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### Major Research Interests

Submerged and Solid State Fermentation  
Enzyme Technology  
Food Biotechnology  
Environmental Biotechnology

### Selected Publications

1. S. Abd-Aziz, **L. G. A. Ong**, M. A. Hassan and M. I. A. Karim (2008) Process parameters optimisation of mannanase production from *Aspergillus niger* FTCC 5003 using palm kernel cake as carbon source. *Asian Journal of Biochemistry*. 3(5):297-307.
2. Yang K. L., Lam K. L., **Ong G. A.**, Sunderasan E. and Ong M. T. (2008) Anticancer properties of *Hevea brasiliensis* extract b-serum sub-fractions. In the Abstract Book of 2<sup>nd</sup> USM Penang International Postgraduate Convention 2008 in conjunction with 4<sup>th</sup> Life Sciences Postgraduate Conference, 18-20 June 2008. pg 581.
3. Kamilla, L, **O. A. G. Lisa**, A. L. Chew and S. Sasidharan (2008) Optimization of nitrogen source in addition of carbon source to improve the growth of *Lactobacillus acidophilus*. In the Abstract Book of 2<sup>nd</sup> USM Penang International Postgraduate Convention 2008 in conjunction with 4<sup>th</sup> Life Sciences Postgraduate Conference, 18-20 June 2008. pg 571
4. Chooi, Y. S., Chew, A. L. and **Ong, L. G. A.** (2007) Screening for biosorbents material for the removal of metal ions from aqueous solution. In the Abstract Book of Asia Pacific Conference on Plant Tissue Culture and Agribiotechnology 2007, 17-21 June Kuala Lumpur, Malaysia. pg 149
5. **L. G. A. Ong**, S. Abd-Aziz, M. A. Hassan and M. I. A. Karim (2005). Optimisation of process parameters for mannanase production under solid substrate fermentation from *Aspergillus niger*. In: Proceedings of 2<sup>nd</sup> International Conferences of Chemical and Bioprocess Engineering, 8-10 December 2005.
6. Suraini Abd Aziz, **Lisa Ong Gaik Ai**, Mohd Ali Hassan, Mohamed Ismail Abdul Karim and Noraini Samat (2005). Optimisation of cake (PKC). In: *Major research findings in the Plantations and Commodities Sector at UPM*. Ed: Idrus, Z., Kanwal, N. D. S. and Rahim, R. A. Serdang: The Research Management Centre (RMC), Universiti Putra Malaysia. pg 66.

7. **Ong, L.G.A.**, Abd-Aziz, S., Noraini, S., Karim, M.I.A. and Hassan, M.A. (2004) Enzyme production and profile by *Aspergillus niger* during solid substrate fermentation using palm kernel cake as substrate. *Applied Biochemistry and Biotechnology*. 118(1-3): 73-80.
8. **L.G.A. Ong**, S.Abd-Aziz, N. Samat, M.A. Hassan and M.I.Abdul-Karim (2003). Enzyme production and profiling of palm kernel cake (PKC) as substrate by *Aspergillus niger* in the solid state fermentation (SSF). In: International conference on Emerging Frontiers at the Interface of Chemistry and Biology Abstract Book, Trivandrum, India. pg 74-75.
9. Abd-Aziz, S., **Ong, L.G.A.**, Noraini, S., Hassan, M.A. and Karim, M.I.A (2003) Effect of inoculum size for the production of hemicellulose by *Aspergillus niger* using palm kernel cake as carbon source. In Proceeding of 14th National Biotechnology Seminar, Penang, Malaysia. pg 87-90.
10. Suraini Abd-Aziz and **Lisa Ong Gaik Ai** (2000). Enzyme production and profile by *Aspergillus niger* during solid substrate fermentation using palm kernel cake as substrate. *Asia Pacific Journal of Molecular Biology & Biotechnology*. **8(2)**: 147-153.
11. Suraini Abd-Aziz and **Lisa Ong Gaik Ai** (2000). Studies on the enzymatic hydrolysis parameters of rice protein. In: Proceedings of 2nd International Conferences on Advance in Strategic Technologies. ISBN 983-9152-70-X. pg. 1463-1468.

#### **Academic Award**

- Fellowship from Indian Technical and Economic Cooperation (ITEC), Ministry of External Affairs, India (2008).
- Research Graduate Assistanceship, UPM (1999-2001).