TOLUENE REMOVAL FROM CONTAMINATED AIRBORNE BY USING ACTIVATED CARBON

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Final Year Project Report Submitted in Partial Fulfilment of the Requirements for the Degree of Bachelor (Hons.) Applied Chemistry in the Faculty Sciences Universiti Teknologi MARA

MAY 2009
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ACKNOWLEDGEMENTS

Alhamdulillah, with the grace and blessing of The Almighty ALLAH S.W.T, I manage to complete this final year project, which could have not been accomplished without HIS willing.

I would like to express my deepest gratitude to my research members; Siti Juriah Abd Rahim and Ruwaidah Jasmin who have given the trust and confident and subsequently support my research. I am also grateful to the Deputy of Dean of the Faculty Applied Sciences, UiTM, Prof. Madya Tuan Haji Borhannuddin Arifin. He is also as my supervisor for this research as upon his strong recommendation and supports me to carry this research. I also would like to thank to my co-supervisor, Encik Mohd Shaharudin Abdul Latiff from Qesh Integrated Consultant for his guidance and support and all the brilliant ideas in order to complete this final year project.

Special thanks and acknowledgement goes to the following individuals: Asmar Hj Hassan, Saodah Hj Yunos, Nur Ayuni Asmar and Mohd Shahidan Asmar. Thanks to all of them for their love and support. Not forgotten to Norida Lahazan, Nurulhuda Kassim and Muhammad Azril. Thanks to them for offering assistance and encouragement throughout my period of completing this research.

Nur Syuhada’ Asmar
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ABSTRACT

TOLUENE REMOVAL FROM CONTAMINATED AIRBORNE BY USING ACTIVATED CARBON

This study investigates the reduction of concentration of toluene. Air samples were collected in a small both with 2 m x 2 m x 2 m dimension. Activated carbon has been used as adsorbent to adsorb the evaporated toluene from the contaminated air. The samples were collected 4 times in every 60 minutes period. Then, all the samples were analyzed by using gas chromatography, GC-FID. The final results indicated that the concentration of toluene reduced from 240.00 mg/m$^3$ to 36.25 mg/m$^3$. The percentage reduction of toluene reaching up to 84%. The concentrations of toluene were below the TWA limit which is 375 mg/m$^3$ (100ppm).