

HYDROGEN SULPHIDE SENSOR AND METHANE SENSOR :

1. HYDROGEN SULPHIDE SENSOR :

- Hydrogen sulphide is obtained during drilling and production of crude oil and natural gas.
- It mainly represents the Microbial Breakdown of organic matter.

A) PROPERTIES OF HYDROGEN SULFIDE :

- Present in the absence of oxygen.
- Colourless.
- Highly flammable.
- Corrosive.

By considering all this properties MQ136 is the best HYDROGEN SULPHIDE sensor to use in the rover.

- **Sensitive material of MQ136 gas sensor is SnO₂, which with lower conductivity in clean air.**
- **When the target Hydrogen-sulphide gas exist, the sensor's conductivity is higher along with the Hydrogen-sulphide concentration rising .**

2. METHANE SENSOR :

- Methane is produced by the breakdown or decay of organic material and can be introduced into the atmosphere by either natural processes.
- Methane represents the anaerobic bacterial decomposition of matter.

A) PROPERTIES OF METHANE :

- Colourless.
- Odourless.
- Non toxic.

- **MQ-2 is a best sensor for the detection of methane.**