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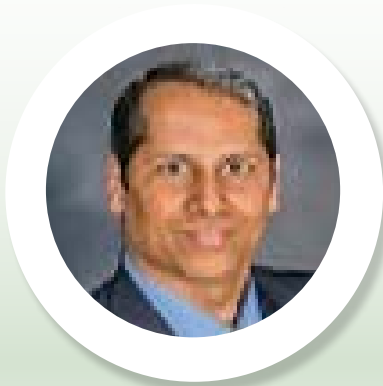
Overview of Design and Development of Vibration Based Energy Harvesting Systems

Abstract:

The diminishing conventional energy sources based on fossil fuels have prompted research and advancement in **renewable** and non-conventional **energy** sources. One of these energy sources that's abundantly available with machinery and structures is mechanical vibrations. In this presentation, an overview of vibration based energy harvesting devices and systems using various mechanisms such as piezoelectric effect, magnetoelectric effect and dynamo effect will be investigated. Although, the actual energy output is small from these vibration based energy harvesters, it provides a viable alternative to provide energy to on-board small scale electronic devices. The presentation will also highlight research on broadband **energy harvesting** systems and its **applications**. This research will provide the foundation to the research community to further investigate multimodal and **multi-mechanism** energy harvesting solutions.

Biography:

Dr. Vishwas N Bedekar Is working as a Associate professor at Middle Tennessee State University received his phd in 2009 at University of Texas at Arlington, for his work on advanced composites manufacturing processes.



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