## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 10, June 2025



## Monitoring Cardiovascular Physiology Using Bio-Compatible Ain Piezoelectric Skin Sensors

Malathi S<sup>1</sup>, Swetha R<sup>2</sup>, Vani A<sup>3</sup>, Sindhu C<sup>4</sup>, Mrs. Asha S<sup>5</sup>

UG Scholars, Dept. of ECE<sup>1-4</sup> Assistant Professor, Dept. of ECE<sup>5</sup> East Point College of Engineering and Technology, Bangalore

**Abstract**: Arterial pulse waves contain a wealth of parameters indicative of cardiovascular disease. As such, monitoring them continuously and unobtrusively can provide health professionals with a steady stream of cardiovascular health indices, allowing for the development of efficient, individualized treatments and early cardiovascular disease diagnosis solutions. Blood pulsations in superficial arteries cause skin surface deformations, typically undetectable to the human eye; therefore, Microelectromechanical systems (MEMS) can be used to measure these deformations and thus create unobtrusive pulse wave monitoring devices.

Keywords: Microelectromechanical systems

Copyright to IJARSCT www.ijarsct.co.in



DOI: 10.48175/IJARSCT-28820



106