

Issue 13



SCHOOL OF NUCLEAR ENGINEERING CHRONICLES

Legend has it that the unit 'barn' was established in 1942 by physicists M.G. Holloway and C.P. Baker while they were having dinner at the Purdue Memorial Union. They came up with the name because 10-24cm<sup>2</sup> is "as big as a barn" in the vast midwestern field. Professor Alex Sesonske (School Head, 1966–1973) taught in his class that the term came from the common Midwest expression, "someone was such a bad shot at hunting that they couldn't hit the broad side of a barn.", implying that the probability of neutrons passing through nuclei to cause fission are so rare, their aim could be equated to that of bad hunters.



## Message from The Head

Dear Friends & Family of Nuclear Engineering,

As we approach the end of the summer semester, we look forward to welcoming our students back to campus. I extend my continued gratitude to our faculty, staff, and students who have dedicated their time and efforts into increasing the global success and visibility of our school. An incredible year is on the horizon, as new faculty members Hitesh Bindra and Xiaoyuan Lou will join NE as associate professors this fall, bringing with them their key research and teaching expertise.

In addition, this issue of the barn Chronicles features groundbreaking news including the University's joint collaboration with Duke Energy to explore the feasibility of nuclear power to achieve a carbon-free campus. As construction wraps up on the Gateway Complex, we are excited to move into our new home very soon! Please visit our website and don't forget to follow us on our social media accounts for updates on important news to come.

Wishing you and yours a wonderful rest of the summer,

Hail Purdue and Boiler Up!

*Seungjin Kim*

*Capt. James F. McCarthy, Jr. and Cheryl E. McCarthy*

*Head of the School of Nuclear Engineering*

*Purdue University*

Click [here](#) to visit the school website.

### Online MNE Now Accepting Applications



### FEATURED STORIES

#### Purdue and Duke Energy to explore potential clean nuclear power source for campus

Purdue University and Duke Energy announced in April that they plan to jointly explore the

feasibility of using advanced nuclear power to meet the campus' long-term energy needs. They intend to study the power produced through Small Modular Reactors (SMRs). The initiative is led by an executive advisory, consisting of expert leaders from the public and private sectors.

[Read more here](#)



## NE welcomes new faculty members Hitesh Bindra and Xiaoyuan Lou

The Purdue University School of Nuclear Engineering (NE) is excited to welcome two new faculty members, Hitesh Bindra and Xiaoyuan Lou. They will join the department this fall semester.



[Read more here](#)

## Hany Abdel-Khalik and Stylianos Chatzidakis receive 2022 DOE Research and Development Awards

The U.S. Department of Energy has awarded a total of \$3.05 million to three Purdue Engineering faculty through its Nuclear Energy University Program (NEUP), including NE faculty, Hany Abdel-Khalik and Stylianos Chatzidakis. The NEUP seeks to maintain U.S. leadership in nuclear research across the country by providing top science and engineering faculty and their students with opportunities to develop innovative technologies and solutions for civil nuclear capabilities.

[Read more here](#)



## Destiny White becomes first Black woman to earn BS in nuclear engineering at Purdue

Destiny White didn't set out to be the first Black woman to graduate with a bachelor's degree from Purdue University's School of Nuclear Engineering, but on May 13, she did just that. White's path to nuclear arguably was paved by what she didn't learn in her primary and secondary education.

[Read more here](#)



## *Student, Faculty, & Staff Achievements*

### **NE undergraduates mark Spring 2022 with commencement**

This May, 15 undergraduate students at the Purdue University School of Nuclear Engineering (NE) graduated! We are very proud of them and have no doubt that they will go on to achieve incredible things in their careers.



### **Teams NRC and RGA recognized for Senior Capstone Design projects**

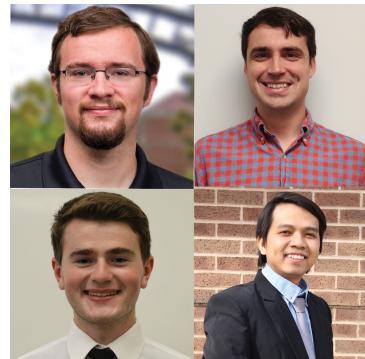
The Purdue University School of Nuclear Engineering (NE) held its annual Senior Design Project showcase. Based on evaluations, the NRC-project won. In addition, the RGA Labs, Inc.-sponsored team won the Industry Impact Award at the College of Engineering's inaugural Design Expo.



Read more [here](#)

### **Undergraduate and graduate students receive major awards**

Four students at the Purdue University School of Nuclear Engineering (NE) received major global and domestic awards this Spring. Jacob Halpern received the Astronaut Scholarship, granted by the Astronaut Scholarship Foundation (ASF). Muhammad Rizki Oktavian won the Best Paper Award at the 2022 American Nuclear Society (ANS) Student Conference. Nathan Boyle was awarded a US Intelligence Community Postdoctoral Fellowship. Drew Ryan won the Best Movie Award at the 19th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH 19).



Read more [here](#).

### **Faculty, staff, and students celebrated at NE Spring Recognition Seminar**

Faculty, staff, and students received various internal and external awards at the department's Spring Recognition Seminar.

Read more [here](#)



## Students recognized at induction ceremony for Alpha Nu Sigma Honors Society (ANS)

The Purdue University School of Nuclear Engineering (NE) was honored the host the Alpha Nu Sigma National Honor Society Recognition Dinner.

Read more [here](#)



## NE staff honored with Bravo Awards

The Purdue School of Nuclear Engineering (NE) awarded three staff members Bravo Awards this year. Teresa Luse, Ashvini Malshe, and True Miller were recognized for their extraordinary achievements that helped the University progress in their mission and increase the morale of its faculty and staff.

Read more [here](#)



## Purdue Gateway Complex Update

We are almost there! NE is expected to move into our new home, the Gateway Complex, this December. Our new state-of-the-art facilities will improve student learning, industry partnerships, virtual labs, and job-ready education. SNE will be on the fifth floor, overlooking the Potter Engineering Center.