



# **GokarajuRangaraju Institute of Engineering and Technology (Autonomous)**

## **Report of the Event**

**Title of the Event: Two Day National Level Workshop on Simulation of Wireless Sensor Network Using NS2**

**Organized Date: 25<sup>th</sup>&26<sup>th</sup> of October, 2016**

**Faculty: Dr. Padmalaya Nayak**

### **Summary:**

The main focus of the workshop is to make the students and faculty to have a good research focus on Wireless Network simulations using NS2 Simulator. This programme is aimed at giving simulator based communication networks to analyze and to provide the opportunities to develop research oriented projects in different areas of computer networks for CSE/IT/ECE/MCA faculty and students. NS2 is one of the widely used discrete event open source simulator designed specifically for research for communication Networks. With the help of NS2 simulator, researchers can analyze the trace files and understand how to evaluate the performance of networking protocols and operations.

### ***Topics to be covered .***

- Introduction to Communication Models
- IEEE Standards
- IEEE 802.3 (Ethernet)
- IEEE 802.11(WLAN)
- IEEE 802.11 (WPAN)
- NS2 Installation
- Basic Programming with NS2 and NAM
- OTcl and C++ Interface with NS2
- Unicasting, Broadcasting etc.
- Running NS2 and NAM
- Invoking External Commands with NS2
- Routing Protocol in WSN (LEACH Protocol)
- Development of New Routing Protocol
- Comparison of these two Protocols through xgraphs
- Result Analysis