



RESEARCH ARTICLE

**NODE AND SINK MOBILITY SUPPORTED ROUTING
PROTOCOL IN WIRELESS SENSOR NETWORK
WITH IMPROVED ENERGY EFFICIENCY**

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Abstract— The proposed routing protocol for Wireless Sensor Network is hierarchical and cluster based. The protocol supports mobility in the Sensor Nodes as well as in the Sink. The entire protocol is described in terms of two phases namely Setup Phase and Data Forwarding Phase. After deployment of the Sensor Nodes entire sensor field is divided into some logical clusters and each cluster contains Sensor Nodes with different roles such as Gateway Node, Cluster Head Node and Ordinary Sensor Node. Majority of the computation intensive tasks are carried out in the Sink. Simulation results show the energy efficiency of the proposed protocol. The performance of the proposed protocol has been compared with that of CBR mobile WSN and results show better performance of the proposed protocol. Future scope of the work is outlined.

Key Terms: - Wireless Sensor Networks; Routing; Mobility; Energy Efficiency

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