



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^{-24}cm^2 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,

We are reaching the end of Spring semester and there are many exciting things unfolding at NE. I am very appreciative of the hard work and enthusiasm our faculty, staff and students have put into making our school stand out nationally and globally.

This issue features our recent key achievements including that of a group of our students testifying at the Indiana Statehouse in favor of a bill supporting the installation of SMRs, which later passed! 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 continued health and success. 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

NE students testify for SMR bill at Indiana Statehouse

Earlier this semester, a group of NE students traveled to the Indiana Statehouse to testify in favor of SB 271, about the installation of SMRs, in front of the Senate. NE undergraduate students Elizabeth Bramer and Morgan Smith presented their testimonies as private citizens and emphasized the importance of bringing nuclear power to Indiana. Bramer and Smith are also President and Vice President of Purdue's Women in Nuclear chapter, respectively, and members of ANS. The group was accompanied by ANS faculty advisor, assistant professor Stylianos Chatzidakis. The bill later passed after moving forward through the House.



NE's Tsoukalas is director of new Center for Intelligent Energy Systems

With a main objective of advancing artificial intelligence (AI) approaches related to energy in the pursuit of smarter energy systems, the College of Engineering in fall 2021 authorized the new Center for Intelligent Energy Systems (CiENS). Lefteri Tsoukalas, professor in Purdue's School of Nuclear Engineering, is the center's director.

Read more [here](#).



SNE continues to play leading role in the OECD/NEA Global Forum

SNE has sought out to be on forefront of initiatives to address issues that affect the areas of policy, education and research in nuclear engineering and science. As one of a handful of universities invited to join among 13 other countries, Purdue leads the Working Area on achieving gender balance in the nuclear engineering and technology and academic workforces.



Read more [here](#).

Hany Abdel-Khalik contributes to NSF-funded AI endeavor

Artificial intelligence (AI) has grown to be viewed as a magical tool. The nearly human intelligence we have taught machines to develop and use has become essential to advancing science, engineering and security. From the smart fridge to the smart grid, AI leverages unprecedented levels of available data and computer power, offering tremendous potential to uncover hidden patterns in big data for scientific discovery and performance improvement.



Read more [here](#).

Rusi Taleyarkhan's research featured on cover of *British Royal Society Journal*

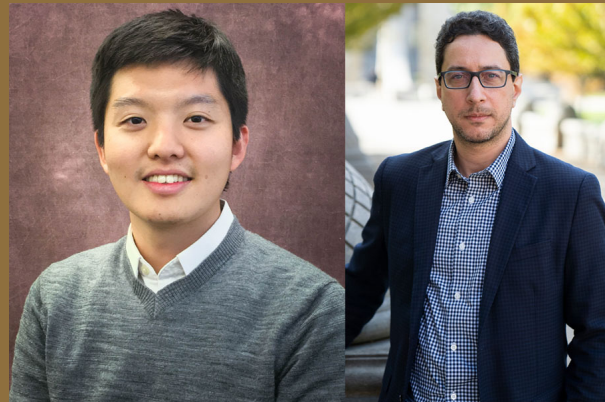
Rusi Taleyarkhan, professor at the School of Nuclear Engineering (NE), and his team were recognized for their research on the front cover of the February issue of the British Royal Society Journal. The featured research article focuses on novel hybrid mass-alpha spectroscopy technology.

Read more [here](#).



Bae and Chatzidakis' research published in *Scientific Reports*

Junghyun Bae, doctoral candidate at the School of Nuclear Engineering (NE), and Stylianos Chatzidakis, assistant professor and advisor, were recently published in *Scientific Reports*, volume 12, for their intensive research on cosmic ray muons. *Scientific Reports* is an online multidisciplinary, open access journal from the publishers of Nature.



Read more [here](#).

FACULTY AND STUDENT ACHIEVEMENTS

Shripad Revankar receives Long Service Award at ICONE28

Shripad Revankar, professor of Nuclear Engineering, received the Long Service Award at the 28th International Conference on Nuclear Engineering. The conference is the premiere global forum on nuclear reactor technology where nuclear professionals gather to discuss industry trends. The ICONE Long Service Award winner is selected based on substantial technical to the nuclear engineering technology and professional leadership.



Read more [here](#).

Stylianos Chatzidakis named Outstanding Engineering Teacher

Stylianos Chatzidakis, assistant professor at the School of Nuclear Engineering (NE), received the distinction of Outstanding Engineering Teacher by the College of Engineering. Faculty, lecturers and other staff were recognized for their outstanding dedication to teaching Boilermaker Engineers. Only 100 or so individuals across the college were acknowledged.

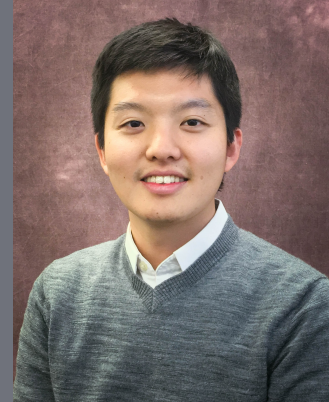
Read more [here](#).



Bae wins 'Pitch Your PhD' Competition

Junghyun Bae, PhD student at the School of Nuclear Engineering, won the 'Pitch Your PhD' Competition during the 2021 American Nuclear Society (ANS) Winter Meeting and Technology Expo. Hosted in Washington, D.C., Bae was selected from six other finalists from top nuclear programs around the country.

Read more [here](#).



Sundaram is inaugural recipient of Graduate Research Recognition Seminar Award

Arvind Sundaram, doctoral candidate at the School of Nuclear Engineering (NE), is the department's inaugural recipient of the Graduate Research Recognition Seminar Award. Starting this year, the award will be given annually to graduate students according to specified merit.

Read more [here](#).



SNE students make Fall 2021 Dean's List

This year, 43 students from the School of Nuclear Engineering (SNE) made the Dean's List and received Semester Honors. These awards recognize students that achieved high scholastic standing cumulatively and/or for the fall semester.

Read more [here](#).

