



KSSEM
K S SCHOOL OF ENGINEERING AND MANAGEMENT

KammavariSangham (R) 1952

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

TECHNICAL TALK ON

SMALL SCALE GAS SENSORS

Organized by IEEE Student Branch, KSSEM



In association with IEEE Bangalore section

Event name: Small Scale Gas Sensors

Date of event: 3rd November, 2023

Venue: Aryabhata Seminar Hall, Dept. of ECE, KSSEM

Number of participants: 60

Targeted Audience: 4th Year ECE Students.

The IEEE Student branch in association with the ECE department, of KSSEM, had organized a technical talk on, “Small Scale Gas Sensors” on 3rd November 2023 at 11:00AM. The seminar was conducted at K.S School of Engineering & Management, Bangalore. The talk was delivered by Dr Abha Misra, Department of IAP, IISC. Dr. K Senthil Babu, HoD of ECE, Dr Mahabaleswar R Bhatt, Associate Director and KSRIF & Dr. Karthik P, Professor and branch counsellor of IEEE KSSEM SB graced the event with their presence. The seminar was attended by both faculty members and students.



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A **gas sensor** is a device which detects the presence or concentration of gases in the atmosphere. Based on the concentration of the gas the sensor produces a corresponding potential difference by changing the resistance of the material inside the sensor, which can be measured as output voltage. Based on this voltage value the type and concentration of the gas can be estimated.

The type of gas the sensor could detect depends on the **sensing material** present inside the sensor. Normally these sensors are available as modules with comparators as shown above. These comparators can be set for a particular threshold value of gas concentration. When the concentration of the gas exceeds this threshold the digital pin goes high. The analog pin can be used to measure the concentration of the gas.



Fig 1: Inauguration of Event



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Fig 2: Faculties and 7th SEM students who were present in the event.

Co-ordinator

Signature of HOD, ECE

Professor & Head
Dept. of Electronics & Communication Engineering
K.S. School of Engineering & Management
Bangalore - 560 109.