

## AUTHOR GUIDE FOR ABSTRACT

1. 200 to 300 words abstract (single space typing for text, letter size 10)
2. To include the following in the abstract:
  1. Title of paper
  2. Authors' full name (in both English and Chinese), Affiliation, mailing address, post code, office telephone number, office fax number and email address
  3. Objectives
  4. Major contents of abstract
  5. Main results and conclusions
  6. Keywords

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### Sample Abstract

#### Monitoring of MTBE around Gasoline Service Stations in Urban Area of Taiwan

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**Abstract:** Methyl tert-butyl ether (MTBE) has been widely applied as a fuel oxygenate for gasoline and has been one of major concerned contaminants around gasoline service stations. Not only the stink smell of MTBE, but also it has been confirmed as a carcinogen. In Taiwan, it has been reported that the workers in gas stations may exposure to MTBE of a concentration as high as 3087 ppb.....

**Keywords:** MtBE; exposure; VOCs

## Author Guide for Paper

### 論文格式範例

# Monitoring of MTBE around Gasoline Service Stations in Urban Area of Taiwan

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**Abstract** Methyl tert-butyl ether (MTBE) has been widely applied as a fuel oxygenate for gasoline and has been one of major concerned contaminants around gasoline service stations. Not only the stink small of MTBE, but also it has been confirmed as a carcinogen. In Taiwan, it has been reported that the workers in gas stations may exposure to MTBE of a concentration as high as 3087 ppb.....

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## I. Introduction

This study monitored MTBE concentrations in the ambient air around typical gasoline service stations in Kaohsiung City for assessing the exposure of the people living/working neighborhood. Kaohsiung City is the secondary large city of Taiwan and has 2.5 million people within. The ambient air qualities around six gasoline service stations of Kaohsiung City were monitored. These stations had been established for 10 to 30 years. Their daily gasoline sale ranged from 12.5 to 20.0 m<sup>3</sup>/day, but most of gasoline was sold during travel rushing hours. For MTBE measurement, field air samples were collected in adsorption tubes based upon TO-17 sampling method and were further analyzed with a thermal-desorption-GC/MS system in the laboratory. [1].....

## II. Material

### 2.1 Apparatus

.....

### 2.2 Methods

#### 2.2.1 Sampling plant

The MTBE concentrations during both travel rushing periods (7:00~9:00 a.m.) and usual periods (8:00~10:00 p.m.) were detected. Based upon the results, the highest MTBE concentrations were generally detected during rush hours.

**Table 1** Location of gas station

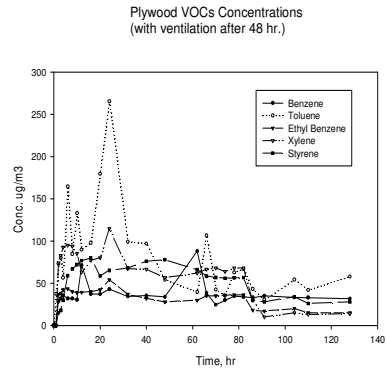
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Gas station

Sampling location

### III. Results and Discussion

#### 3.1 results



**Figure 1** Distribution of VOC concentration around gas station

Methyl tert-butyl ether (MTBE) has been widely applied as a fuel oxygenate for gasoline and has been one of major concerned contaminants around gasoline service stations. Not only the stink small of MTBE, but also it has been confirmed as a carcinogen. In Taiwan, it has been reported that the workers in gas stations may exposure to MTBE of a concentration as high as 3087 ppb. This study monitored MTBE concentrations in the ambient air around typical gasoline service stations in Kaohsiung City for assessing the exposure of the people living/working neighborhood. Kaohsiung City is the secondary large city of Taiwan and has 2.5 million people within. The ambient air qualities around six gasoline service stations of Kaohsiung City were monitored....

### IV. Conclusions

#### References

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- [2] 黃光輝, 下水道工程學, 台北, 長松出版社, 2005.8-11
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