

COLLEGE HAPPENINGS

April 30, 2019

FROM THE DEAN

The Most Exciting Time of the Year

It is hard to believe that we have less than two weeks left in the 2018-2019 academic year. While everyone is busy making a final push to the finish line for the semester, this time of year also offers many events and opportunities to celebrate and recognize outstanding students and colleagues. Last week, some of these activities included the CEE Department Picnic, CME Department Senior Dinner and Awards Reception, IME Senior Capstone Banquet, the Society of Women Engineers (SWE) Banquet, and three separate departmental advisory board meetings. This week includes the Senior Design Expo for the ME, ECE, and ABEN Senior Design Projects on Thursday, and the College of Engineering Advisory and Advancement Board Meeting on Friday. The end of semester festivities will conclude next week with the Celebration of Faculty Excellence (Thursday, May 9 at 3:00 in the Plains Room of the MU), the Order of the Engineer ceremony (Friday, May 10 at 3:00 in AG Hill), and Commencement (Saturday, May 11 at 9:00) followed by a College of Engineering reception in the Fargodome after the graduation ceremony. I hope you have reserved time to participate in some of these activities as we wind down the semester. I particularly encourage you to attend the Order of the Engineer ceremony and the graduation reception following commencement.

During some of the events the past few weeks, I've had a chance to talk with a number of our graduating students about their experiences in the College of Engineering over the last 4 or 5 years. I left these discussions optimistic about the quality of our students and the strength of our academic programs. It is very clear from talking with the students that we have a faculty and staff that really care for them, and who place immense value on educating and empowering them for success. One theme that emerged from these talks is the relief and excitement that the students are feeling to be graduating next week. I don't think there is a more exciting time of year at an academic institution than these next two weeks, culminating with commencement.



IN THE NEWS

[Student innovations draw industry attention at Clean Snowmobile Challenge](#)

[NDSU faculty member's research makes glass more predictable](#)

[STEM Kids Camp registration open](#)

[NDSU EXPLORE award winners announced](#)

CONGRATULATIONS

Fardad Azarmi from the **Department of Mechanical Engineering** has been promoted to Full Professor.

Achintya Bezbaruah from the **Department of Civil and Environmental Engineering** has been awarded the Walter F. and Verna Gehrts Presidential Professorship.

Ben Braaten from the **Department of Electrical and Computer Engineering** has been promoted to Full Professor.

Jacob Glower from the **Department of Electrical and Computer Engineering** has been promoted to Full Professor and awarded the Peltier Award for Teaching Innovation.

Xinhua Jia from the **Department of Agricultural and Biosystems Engineering** has been promoted to Full Professor.

Samee Khan from the **Department of Electrical and Computer Engineering** has been promoted to Full Professor.

Zhibin Lin from the **Department of Civil and Environmental Engineering** has been approved for tenure and promoted to Associate Professor.

Beena Ajmera, Long Jiang, Halis Simsek, Dali Sun, Yechun Wang, Di Wu, Xiangfa Wu, Wenjie Xia, and Ravi Yellavajjala have all been awarded grants by the NDSU Foundation and Alumni Association.

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

CELEBRATION OF FACULTY EXCELLENCE

You'll have a chance to help honor College of Engineering faculty who earned awards, promotions and NDSU Foundation grants at the 2019 Celebration of Faculty Excellence.

The event is scheduled for Thursday, May 9 at 3:00 p.m. in the Memorial Union Plains Room. Registration is appreciated but not required. [Register here.](#)

UPCOMING EVENTS

Wednesday, May 1, **open forum sponsored by FORWARD and the Commission on the Status of Women Faculty.** The commission is soliciting feedback on NDSU Policies 103 and 304 that provide guidance and structure when filling administrative, faculty, and staff positions. 3:30 – 4:40 p.m. in the Memorial Union Century Theatre.

Thursday, May 2, **Senior Design Expo.** 11:00 a.m. – 2:00 p.m. Memorial Union Great Plains Ballroom. The event will showcase student projects from Agricultural and Biosystems Engineering, Electrical and Computer Engineering, and Mechanical Engineering.

Tuesday, May 7, **Industry-University Partnerships Lunch and Learn.** RCA Vice President Jane Schuh and IME Chair David Grewell will discuss the industry-university partnerships program. [Learn more here.](#) [Register here.](#)

Friday, May 10, **Order of the Engineer Induction Ceremony.** 3:00 p.m. in Room 112 of the A. Glenn Hill building. A small reception will follow in the atrium, light refreshments will be served.

Saturday, May 11, **NDSU Spring Commencement**. The ceremony for the College of Engineering will be held at 10:00 a.m. at the Fargodome.

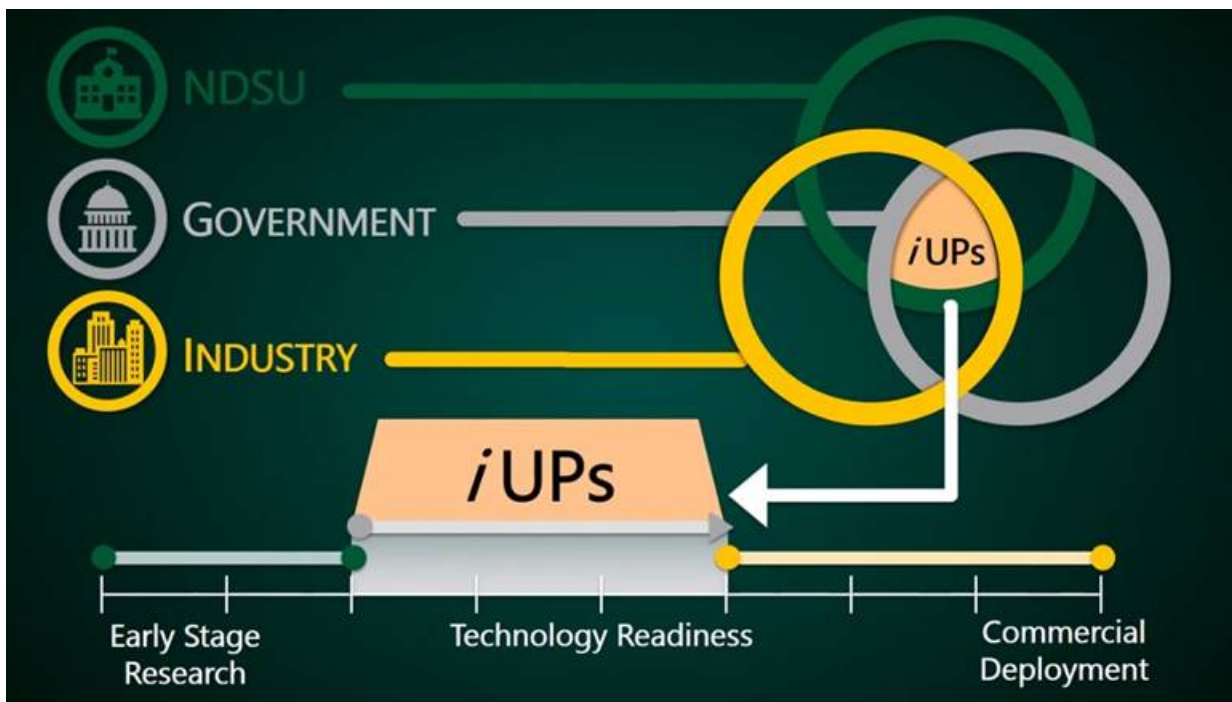
Saturday, May 11, **College of Engineering Graduation Reception**. The reception will be held in the Fargodome, Rooms 201-202, immediately following Commencement. No RSVP is necessary.

INDUSTRY-UNIVERSITY PARTNERSHIPS LUNCH AND LEARN

Tuesday, May 7 | 11:00AM-1:30PM
Memorial Union Prairie Rose Room

Join Vice President for Research and Creative Activity Jane Schuh and Industrial and Manufacturing Engineering Department Chair David Grewell as they discuss industry-university partnerships (iUPs), an innovative model for NDSU that leverages NDSU researchers, industry partnerships, and governmental support. By building teams and developing a nimble research model now, we can put NDSU researchers in a position to quickly respond to industry needs and create the future through innovation and partnerships.

Click the picture to learn more.



[Register to attend >>](#)

This event is co-hosted by the Provost's Office and the Research and Creative Activity Office.

NEW HIRES

Umamaheswara Rao Tida has been hired as a new Assistant Professor in the **Department of Electrical and Computer Engineering**.

Tida is set to graduate from the University of Notre Dame in May with a Ph.D. in Electrical Engineering. His research interests include Three-Dimensional Integrated Circuits, VLSI Computer-Aided-Design, Sensors, On-Chip Device Modeling and Neuromorphic Computing.

He is scheduled to start at NDSU on August 1.

COMMUNITY OF RESPECT TRAINING

The objective of the Community of Respect seminars is to improve inter-cultural competencies and provide hands-on strategies to assist participants in learning how to work more effectively with colleagues and students whose cultural backgrounds are different from their own. The curriculum is organized into four separate modules with distinct learning outcomes outlined in each.

Module 1: Cultural and Cultural Diversity (May 29 from 10:00 a.m. to Noon in the Memorial Union Hidatsa Room)

Module 2: Redefining Diversity (June 12 from 10:00 – 11:30 a.m. in the Memorial Union Hidatsa Room)

Module 3: Microaggressions (June 26 from 9:30 to 11:00 a.m. in the Room of Nations)

Module 4: Confronting Bias (July 10 from 1:00 to 2:30 p.m. in the Room of Nations)

To register go to: https://www.ndsu.edu/equity/education_and_training/

If you have questions please contact Angela Bachman at angela.bachman@ndsu.edu or 1-7150

SUMMER NATURE CAMP OPPORTUNITY FOR FACULTY

During the first two weeks in June, we will have 25 Native American tribal college students on the NDSU campus for the ND EPSCoR-sponsored NATURE Summer Camp. Faculty will once again have the opportunity to meet these young people and show them the enjoyment they receive from their scientific quests.

There is also an opportunity to work with 1 to 3 students during the 2nd week of camp, so they can get hands-on experience in the research that you do and then do a presentation about it to their peers.

To take part, go to [the doodle poll](#). If you have any questions about this opportunity please email [Scott Hanson](#).

SUSTAINABLE AGRICULTURE AND ENVIRONMENT CONFERENCE

Halis Simsek and **Igathinathane Cannayen** from the **Department of Agricultural and Biosystems Engineering** are among those organizing the “6th International Conference on Sustainable Agriculture and Environment” scheduled for October 3-5, 2019 in Konya, Turkey.

Details of this conference can be [found here](#).

You can [submit your research abstract](#) if the topics/scope of the conference is fit to your research area.

FUNDING OPPORTUNITIES

NSF: Faculty Early Career Development (CAREER) Program

The [Faculty Early Career Development \(CAREER\) Program](#) [NSF 17-537] is a National Science Foundation (NSF)-wide activity that offers the NSF's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. This premier program emphasizes the importance NSF places on the early development of academic careers dedicated to stimulating the discovery process in which the excitement of research is enhanced by inspired teaching, enthusiastic learning, and disseminating new knowledge. Effective integration of research and education generates a synergy in which the process of discovery stimulates learning, and assures that the findings and methods of research and education are quickly and effectively communicated in a broader context and to a large audience. A CAREER award typically totals a minimum of \$400,000 over a five year duration. [View Frequently Asked Questions](#)

[\(FAQs\) >>](#)

Application deadline varies depending on discipline: July 17 – 19, 2019

RECENTLY FUNDED GRANTS

- Yao Yu (PI). Energy Simulation for Dean Residence. \$2,000 from Meadowlark. 03/01/2019 – 06/07/2019.
- Dali Sun (PI). Development of the Product-Oriented Learning in the “Instrumentation for Engineer” (ECE 483/693) course. \$500 from the NDSU Foundation and Alumni Association. 03/25/2019 – 04/12/2019.
- Long Jiang (PI). Improving bactericides effectiveness on wheat bacterial leaf streak by using cellulose nanofibers as the bactericides delivery vehicle. \$16,963 from the NDSU Foundation and Alumni Association. 07/01/2019 – 12/31/2020.
- Wenjie Xia (PI). Multiscale Modeling of Biopolymer Foams for Advancing their Mechanical Performance. \$5,000 from the NDSU Foundation and Alumni Association. 08/16/2019 – 11/15/2019.
- Di Wu (PI). Analysis of line failures in a graph theoretical framework for blackout prevention in power grids. \$1,000 from the NDSU Foundation and Alumni Association. 09/01/2019 – 08/31/2020.
- Halis Simsek (PI). Novel application of bacteriophage treatment for biocontrol of biological foaming and bulking in sugarbeet wastewater effluent. \$4,860 from the NDSU Foundation and Alumni Association. 06/01/2019 – 10/01/2019.
- Yechun Wang (PI), Long Jiang (CPI). Degradation of Silk Fibroin Scaffold for Knee Cartilage Replacement. \$5,000 from the NDSU Foundation and Alumni Association. 04/19/2019 – 10/18/2020.
- Beena D Ajmera (PI). Rainfall-Intensity Duration Threshold Curves for Post-Wildfire Debris Flows. \$1,000 from the NDSU Foundation and Alumni Association. 06/15/2019 – 12/14/2020.
- Xiangfa Wu (PI). NDSU Development Foundation: High-Temperature Polymer Electrolyte Membranes (PEMS) for Direct Bioethanol Fuel Cells. \$5,000 from the NDSU Foundation and Alumni Association. 07/01/2019 – 12/31/2020.
- Ravi Kiran Yellavajjala (PI). Low cost bio-based ionic liquids from corn fructose for corrosion inhibition in pipelines. \$2,500 from the NDSU Foundation and Alumni Association. 05/01/2019 – 08/15/2020.
- Dong Cao (PI). Development of a High Temperature and High Power Testbed for GaN HMET /SiC based Switching Power Converter for Long-Duration Venus Surface Operations. \$90,249 from the National Aeronautics and Space Administration. 01/16/2019 – 01/16/2020.

RECENT PUBLICATIONS

For 2019, 41 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:

- Bajwa, Dilpreet S., Sushil Adhikari, Jamileh Shojaeiarani, Sreekala G. Bajwa, Pankaj Pandey, and Saravanan R. Shanmugam. 2019. “Characterization of Bio-Carbon and Ligno-Cellulosic Fiber Reinforced Bio-Composites with Compatibilizer.” *Construction and Building Materials* 204 (April): 193–202. <https://doi.org/10.1016/j.conbuildmat.2019.01.068>.
- Le, Trung Bao, Mohammed S. M. Elbaz, Rob J. Van der Geest, and Fotis Sotiropoulos. 2019. “High Resolution Simulation of Diastolic Left Ventricular Hemodynamics Guided by Four-Dimensional Flow Magnetic Resonance Imaging Data.” *Flow Turbulence and Combustion* 102 (1): 3–26. <https://doi.org/10.1007/s10494-018-0003-7>.
- Pandiselvam, R., M. R. Manikantan, S. Sunoj, S. Sreejith, and Shameena Beegum. 2019. “Modeling of Coconut Milk Residue Incorporated Rice-Corn Extrudates Properties Using Multiple Linear Regression and Artificial Neural Network.” *Journal of Food Process Engineering* 42 (2): e12981. <https://doi.org/10.1111/jfpe.12981>.
- Zhou, Zhengping, Jiawei Gong, Yichen Guo, and Linqin Mu. 2019. “Multifunctional Hybrid Nanomaterials for Energy Storage.” *Journal of Nanomaterials*, 3013594. <https://doi.org/10.1155/2019/3013594>.

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.

