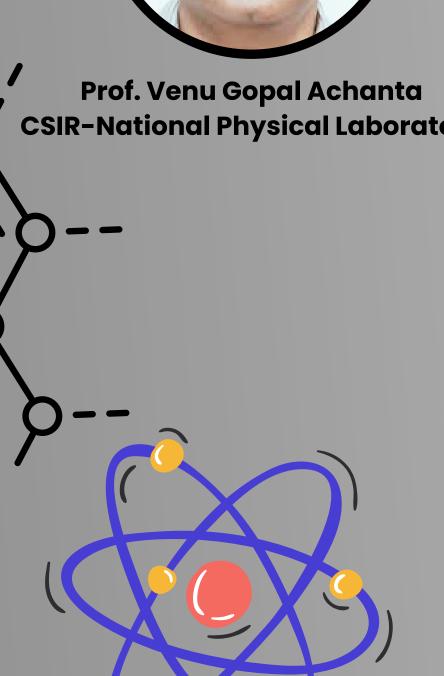


## LIGHT-MATTER INTERACTION IN BROADBAND METAMATERIALS WITH DIPOLE EMITTERS

## **SPEAKER**



**CSIR-National Physical Laboratory** 



## **ABSTRACT**

Metamaterials with sub-wavelength featured metal and dielectric structures can be designed for specific applications. They offer opportunity to study rich physics as well. Metamaterials with dipole emitters are a good platform to study lightmatter interaction in different coupling regimes. While weak and strong coupling regimes are well studied, ultrastrong and deep strong coupling regimes are of current interest. In this talk, I will present our work on broadband plasmonic structures to cover their properties, applications including single molecule sensing, and plasmonexciton interactions.

## All are cordially invited