Indoor Air Quality Monitoring Tool using Wireless Sensor Network

Indoor Air Quality can be affected by microbial contaminants, gaseous pollutants (including carbon monoxide, carbon dioxide, volatile organic compounds etc) and dust particles or aerosols. These pollutants can cause adverse health effects. To avoid such adverse effects, an Air Quality Monitoring system is required.

A wireless solution for indoor air quality monitoring has been developed by C-DAC. The developed solution measures the environmental parameters like temperature, humidity, gaseous pollutants, Particulate Matter to determine the environmental health of an indoor space.

Air Quality Index (AQI) is estimated from the measured indoor criteria air pollutants. A toolkit has been developed to view the live air quality data of deployed regions in the form of numbers and graphs.

Features
- Wireless monitoring of environmental parameters through Zigbee
- Live monitoring of air pollution data through IAQ tool kit
- Air Quality index estimation as per EPA standard

Potential Users
- Smart building solution providers
- Vendors interested in monitoring air quality inside buildings

Benefits to Users
- Make occupants aware of IAQ of the building
- Helps to identify which part of the building is more polluted
- Helps prevent Sick Building Syndrome (SBS)