

Two PhD studentships in Pharmaceutical Technologies

De Montfort University – Pharmaceutical Technologies Group, School of Pharmacy

Two 3-year PhD research studentships within Pharmaceutical Technologies Group in School of pharmacy at De Montfort University are available. The studentships will cover international student tuition fees for 3 years starting October 2014. The successful candidate may be able to seek paid work in teaching and research assistance although this is not guaranteed and is dependent on teaching load and research projects available.

Projects: The research projects will focus on solving key challenges facing the pharmaceutical industry for reduction in manufacturing costs and improvements in production efficiency through understanding material physical and chemical properties including crystallisation, use of single crystal structural information and prediction of properties, solid form screening and particle engineering, and application of process analytical technologies, process performance monitoring and process modelling and control.

Entry Requirements: Candidates should have a degree in Pharmaceutical Science, Chemical engineering, Chemistry, Material science or another Engineering/Science subject. Candidates should also demonstrate competence in the use of the English language to the satisfaction of the Higher Degrees Committee Sub-Committee. Normally required is a minimum score of 6.5 in an International English Language Test Score (IELTS or equivalent) test. This shall have been taken not more than two years prior to entry.

Enquires and application: please contact Dr Mingzhong Li by telephone +44 (0)116 257 7132, mobile +44(0)7877184021 or email mli@dmu.ac.uk for more information and admission pack.

Group information can be found at <http://www.dmu.ac.uk/about-dmu/academic-staff/health-and-life-sciences/mingzhong-li/mingzhong-li.aspx>.

Key publications from the group related to the projects

- 1) M. Li, S. Qiu, Y. Lu, K. Wang, X. Lai, and M. Rehan. Investigation of the Effect of Hydroxypropyl Methylcellulose on the Phase Transformation and Release Profiles of Carbamazepine-Nicotinamide Cocrystal. *Pharmaceutical Research*, 1-14 (2014).
- 2) M. Li, N. Qiao, and K. Wang. Influence of Sodium Lauryl Sulfate and Tween 80 on Carbamazepine–Nicotinamide Cocrystal Solubility and Dissolution Behaviour. *Pharmaceutics*. 5:508-524 (2013)
- 3) Liu, H., K. Wang, W. Schlindwein and M. Li. Using the Box-behnken Experimental Design to Optimise Operating Parameters in Pulsed Spray Fluidised Bed Granulation. *International Journal of Pharmaceutics*, 2013, 448(2), 329-338.
- 4) Qiao N., K. Wang, W. Schlindwein, A. Davies, and M. LI. In situ Monitoring of Carbamazepine-Nicotinamide Cocrystal Intrinsic Dissolution Behaviour. *European Journal of Pharmaceutics and Biopharmaceutics*, 2013, 83(3):415-26.
- 5) Khan K., M. Li and W. Schlindwein. Comparison of *In Vitro* dissolution tests for Commercially Available Aspirin Tablets. *Dissolution technologies*, 20(1), 48-58, 2013.
- 6) Qiao N., M. Li, W. Schlindwein, N. Malek, A. Davies and G. Trappitt. Pharmaceutical cocrystals: an overview. *International Journal of Pharmaceutics*, 419, 1-11, 2011.