CONGRATS DR. ALLEN GARNER ASSOCIATE PROFESSOR

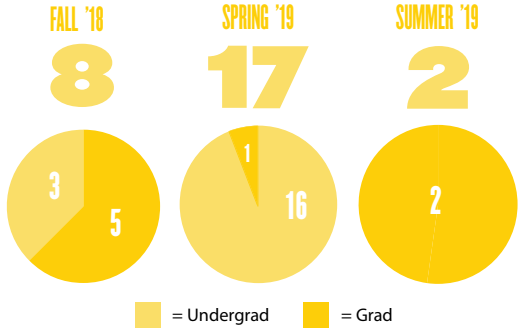
Garner has been promoted to Associate Professor with tenure. Since joining us in 2012, he has done an outstanding job teaching, researching, and engaging. He has successfully secured research funding from various sponsors including AFRL, DARPA, U.S. NRC, ONR, NASA, U.S. DOE and private industries. He is instrumental in teaching and advising at both the undergraduate and graduate levels. This summer, Dr. Garner was also promoted to captain within the U.S. Navy.

ATOMS SUMMIT BRINGS NUCLEAR COMMUNITY TO PURDUE

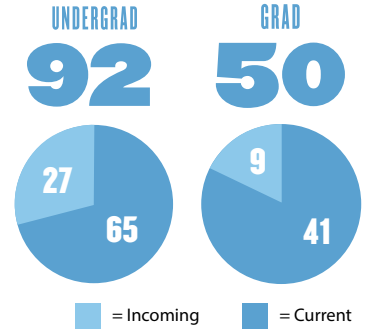
The Atoms for Humanity Summit began Tuesday, September 3 with a flip of the switch for PUR-1 as the first all-digital nuclear reactor. We were proud to celebrate this momentous event with distinguished members from both the community and the nuclear energy field. Over the course of the three day event, audience members heard from multiple panelists with very different backgrounds with the same message, what if nuclear innovation could change the world? From space to climate change, from health care to robotics and AI – we talked about it all and nuclear's role.

NE BY THE NUMBERS

'18-'19 GRADUATION NUMBERS



'19-'20 STUDENT NUMBERS



PURDUE UNIVERSITY

Nuclear Engineering

516 Northwestern Ave
West Lafayette, IN 47906

150 YEARS OF GIANT LEAPS
PURDUE UNIVERSITY

ISSUE 8, AUG/SEPT 2019

barn

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*" for a nuclear reaction process. 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 is so rare, their aim could be equated to that of bad hunters. Hope you enjoy the news. Boiler up!

PUR-1 FIRST ALL-DIGITAL NUCLEAR REACTOR SYSTEM IN THE US

The U.S. Nuclear Regulatory Commission has licensed Purdue University Reactor Number One (PUR-1) as the first entirely digital nuclear reactor instrumentation and control system in the nation. Traditional analog consoles make it difficult to take research data accurately and quickly, while a digital system allows values to be measured instantly. Going digital means that much more data can be processed and analyzed, opening the door to capabilities that haven't been as possible yet in the nuclear sector, such as predictive analytics, machine learning and artificial intelligence.

Read more: bit.ly/

DR. REVANKAR AWARDED NUCLEAR ENERGY UNIVERSITY PROGRAM GRANT

Revankar was awarded a grant through the Nuclear Energy University Program (NEUP) by the U.S. Department of Energy (DOE). Revankar will investigate the accident scenario of a break in the primary coolant boundary for a high-temperature gas-cooled reactor (HTGR). In this scenario the main concern is air entering the primary coolant circuit and causing severe damage to the graphite structures via oxidation.
Read more:

ALUMNI NEWS

Corey McDaniel (BS NE '93) was sworn in as a member of the board of American Nuclear Society, a not-for-profit, international, scientific and education organization. Vivek Agarwal (PhD NE '11) was awarded The Presidential Early Career Award for Scientists and Engineers (PECASE).
Read more:

10.02.19 CELEBRATE THE PAST AND FUTURE OF NUCLEAR ENGINEERING

11.18.19 ALUMNI AND FRIENDS RECEPTION @ANS WINTER CONFERENCE