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Performance Comparison of a Low Cost Air Quality Sensor with a Commercial Electronic Nose

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Abstract: The Figaro AM-1 sensor module which employs TGS 2600 model gas sensor in air quality assessment was used. The system was coupled with a microprocessor that enables sensor module to create warning message via telephone. This low cot sensor system's performance was compared with a Diagnose II commercial electronic nose system. Both air quality sensor and electronic nose system employ metal oxide chemical gas sensors. In the study experimental setup, data acquisition methods for electronic nose system, and performance of the low cost air quality system were evaluated and explained.

Keywords: air quality, electronic nose, environmental quality, gas sensor

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