## **Department Of Electronics and Communication Engineering**

## **Center of Excellence: Wireless Sensor Networks**

Wireless Sensor network (WSN) has wide range of applications in all walks of life. Some of the glaring application are surveillance in remote places where human presence is either difficult or not accessible .WSNs based on type of modes are used in surviving of wild life, natural resources presence of thefts and security breaks, environmental monitoring, agriculture, consumer requirements etc.

Researches using WSN is growing day by day and cater to applications which are data centric. Research is incudes a lot of data aggregation, encryption, and redundancy check for different types of deployment of modes. The connectivity among the modes and gateway in generally through Zigbee and the data transfer between gateway and the cloud is Wi-Fi Ethernet. The connectivity between modes and local data base can be Wi-Fi through gateway for bigger data and manipulation.

Lot of innovative projects can also be done using WSN. The projects relevant to consumer electronics such as home automation, industry automation using IOT concepts. Wireless Sensor network (WSN) can also be used for surveillance on academic and industry campuses, agriculture, relevance surveillance and monitoring such as automated irrigation, power control, and surveillance of Operation Theater, Smart control