**Title:** Air quality monitoring by using UAV flight system: A review

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**Review:** An overview of small unmanned aerial vehicles for air quality monitoring is presented in this paper. Because of their mobility in 3d space and their low-cost UAVs have filled a gap in modern mobile Wireless Sensor Network. Applications and research work on this topic are increased in the five last year. The Application of the UAV-based AQM in smart cities named special IoT AQM system has taken the largest intention. Adaptive and automatic monitoring techniques that ensure better battery consumption of the UAV, with sufficient accuracy of air quality index was the main interest problem in the literature. However, real-world applications of the UAV-based AQM remain modest.

They set their parameters of air pollutants bear similarities based on which are categorized into gaseous pollutants cased directly by fossil fuel combustion as Carbon Monoxide CO, Nitrogen Oxide NO, ozone O3, nitrogen dioxideNO2, Volatile Organic compounds VOCs, Sulfur DioxideSO2, etc. Heavy metals include of mercury Hg, lead Pb, cadmium Cd and silver Ag, etc. Can be transported by air and their most common sources are industrial and mining waste, vehicle emissions, fertilizers and acid batteries, etc. Other important category of pollutants are the Particulate matter PM. Waste incineration facilities, dust, fires, vehicles are major source of PM. The particle size ranges between 2.5 mm (PM2.5) and10 mm (PM10).