

A Major Project Report on

**WIRELESS COALMINE MONITORING AND ALERT SYSTEM**

Submitted to

**Jawaharlal Nehru Technological University, Hyderabad**

In Partial fulfilment of the requirement for

The award of degree of

**BACHELOR OF TECHNOLOGY**

In

**ELECTRONICS AND COMMUNICATION ENGINEERING**

By

**MUKKERA SATHVIKA**

**196Y1A0465**

**KONDA SHIRISHA**

**206Y5A0417**

**MERUGU SUSHMA**

**196Y1A0466**

**PASUPUTHOTA SUNAYANA**

**196Y1A0475**

Under the esteemed Supervision of

**Dr. K. MAHENDER**

Head of the Department



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**SUMATHI REDDY INSTITUTE OF TECHNOLOGY for Women**



(Approved by AICTE, New Delhi, Affiliated to JNTU, Hyderabad)  
Ananthasagar(Vill), Hasanparthy(M), Warangal - 506 371(T.S.), Website : www.sritw.org

2022-23

**PRINCIPAL**  
Sumathi Reddy Institute of Technology for Women  
Ananthasagar(V), Hasanparthy (M)  
WARANGAL - 506 371 (T.S.)



# SUMATHI REDDY

## INSTITUTE OF TECHNOLOGY FOR WOMEN

*Learning at its best*

Affiliated to JNTUH - Approved by AICTE - Accredited by NBA

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



#### CERTIFICATE

This is to certify that the major project entitled “WIRELESS COALMINE MONITORING AND ALERT SYSTEM” Submitted to JNTUH is carried out by the following students of IV B. Tech in the partial fulfilment of requirement for the award of degree of Bachelor of Technology in Electronics and Communication Engineering during academic year 2022-2023.

**MUKKERA SATHVIKA**

**196Y1A0465**

**KONDA SHIRISHA**

**206Y5A0417**

**MERUGU SUSHMA**

**196Y1A0466**

**PASUPUTHOTA SUNAYANA**

**196Y1A0475**

**Dr. K. MAHENDER**  
Project Guide



**Dr. K. MAHENDER**  
Head of The Department

*Rajam*

**PRINCIPAL**

Sumathi Reddy Institute of Technology for Women  
Ananthasagar (V), Hasanparthy (M)  
WARANGAL- 506 371(T.S.)

## ABSTRACT

Coal mines are one of the most important and industries in the country, as they are used as fuel in the steel and cement industries to extract iron from the stone and create cement. Every parameter, such as methane gas, high temperature, fire incidents, etc., should be regularly checked in the underground mining business. Due to the complexity of the mining environment and the variety of activities performed in coal mines, it is important to monitor the working environment. To address this issue, there is a system that monitors basic safety measures and regulates many restrictions on coal mines, such as gas leaks, temperature and humidity conditions, and fire sensor. All the sensors are assembled into a single unit and then placed in a coal mine.



*Rijan*

**Principal**

Sumathi Reddy Institute of Technology for Women  
Ananthasagar (V), Hasanparthy (M)  
WARANGAL - 506 371 (TS)