## SIGNALS, SYSTEMS AND SIMULATION

## **REPORT**

Simulation is the imitation of the operation of a real-world process or system.[1] The act of simulating something first requires that a model be developed; this model represents the key characteristics, behaviors and functions of the selected physical or abstract system or process. The model represents the system itself, whereas the simulation represents the operation of the system over time.

Simulation is used in many contexts, such as simulation of technology for performance optimization, safety engineering, testing, training, education, and video games. Often, computer experiments are used to study simulation models. Simulation is also used with scientific modelling of natural systems or human systems to gain insight into their functioning,[2] as in economics. Simulation can be used to show the eventual real effects of alternative conditions and courses of action. Simulation is also used when the real system cannot be engaged, because it may not be accessible, or it may be dangerous or unacceptable to engage, or it is being designed but not yet built, or it may simply not exist.[3]

Key issues in simulation include acquisition of valid source information about the relevant selection of key characteristics and behaviours, the use of simplifying approximations and assumptions within the simulation, and fidelity and validity of the simulation outcomes. Procedures and protocols for model verification and validation are an ongoing field of academic study, refinement, research and development in simulations technology or practice, particularly in the field of computer simulation.

This year the workshop was organized on **02nd July 2014** by the **Department of Electronics and Communication Engineering** under the supervision of **Dr.T.Jagnnadha swamy**, Professor & Head.

(Dr. T.Jagannadha swamy) Professor & HoD ECE Mr.KNB.Kumar Convener