

DESARROLLO DE UN SISTEMA INNOVADOR DE BAJO COSTO PARA EL MONITOREO Y CONTROL DE LA CALIDAD DEL AIRE EN TIEMPO REAL EN LA CIUDAD DE BARRANQUILLA

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RESUMEN

(Extensión del texto mínimo de 500 palabras y máximo 1000. Para el caso de los artículos mínimo 100 palabras máximo 500)

El presente artículo presenta los resultados obtenidos de un proyecto de monitoreo de calidad del aire en la ciudad de Barranquilla, abordando la creciente contaminación causada por la industrialización y el tráfico vehicular resalta la necesidad urgente de un monitoreo efectivo en tiempo real. Este proyecto tiene como objetivo desarrollar un sistema de control y monitoreo de la calidad del aire innovador y de bajo coste. Con el objetivo de seleccionar los componentes apropiados para implementar el sistema especificado, identificar las principales fuentes de contaminación, lugares donde se establece esta mayor contaminación y construir un sistema eficaz de recopilación y análisis de datos, nos esforzamos por proporcionar información precisa sobre la calidad del aire, mostrar y promover acciones para mitigar los impactos adversos. Este proyecto que se desarrolló siguiendo una metodología estructurada, proyecto que propone el desarrollo de un sistema innovador de bajo costo para el monitoreo y control de la calidad del aire en tiempo real en la ciudad de Barranquilla, eficiente y rentable, utilizando tecnologías de vanguardia y una recopilación de datos accesible y muy precisa para proporcionar información en tiempo real sobre la calidad del aire; teniendo en cuenta la efectividad y también el valor para sus componentes.

Palabras clave: Calidad del aire, sistema de monitoreo del aire, sensores de bajo costo

ABSTRACT

This article presents the results obtained from an air quality monitoring project in the city of Barranquilla, addressing the growing pollution caused by industrialization and vehicular traffic, highlighting the urgent need for effective real-time monitoring. This project aims to develop an innovative and low-cost air quality monitoring and control system. With the aim of selecting the appropriate components to implement the specified system, identifying the main sources of pollution, places where this major pollution is established and building an effective data collection and analysis system, we strive to provide accurate information on the quality of the air, show and promote actions to mitigate adverse impacts. This project was developed following a structured methodology, a project that proposes the development of an innovative low-cost system for the monitoring and control of air quality in real time in the city of Barranquilla, efficient and profitable, using cutting-edge technologies and accessible and highly accurate data collection to provide real-time information on air quality; taking into account the effectiveness and also the value for its components.

KeyWords: *Air quality, air monitoring system, low-cost sensors*

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