

**Sensor Recharging Framework with Secured Packet  
Scheduling for Named Data Networking Based (WSN)**

**A Project Report**

**Submitted by**

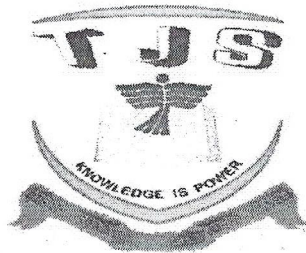
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**In partial fulfilment for the award the degree of**

**BACHELOR OF ENGINEERING**

**COMPUTER SCIENCE AND ENGINEERING**



**T.J.S ENGINEERING COLLEGE**

**PERUVOYAL(NEAR KAVARAIPETTAD)**

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**JUNE 2022**



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**BONAFIED CERTIFICATE**

Certificate that this project report “ Sensor Recharging Framework with Secured Packet Scheduling for Named Data Networking Based (WSN)” is the bonafide work of the following students.

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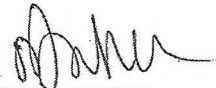
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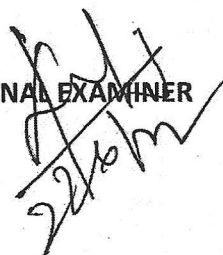
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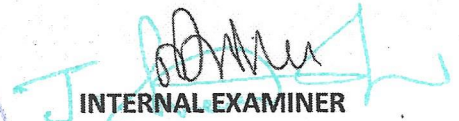
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Submitted for viva voce held on \_\_\_\_\_ at T.J.S Engineering College,  
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**EXTERNAL EXAMINER**



**INTERNAL EXAMINER**



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## ABSTRACT

Create a Wireless Sensor Network topology to Simulation environment on Wireless Sensor Network topology with more number of nodes and implement Adhoc On-Demand Distance Vector Routing Protocol to transmit the message from source to destination. With more number of sensor nodes and form the divided by clusters zones and select cluster head based on algorithm to transmit the message from cluster head to sink. A sensor nodes and implement Node recharge algorithm based on, Checking Energy Status and Emergency energy report to transmit the message from cluster head to sink. A Wireless Sensor Network topology with more number of sensor nodes and implement Maximum Weight Sum algorithm for select routing for charging vehicle. Implement Data gathering algorithm for aggregate all information in data gathering vehicle and implement NDN (Named Data Networking) Based data transmission to increase the security of the network. Packet delivery ratio, End to end delay, energy consumption, remaining energy are measured for Mobile recharging framework with Secured packet scheduling for Named data networking Based WSN and outputs are shown using graphs. One of the fundamental problems faced by wireless sensor networks is its constrained lifetime due to scarce energy supply available during their operation. In this paper we are going to model an efficient real time wireless recharging for wireless sensor network along with Dynamic Multilevel Priority (DMP) packet scheduling and Multiple Travelling Salesman Problem with Deadlines (m-MTSP). For that firstly a Real time recharging scheme is adopted. An NDN based Real time recharging scheme is one of the best real time recharging scheme which uses multiple mobile vehicles for recharging, and also provides more scalability and robustness. In this proposed work, an efficient real time wireless recharging protocol which is named as, Enhanced Mobile recharging Framework is developed, by including DMP packet scheduling along with above mentioned NDN based real time recharging scheme. By adopting DMP packet scheduling and m-MTSP scheme along with the Real time recharging framework further improves the network performance.

Keywords: Wireless Charging Technology, Real Time Recharging, NDN, NETWRAP, Sencars, DMP



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