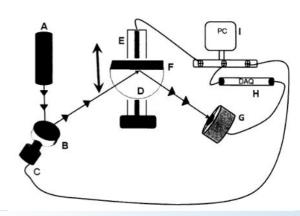






(IN452717)
A system and method for measuring surface plasmon resonance of a sensing element



### **NEED**

Measuring surface plasmon resonance (SPR) accurately is crucial in fields like biosensing and material science. Current methods often lack precision in controlling the light incidence angles. But what if this limitation could be overcome with enhanced light control?

### **TECHNOLOGY OVERVIEW**

The patent reveals a system for precise measurement of surface plasmon resonance (SPR) using a laser source, prism, and linear displacement mechanism, which ensures a constant light strike and adjusts the reflection angle, improving accuracy.

## **TECHNOLOGY KEY FEATURES**

Laser-based, prism and elongated member design, linear displacement mechanism, real-time intensity measurement, customizable resonance detection, precise reflection angle control, and high-accuracy data acquisition.

### **MARKET ANALYSIS**

The global SPR biosensors market is projected to grow at a CAGR of 9.3% from 2023 to 2033, driven by the growing demand in healthcare diagnostics, environmental monitoring, and food safety. [Source: MarketsandMarkets, 2023]

# **Target Industries**

Healthcare (Biosensing), Environmental Monitoring, Material Science., SPR system manufacturers, biosensing companies, environmental analysis firms, research institutions, and material characterization companies.

### AT A GLANCE

 SDG 3 (Good Health and Well-Being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

#### Read more here

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,

BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913

