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NMR studies of protein-small molecule and protein-peptide interactions

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List of Publications

J.-Y. Guan, P. H. J. Keizers, W.-M. Liu, F. Löhr, E. Heeneman, S. P. Skinner, H. Schwalbe, M. Ubbink and G. Siegal. **Small molecule binding sites on proteins established by paramagnetic NMR spectroscopy.** *J. Am. Chem. Soc.*, **2013**, 135 (15), 5859–5868

J.-Y. Guan, J. M. Foerster, J. W. Drijfhout, M. Timmer, A. Blok, G. M. Ullmann and M. Ubbink. **An ensemble of rapidly interconverting orientations in electrostatic protein-peptide complexes characterized by NMR spectroscopy.** *Manuscript submitted to ChemBioChem.*

C. H. Röhrig, C. Loch, J.-Y. Guan, G. Siegal and M. Overhand. **Fragment-based synthesis and SAR of modified FKBP ligands: influence of different linking on binding affinity.** *ChemMedChem* **2007**, 2, 1054–1070.

Curriculum vitae

Jia-Ying Guan (官佳穎) was born on 1 December 1980 in Yi-Lan, Taiwan. She obtained her early education in the beautiful countryside of Yi-Lan and the technology town of Hsin-Chu, and then completed her bachelor in chemistry from National Taiwan University in Taipei.

After spending a few years in Taipei, she decided to take an adventure in the other side of the world, a country that has more bikes than people– the Netherlands. She did internships in the bioorganic synthesis group and the protein chemistry group in the Leiden Institute of Chemistry. The topics of her internships include fragment-based synthesis of FKBP12 ligands, synthesis of bacterial teichoic acid subunits, and comparison of various NMR screening techniques. In 2008 she completed her master degrees in chemistry from Leiden University, with specialization in Biological Chemistry and Design and Synthesis.

In 2009 she started her PhD research in the Protein Chemistry group under the supervision of Prof. Dr. Marcellus Ubbink and Dr. Gregg Siegal. The research focused on the applications of paramagnetic NMR in protein-ligand studies. Part of the work described in this thesis was presented at the International Conference on Magnetic Resonance in Biological Systems (ICMRBS) 2012 in Lyon, France and Annual Dutch Meeting on Chemical Sciences in Veldhoven in 2012.

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