## Seminar

## Institute for Plasma Research

Title: Applications of Metasurface to Wearable

Antenna: A Solution and Future Aspects

**Speaker:** Dr. Anil Babu

Koneru Lakshmaiah Education Foundation (KLEF) Deemed University, Vijayawada

**Date:** 08<sup>th</sup> March 2024 (Friday)

**Time:** 10:30 AM

**Venue:** Seminar Hall, IPR

## **Abstract**

Nowadays, Metasurface has become the buzzword in the RF domain with applications such as reflectors, absorbers, polarization converters, etc. In this talk, I am going to discuss the fundamentals of Metasurface and its applications to wearable antennas. The design of wearable antennas is indifferent to the other types of antennas due to the deployment on the human body surface. This talk explores the practical aspects of metasurface design and its applications with a specific focus on challenges by wearable antennas. The design experiences will be shared with illustrative design examples.

RIS (Reconfigurable Intelligent Surface) has become the new paradigm in Metasurface design, which provides energy efficiency and spectrum efficiency ability for futuristic wireless communication. This talk also highlights the fundamentals and design constraints of RIS for mmWave communications as a future work.