

A photograph of a male teacher with glasses, wearing a grey blazer over a yellow t-shirt and light-colored trousers, standing in a classroom. He is positioned in front of a chalkboard that has "Classwork" written on it, along with a triangle diagram and the equation $A=L$. The foreground shows the backs of several students' heads and wooden desks.

SCHOOLS

Guarantee a healthy environment while
ensuring students' productivity

A dark blue rectangular box with a white corner icon in the top-left corner.

Challenges

Real-time control of indoor air quality
and pollution

Respiratory diseases as well as reduction
of cognitive abilities and productivity

Solution



Quantification and identification of gas and odor source emissions

Monitoring of air renewal and hygrometry conditions for a full control of your indoor environment

Obtain real-time data to adapt purification operations to current conditions and needs

Benefits



- ✓ Provide a healthy and safe environment, reducing respiratory diseases
- ✓ Increase focus, comfort and productivity of students
- ✓ Optimize energy costs and lifetime of the remediation systems

Context

Children spend +1,000 hours per year in a classroom, potentially exposed to polluted indoor air that impacts their health and cognitive abilities

Challenge

There is a direct association between wheezing and high exposure to formaldehyde, particulate matters (PM10, PM2.5) and carbon monoxide in indoor environments. It is also proven that high levels of CO2 directly impact productivity and cognitive capacities. Therefore, it is necessary to be able to control classrooms' air quality not only to avoid the development of respiratory diseases, but also to ensure that students' abilities are not impacted

Solution

Monitoring and controlling in real time parameters such as air renewal and hygrometry conditions allows you to trigger purification or filtration actions when required. The POD2 analyzes actual environmental conditions and automatically adjusts air purification and filtration operations and power when required

Impact

This measurement in real time of all indoor air parameters (VOC, CO2, PM, temperature...) guarantees a healthy and safe environment for the occupants, preventing respiratory diseases. Also, it controls remediation activities based on real environmental needs. This allows you to anticipate possible harmful situations and react accordingly as well as to optimize the efficiency and energy usage of the filtration and purification systems



**Leader in environmental intelligence for a
healthier world, through environmental
monitoring and source identification
IoT technologies**