

# A Research Paper on Harnessing Wind Vibration Novel Approach towards Electric Energy Generation

Suhas B khadake<sup>1</sup>, Shraddha S Magar<sup>1</sup>, Archana S Sugandhi<sup>1</sup>, Shweta H Pawar<sup>1</sup>

SVERI's College of Engineering, Pandharpur, Maharashtra, India<sup>1</sup>  
suhashkhadake@gmail.com

**Abstract:** Bladeless wind turbines represent an innovative technology in wind energy generation, Offering a distinct alternative to conventional turbines. Unlike traditional designs that rely on Large, rotating blades, bladeless turbines harness wind energy through oscillation. Vertical, Cylindrical structure vibrates as the wind passes by, creating vortices that induce movement. This oscillation is then converted into electrical energy through an internal. Generator. The Bladeless design reduces noise, making it suitable for urban and residential areas, where Conventional turbines can cause noise pollution. Additionally, the absence of rotating blades minimizes the risk to birds and wildlife, Addressing a common environmental concern with traditional wind turbines. Bladeless turbines Also have a smaller physical footprint, allowing for easier installation in compact spaces.

**Keywords:** Bladeless, Conventional, Harness, Traditional, Installation

