



CURRICULUM VITÆ

BRYAN ALLISON

“Dr. Allison’s expertise spans various industries, including aerospace, automotive, and industrial equipment. He has extensive experience in rolling contact fatigue, polymer composites, and advanced manufacturing processes. ”

Ph.D. Mechanical Engineering

M.Sc. Mechanical Engineering

B.Sc. Mechanical Engineering

1. BIOGRAPHY

Dr. Bryan Allison has extensive experience in rolling contact fatigue, polymer composites, and advanced manufacturing processes. He leverages his technical expertise and problem-solving abilities to develop innovative solutions for bearings and power transmission components in aerospace and industrial applications.

Dr. Allison has been instrumental in leading a variety of innovative projects across multiple domains, primarily focused on enhancing the performance and sustainability of mechanical components. His efforts include identifying low-carbon-footprint materials for bearing cages, developing methods for quantifying the natural frequency of rubber, assembling sound-dampened MRI machines, optimizing electric vehicle powertrains for efficiency, analyzing scanner noise through software, creating vibrational analysis models for bearing systems, upgrading thermal systems for rolling contact fatigue testing, redesigning roller bearing cages to accommodate polymer attributes, and designing a test machine to evaluate polymer cage fatigue.

Dr. Allison earned his Ph.D. and M.S. in Mechanical Engineering from the University of Florida and University of Alabama in Huntsville, respectively. His doctoral research focused on the evolution of mechanical properties in bearing steels due to rolling contact fatigue, while his master's thesis explored the effect of fiber waviness on the strength of composite materials.

In his role as a Senior Engineer and Project Manager at SKF, a leading bearing and seals manufacturing company, Dr. Allison has led numerous projects to optimize materials, manufacturing processes, and bearing designs for improved performance, cost savings, and sustainability. His work has resulted in significant reductions in noise, cost, and development time for critical components in medical equipment and aerospace applications.

Prior to joining SKF, Dr. Allison served as a Product Development Engineer at SKF Aeroengine North America, where he managed the development of high-temperature stainless steels, polymer components, and ceramic materials for aerospace bearings.

Dr. Allison's research has been widely published in leading scientific journals and conference proceedings. He holds several patents related to bearing design and manufacturing, and has secured over \$1.2 million in research funding from industrial sponsors. He is an active member of professional societies such as STLE, ASME, and ASM International, and serves as a reviewer for numerous scientific journals. [Click here to request the full CV of Dr. Bryan Allison](#)