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 3, May 2025

Structural Health Monitoring Method Regarding a Multi-Sensor

Vineet Sikdar

B.Tech , CIVIL Engineering Student
Arya College of Engineering and Research Center, Kookas, Jaipur, Rajasthan vineetsikdar777@gmail.com

Abstract: Structural Health Monitoring (SHM) involves the continuous monitoring of a structure's condition during operation using integrated sensor systems. SHM holds great promise for enhancing structural safety while simultaneously reducing deadweight and downtime. Various SHM methods have been developed to detect and evaluate different types of damage across a wide range of structures. Recently, the concept of Information Fusion combining data from multiple SHM methods has gained traction for improving damage assessment accuracy and reliability.

Keywords: Multi-modal sensor, Sensor fusion, Hybrid material, Metallic element, EMI method, Ultrasonic wave, EIT, Carbon nanofiber, Stress-strain monitoring





