

DEVELOPING A SENSOR FOR SULFUR DIOXIDE
IN THE ENVIRONMENT OF AIR

EASWARY. NALLATHAMBY

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ABSTRACT

The report is concerned with the development of a reliable method to monitor sulfur dioxide in indoor atmosphere. Sulfur dioxide is one of the most harmful air pollutants known. An impregnated filter paper was used to trap the airborne sulfur dioxide. The intensity of colour produced was measured by means of a UV/ Visible spectrophotometer. The absorbance of the sample solution was measured at 520 nm and was related directly to the amount of sulfur dioxide present in the corresponding sample by means of a calibration curve. The sensitivity of the method is $0.002 \mu\text{g} / \text{m}^3$. The concentration of sulfur dioxide obtained during the study was lower than the threshold value of $5 \mu\text{g} / \text{m}^3$ for sulfur dioxide.