Prof. Dr. Khalid Lafdi

Honorary Doctorate in Science & Innovation

Khalid Lafdi is the wright Brothers Institute Endowed Chait in nanomaterials and nano-Composites. In 2001, he joined the University of Dayton as a professor to lead the nano research activity. He was involved in building the nano research vision at UD, helping to get capital funds to establish a nano-characterization facility from various sources (state or/and federal). In 2004, Dr. Lafdi was responsible for establishing the Nanoscale Engineering, Science and Technology facility at university of Dayton (UD).

Also, in 2007, He established a new Carbon Research Laboratory (CRL) at UD with permanent research scientists and engineers and graduate students. CRL is directly involved in the processing, characterization and modeling of various aspects of carbon hybrid research. In 2010, he has built a state of the art thermal and energy management laboratory. Also, he established a manufacturing transition facility located at National Composite Center (Kettering, Ohio) to facilitate the scale-up processes and technology transfer.

His 30 years of experience in advanced engineered materials has enabled his position as principal investigator (PI) and Co-PI on many programs to develop multifunctional composites, biomaterials for scaffolds and implants, thermal and energy management. At this time, he has more than 300 articles and chapters published in refereed journals and 4 edited books in the nanocomposites and thermal management and 4 patents with three major licensed technologies in nano-manufacturing to Nanosperse Inc.

In the last 20 years the carbon hybrids were the topic of many presentations and papers delivered by Dr. Lafdi and resulted in considerable recognition of his contributions. He has been selected as the American Carbon Society's George D. Graffin Lecturer. As the society's carbon "ambassador," Dr. Lafdi is promoting carbon science and technology within academia and industry throughout the U.S. Dr. Lafdi has been nominated to The Charles E. Petinous award for his carbon research. These positions provide direct recognition and exposure to UD in national and international professional societies. Dr. Lafdi was invited in numerous times to present a 45 minutes plenary lecture, devoted carbon in functional biology.

The use of graphitic foam as novel implant materials brought a tremendous media coverage. This research was featured in Ivanhoe Medical breakthroughs channel. In this carbon journey, Dr. Lafdi was honored with several awards and recognitions. In 2021, 2022 and 2023, Dr. Lafdi was recognized as one of the top 2% of the world's most influential scientists, according to Stanford university.

Dr. Lafdi is actively involved in the academic researches that allow graduate students to be in very competitive area of their interest. He is committed to raise the students' standards and achievements. As a part of student experience, Dr. Lafdi has established multiple international collaborations with European institutes to foster graduate students exchange and enrich the global research vision in the mind of these young researchers. The carbon research was a great

vehicle in attracting top quality students from different departments. These students have contributed to the development of these multifunctional and multi-scale materials.