

# Woo Meng Wai

## Contact Details

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## Education

2006            PhD candidate, Universiti Kebangsaan Malaysia  
2004            Bachelor of Chemical Engineering, James Cook University,  
                  Queensland, Australia  
2002            Diploma of Chemical Engineering, Prime College,  
                  Malaysia

## Working Experience

2005 – 2006      Process Engineer, Polyplastics Asia Pacific Sdn. Bhd.  
2005              Engineer, Darco Water Systems Sdn. Bhd.  
2003              Industrial Trainee, PTL Technology Sdn. Bhd.

## PhD Research Project

Project Title:    A Study on Spray Drying – Experimental and Modelling Approach

Project objectives:

1. Investigate the effect of wall surface properties on the deposition problem of amorphous particles in a spray dryer. Experiments to be carried out on a pilot scale dryer utilizing different wall materials and drying rates.
2. Evaluation of a suitable droplet drying model for CFD modelling of spray drying. The models will be evaluated with reference to the final moisture content and the condition of the particles upon impacting the dryer wall. Comparison will be made to experimental data.
3. Develop a new CFD wall deposition model for amorphous particles. The model will aim to capture the effect of wall materials and the adhesion / cohesion mechanism.
4. Parametric study on the effect of wall material on deposition using the developed CFD model. This is aimed to provide a basis for the selection of dryer construction material as an alternative to reduce the wall deposition problem.

## Publication (Journals and Proceedings)

1. Woo, M.W., Daud, W.R.W., Masrinda, T.S., Talib, M.Z.M. Optimization of the spray drying parameters – A Quick Trial and Error Method, Drying Technology (accepted).
2. Woo, M.W., Daud, W.R.W., Masrinda, T.S., Talib, M.Z.M. Effect of wall surface properties on the deposition problem at different drying rates in a spray dryer. Proceedings of The 5<sup>th</sup> Asia-Pacific Drying Conference, August 13-15, 2007, Hong Kong, China (accepted).

## Interests

Toastmasters International

Fishing