

ASU's Terry Alford Elected as Senior Member of the National Academy of Inventors



Phi Iota Chapter, Phoenix AZ.

August 15, 2019

Bro. Dr. Terry Alford (Kappa Lambda 1981) has been selected as a senior member of the National Academy of Inventors (NAI) for his dedication to fostering a spirit of innovation at Arizona State University, while educating and mentoring the next generation of inventors.

Alford is one of 54 academic inventors named to the spring 2019 class of NAI Senior Members. Alford serves as the associate director of the School for Energy of Matter, Transport and Energy — one of the six schools in ASU's Ira A. Fulton Schools of Engineering — where he is also a professor and highly regarded mentor and teacher of materials science and engineering.

NAI senior members are active faculty, scientists and administrators from NAI member institutions who have demonstrated remarkable innovation producing technologies that have brought, or aspire to bring, real impact on the welfare of society. Senior members have proven success in patents, licensing and commercialization.

Alford currently holds 10 U.S. patents and multiple invention disclosures. His efforts as an inventor and innovator have supported ASU's designation as one of the top 10 universities worldwide granted U.S. patents.

Alford, an expert in silver and copper metallization and low-k dielectrics for integrated circuit technologies, is most proud of his patented work to develop a process for cladded silver alloy metallization to improve adhesion and electro-migration assistance. His greatest achievements, however, lie in the successes of the students he mentors, many of whom have gone on to have successful careers as entrepreneurs and in academia and industry.

“I use generating patent disclosures as a venue to train graduate students – a way to encourage them to be entrepreneurs, scholars, tinkerers and intellectuals,” Alford said. “We use the curiosity inherent in research to address societal needs. I always tell my students, the whole premise of what we do is not just to learn through concepts in the classroom or fund research, but to contribute to the knowledge base.”

“In addition to his noteworthy achievements as a researcher and inventor, Terry is a dedicated mentor who encourages students to find innovative ways to solve societal challenges with global impact,” Panchanathan said. “He is richly deserving of this recognition.”