

ABSTRACT

This talk will highlight the fundamental and importance of conjugated materials-molecules and polymers-in context to presently utilized systems. Their ability to be tuned allows them to specifically have particular applications in multiple areas of medicine, electronics and day-to-day life. This talk will specifically focus on development of new materials with focus on applications in environment, healthcare and electronic devices with in house fabrication and demonstration. This will include conjugated polymers development and characterization, controlling their solubility by introducing specific functional groups, making them water soluble whenever necessary or making nanoparticles with them, developing thin film and portable sensors or flexible energy efficient bright devices.