

Studi perbandingan kualitas udara tempat parkir tertutup, gedung parkir, dan tempat parkir terbuka ditinjau dari Parameter Karbon Monoksida (CO). Studi Kasus : Mal Kelapa Gading = comparative study of air quality in basement parking, building parking, and field parking reviewed from the Parameter Of Carbon Monoxide (CO). (Case Study: Mal Kelapa Gading) / Aulia Azwarani

Aulia Azwarani, author

Deskripsi Lengkap: <http://lib.ui.ac.id/detail.jsp?id=20353270&lokasi=lokal>

Abstrak

[ABSTRAK

Penelitian ini dilakukan di gedung parkir 3 Mal Kelapa Gading untuk mengetahui perbedaan nilai konsentrasi karbon monoksida (CO) pada tempat parkir tertutup, gedung parkir, dan tempat parkir terbuka. Gedung parkir 3 memiliki 8 lantai, dengan 2 lantai adalah berupa parkir bawah tanah (basement) dan 6 lantai lainnya adalah gedung parkir diatas tanah. Lokasi parkir basement yang berada di ruangan tertutup membuat pihak pengelola harus bisa memastikan bagaimana kondisi sirkulasi udara di ruangan tersebut dapat terjaga. Karbon monoksida merupakan polutan yang berbahaya karena sifatnya yang tidak berbau, tidak berasa dan tidak berwarna sehingga tidak dapat terdeteksi secara fisik. Penelitian yang dilakukan hari Senin dan Jumat ini menunjukkan bahwa konsentrasi maksimum CO terjadi di titik A 3 (ruang tunggu supir), yaitu sebesar 19 ppm pada hari Senin siang.

Konsentrasi minimum CO adalah 0 ppm yang terjadi pada basement 2 (titik B 1 dan B 2), lantai P 3 (titik D 1), dan parkir luar (titik E 2) di hari Jumat pagi dan siang, titik lantai P 1 (titik C 1), D 2, dan E 1 di hari Jumat pagi. Pada pengukuran hari Senin, seluruh nilai minimum CO sebesar 0 ppm terjadi di seluruh titik kecuali di titik A 3 pada siang hari, yakni sebesar 17 ppm. Berdasarkan hasil uji-t, jumlah kendaraan berpengaruh terhadap nilai konsentrasi CO di udara ambien. Berdasarkan uji ANOVA, ada perbedaan nilai konsentrasi CO antara ketiga jenis tempat parkir tersebut;

<hr>

ABSTRACT

This study took place at Gedung Parkir 3 Mal Kelapa Gading to know the differences of concentration value of carbon monoxide in basement parking, building parking, and field parking. Gedung Parkir 3 is a 8 stories building, with 2 floors are the basement parking, and the other 6 floors are upperground parking structure.

The basement parking that located in a confined space makes the manager should be able to ascertain how the conditions of the air circulation in the room can be maintained.CO is a dangerous pollutant because its odorless, tasteless, and colorless, so it can't be physically detected. Research conducted on Monday and

Friday shows that the maximum concentration of CO occurs at point A3 (the driver's waiting room), amounting to 19 ppm on Monday afternoon. The minimum concentration of 0 ppm CO is occurring in basement 2 (point B1 and B2), p3 floor (point D), and outside parking (point E2) on Friday morning and afternoon, the floor P1 (point C1), D2, and E1 on Friday morning. On Monday measurement, all minimum value of 0 ppm CO occurs at all points except at the point A3 in the afternoon, which amounted to 17 ppm. Based on the results of ttest, the concentration of CO in ambient air is affected by the amount of vehicles. Based on the ANOVA test, there are differences in the concentration of CO between the three types of parking spaces, This study took place at Gedung Parkir 3 Mal Kelapa Gading to know the differences of concentration value of carbon monoxide in basement parking, building parking, and field parking. Gedung Parkir 3 is a 8 stories building, with 2 floors are the basement parking, and the other 6 floors are upperground parking structure.

The basement parking that located in a confined space makes the manager should be able to ascertain how the conditions of the air circulation in the room can be maintained. CO is a dangerous pollutant because its odorless, tasteless, and colorless, so it can't be physically detected. Research conducted on Monday and Friday shows that the maximum concentration of CO occurs at point A3 (the driver's waiting room), amounting to 19 ppm on Monday afternoon. The minimum concentration of 0 ppm CO is occurring in basement 2 (point B1 and B2), p3 floor (point D), and outside parking (point E2) on Friday morning and afternoon, the floor P1 (point C1), D2, and E1 on Friday morning. On Monday measurement, all minimum value of 0 ppm CO occurs at all points except at the point A3 in the afternoon, which amounted to 17 ppm. Based on the results of ttest, the concentration of CO in ambient air is affected by the amount of vehicles. Based on the ANOVA test, there are differences in the concentration of CO between the three types of parking spaces]