# Dry Rubber Content Determination of Natural Rubber Latex Using Near-Infrared Spectometry (NIRS)

## Device Overview

This project is a portable device designed to measure the Dry Rubber Content (DRC) of freshly harvested rubber using a Near-Infrared (NIR) sensor integrated with an ESP32 microcontroller. The system collects and processes sensor data to determine the rubber's DRC accurately and efficiently, providing a faster alternative to traditional laboratory testing methods. The measured readings are transmitted wirelessly from the ESP32 to an Android application, where users can conveniently monitor and view the results in real time. Powered by a rechargeable battery, the device is compact and portable, making it suitable for on-site field use by rubber farmers and agricultural workers.

Hardware:

Software: