

# Analysis Of Energy Consumption In Wireless Sensor Networks

Dr.M.S.Nidhya<sup>1</sup>, Dr.L.Jayanthi<sup>2</sup>, Dr.D.ChristySujatha<sup>3</sup>  
Dr.P.LalithaKumari<sup>4</sup>

<sup>1</sup>Associate Professor, Dept of Software Engineering, PMIST, Vallam.

<sup>2</sup>Assistant Professor, Dept of ECE, PMIST, Vallam

<sup>3</sup>Assistant Professor, Dept of Software Engineering, PMIST, Vallam

<sup>4</sup>Associate Professor, Dept of Computer Science and Engineering, Visakha Institute of Engineering & Technology, Vishakapatnam

Eamil : <sup>1</sup>nidhyaphd@gmail.com

**Abstract:** *Energy is a one of the important factor for Wireless Sensor Network. Sensors in the environment will work very efficiently, due there loss of charge it stops its working; end user cannot able to get the information from the environment. Various algorithms and models are proposed to save energy but still there no efficient way to save energy of a sensor. In this paper we analysed a number of factors which affects energy of a sensor.*

**Keywords:** *Sensors, energy, sink node, energy consumption.*

## 1. INTRODUCTION

Wireless Sensor Network [1] consists of number of sensors which are scattered in an environment to monitor the environment. Sensors can be used in military, agriculture, building, highways etc. Sensors in an environment will monitor the environment and send the information about the environment to the base station or sink node. End user can retrieve the information about the environment from the base station.

Generally sensors are used in an environment where the places cannot be able to access by the human. Some places are very risk to reach by a human being that places are monitored and information will be send by the sensors. For example volcano, deep forest, underground, under water or ocean. Sensors are very tiny device it will access the information about the environment where it is mounted.

A sensor has been made up of four components; they are communication, processor, energy and sensing. Communication component is used to connect with the neighbouring sensors and sending and receiving the information is also handling by this part. Processor component which used to process the received information like shortest path algorithm can be used to route a packet. Battery is a place where the energy of a sensor will be stored.