

# Vasavi College of Engineering

## Department of computer science & Engineering

A report on Guest Lecture on "Infrared Seeker" by Mr. B. Suresh Kumar conducted on Aug 28<sup>th</sup>,2012

A Guest lecture on "Infrared Seeker" was delivered by Mr. B. Suresh Kumar serving as Scientist-D position for DRDO-RCI located at Hyderabad for the target audience of ME II-Sem 2011-2012 on Aug 28<sup>th</sup>,2012 .



Mr B. Suresh Kumar introduced the subject showing some images of NAG missile and its components. Followed by explanation about the role of "Infrared seeker" in the missile. Then he elaborated his talk on types of seekers and major building blocks of IR(Infra Red) seeker and its various modes of operation.

There are two types of seekers:

1. Active radar seeker
2. Passive IR seeker

Major building blocks of IR seeker are:

1. An Electro-optical System
2. A Signal/ Image processing System
3. A Steering & Stabilization System

Modes of operation of IR seeker.

- Lock on before launch
- Lock on after launch
  - a. Terminal guidance fixed ground targets

- b. Terminal guidance mobile ground targets

The speaker explained Target Tracking Algorithms and Automatic target recognition of moving targets. Speaker has narrated the current status of Indian Missile Program to the target audience.



He also shared his experience at DRDO with the students and expressed his passion towards research in defense applications.



He ended up the session showing some video clips containing firing of NAG Missile. The Speaker encouraged students to join DRDO and serve the country.