

GUEST LECTURE

A guest lecture was given by Dr.M.Balachary Scientist 'G' DLRL Hyderabad on "Practical Broadband Antennas and Trends in antenna technology "on 01-02-2014 from 10:15AM to 1:30 PM.

Venue: Peacock Hall

Event Conducted by: RF, Microwaves and antenna Research Group

Event Chairman: Dr.R.Srihari Rao Vice-Chancellor KL University

Event CO-Chairman: Dr.Habibulla Khan RF, Microwaves and antenna research Group head

Event Coordinator: Mr.K.PHANI SRINIVAS

The main points that were covered in the guest lecture are:

1. Introduction about various antennas
2. Functions of Microwave antennas
3. Invention of compact antennas with higher frequency bands
4. Different applications Micro strip-patch antennas



Addressing the Guest Dr.M.Balachary by Dr.R.Srihari Rao Honble Vice-chancellor
KL University



Innovative ideas on Broadband antennas given by Expert
Dr.M.Balachary DLRL

Broadband Systems

Just what is a broadband system? The word "broadband" means different things in different applications. Federal Standard 1037C, Glossary of Telecommunication Terms, defines it in a vague way. Today, just about all communications systems fit our idea of "broadband," with the key concept being speed due to the number of bits that flow through the communication "pipe."

System Design

Before you select individual components for a broadband system, develop an understanding of what that system will be doing and what environment each component will operate in (outdoor, high heat, high noise, etc.). Create a block drawing of the major components, as a starting point.

Once you have a clear idea of which components are your core components, you can select the supporting components that match them. For example, select your routers, switches, antennas, and amplifiers before specifying your cabling.

This seems logical enough, but it's not always the way people proceed. One reason why they get hung up is they realize they'll be routing cabling through environmental air space, so they specify plenum cabling while this is on their mind. But that's out of sequence in the design process.

Selection:

Obviously, you need broadband filters, couplers, and antennas that meet your frequency requirements. But many other factors also apply. For example:

- Indoor or outdoor
- In an enclosure, wall-mounted, or panel-mounted
- Do you need a mast, tripod, or tower
- Are connections coaxial or some other method
- Is your broadband system providing stand-alone coverage, or is it part of an integrated wired/wireless system

