


# Solid-state Nano-tech CO2 Sensor


Our innovative **Solid-state** CO2 sensor offers **precise and reliable** carbon dioxide detection across a **wide range** of conditions, including varying temperatures and high humidity. Unlike conventional sensors, it operates at room temperature, consumes **minimal power**, and is **compact** enough to integrate seamlessly into mobile devices, wearable tech, and critical safety systems. With its advanced composite materials, this sensor provides **rapid, accurate** readings without frequent calibration, making it an ideal solution for applications in multiple fields. It's a versatile, **cost-effective** technology designed to enhance safety, efficiency, and quality of life in various settings.

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**Advisor(s):** Bowman, Victor


Advantages:

SENSITIVITY


1) High sensitivity (100–10,000 ppm)

HUMIDITY


2) Humid and dry conditions




3) Consumes less power




4) Lightweight and portable




5) Maintains accuracy and has low maintenance cost



6) Cost-Effectiveness



7) Durability



8) Real time monitoring

Large Potential Markets

Healthcare

Industry

Agriculture

Environment

Space

Ambient Monitoring  
for preventing confined space hypoxia

ARCTIC INSTITUTE OF NORTH AMERICA  
1945

NATIONAL CAVE & KARST RESEARCH INSTITUTE

UNITED STATES ANTARCTIC PROGRAM  
NATIONAL SCIENCE FOUNDATION

Arctic      Caves      Antarctic

Effects of CO2 intoxication range from headaches and nausea to seizures, coma, and death

Competitors

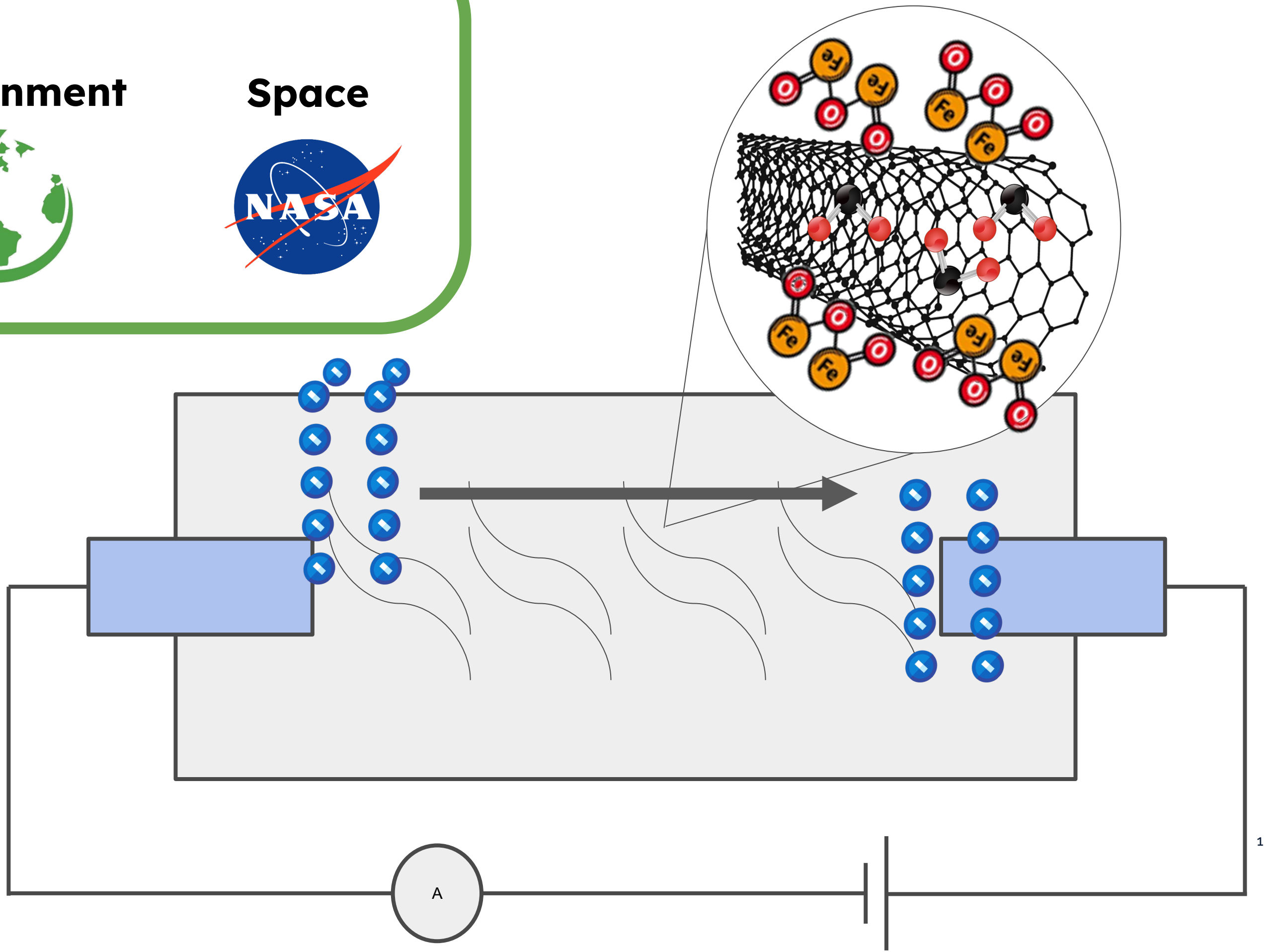
Johnson Controls

NUANCE

Infosys

Honeywell

SIEMENS



Patent Distribution Among Top Companies

