices using Subwavelength Particles. \$114,000 from the Department of Defense. 09/01/2018 – 08/31/2019.
- Danling Wang (PI). Investigating on New Functional Semiconducting Nanomaterial, K2W7O22 for Application in Chemiresistive Gas Sensors. \$24,493 from the National Aeronautics and Space Administration. 08/16/2018 – 05/05/2019.
- Di Wu (PI). Advanced Technologies for Large-scale Solar Energy Integration. \$36,147 from the National Aeronautics and Space Administration. 09/01/2018 – 04/30/2019.
- Dharmakeerthi Nawarathna (PI). Low-cost, Highly Sensitive and Speedy Detection of Epigenetic Biomarkers in Blood for Monitoring the Astronauts' Health During Space Explorations. \$36,250 from the National Aeronautics and Space Administration. 08/16/2018 – 05/05/2019.
- Yechun Wang (PI). Microfluidic Studies on Microparticle Impact During Erosion Corrosion. \$35,690 from the National Aeronautics and Space Administration. 08/16/2018 – 05/05/2019.
- Jordi Estevadeordal (PI). Advanced Velocimetry Studies for Supersonic Wind Tunnel Research at NASA. \$34,998 from the National Aeronautics and Space Administration. 08/16/2018 – 05/05/2019.
- Adam Curtis Gladen (PI). Sugarbeet Pulp Derived Nanocellulose: A Novel Framework for a New Thermochemical Storage Material. \$197,011 from NIFA. 01/01/2019 – 12/31/2020.

RECENT PUBLICATIONS

For 2018, 78 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:

- Bigdeli, Yasser, Michele Barbato, Maria Teresa Gutierrez-Wing, Charles D. Lofton, Kelly A. Rusch, Jongwon Jung, and Jungyeon Jang. 2018. "Development of New PH-Adjusted Fluorogypsum-Cement-Fly Ash Blends: Preliminary Investigation of Strength and Durability Properties." *Construction and Building Materials* 182 (September): 646–56. <https://doi.org/10.1016/j.conbuildmat.2018.06.086>.
- Li, Shangyuan, Moude Luan, Deqiang Gan, and Di Wu. 2018. "A Model-Based Decoupling Observer to Locate Forced Oscillation Sources in Mechanical Power." *International Journal of Electrical Power & Energy Systems* 103 (December): 127–35. <https://doi.org/10.1016/j.ijepes.2018.05.014>.

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*.

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