Anti-Toxic Robot

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The project prevents accidents caused by leakages of toxic gases resulting from petroleum and petrochemicals companies which causes threat to people's lives and the environment, so we thought of how to get rid of toxic gases and treat them chemically to convert the toxic gas to eco-friendly and unharmful gases by exchanging the human resource with a robot. So our project is based on four axes:- First: Detecting the concentration of toxic gas and leak area. Second: Absorbing the leaked toxic gas. Third: Treating toxic gas chemically and reuse the product. Forth: Mending the pipe or leak area to prevent the leakage. We made gas sensor circuit to know which place leak toxic gas and the concentration. When the concentration of toxic gas increase, the gas sensor circuit produces the warning signals to the workers, at the same moment to control room to call the robot to come in the leakage area. The robot take the order and go to leakage area to absorb toxic gas using absorber or reversed blower and treat it using suitable chemical material, then reuse the product in the industrial filed. This project will be used to achieve the highest level of safety of the workers from asphyxiation and death, safety for the factories from the leakages of gases, in addition to environment preservation.

Awards Won: