

**CERTAIN INVESTIGATIONS ON ENERGY  
EFFICIENT CLUSTER BASED MULTILEVEL  
HIERARCHICAL ROUTING SCHEME IN  
WIRELESS SENSOR NETWORKS**

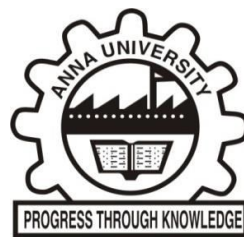
**A THESIS**

*Submitted by*

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*in partial fulfillment of the requirements for the degree of*

**DOCTOR OF PHILOSOPHY**



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**OCTOBER 2014**