

DEVELOPMENT OF DATA ACQUISITION ROBOT FOR TOXIC ENVIRONMENTAL MONITORING USING WSN – KROTO FINDER

INTRODUCTION:

This project is mainly implemented for industrial applications. Mainly for detecting the damages inside the oil pipe that cannot be detected by human beings. Kroto is the Greek word meaning to crack. Inside the pipe, there is very heavy temperature, pressure and toxic gases. So we are implementing a robot that have a camera, temperature sensor, pressure sensor etc which is used to detect the crack and conditions inside the pipe. This data from all the high precision sensors will be transmitted using ZIGBEE protocol from the robot to the control station. The robot incorporates a wireless camera and the data from the cam is transmitted to the frontend Visual studio.

EXISTING SYSTEM:

In certain industries, there is a mandatory requirement to maintain crack free pipes to avoid leakages. The workers use to dismantle the pipes and it becomes mandatory for them to dig the ground if necessary to check the crack. In few chemical industries we have to maintain constant temperature, pressure. People were using some risky operations to keep the system constant.

PROPOSED SYSTEM:

To overcome the above situations, we are implementing a robot that have a camera, temperature sensor, pressure sensor etc which is used to detect the crack and conditions inside the pipe.

APPLICATIONS:

- Used for digital Data Acquisition.
- It is used in long pipes in the industries
- It is used in all those places where human beings cannot go.

ADVANTAGES:

-
- It is used to find cracks, temperature, pressure etc

TECHNOFIST