**ABSTRACT**

In the wireless sensor networks (WSNs), the upholding the energy and routing formation at every sensor node is the major issues. The distance from base station and internal node mainly has imbalanced in the energy consumption during transformation of the data. To reduce the energy upholding and the data aggregation routing issues in Centralized Clustering-Task Scheduling for wireless sensor networks (WSNs), this paper focuses on a Cluster-Based Data Aggregation Routing with Genetic search Algorithm (CDARGA) , which reduces the energy consumption in a hyper round model. The proposed data aggregation routing protocol using the Genetic Algorithm (GA) estimates the fitness function using the three key parameters distance, energy, and Hyper round policy. The proposed methods were compared with RP-MAC and the experimental result shows that the proposed protocol is superior to RP-MAC protocol and the proposed algorithm improves the network lifetime which can used in real time application.