

**Publications and Presentations:**

1. L. J. Bignell, L. Mo, D. Alexiev, and S.R. Hashemi-Nezhad "The effect of multiple  $\gamma$ -ray interactions on ionisation quenching corrections in liquid scintillants", *Nucl. Instr. Meth. A*, **614**(2), p. 231-236 (2010).
2. L. Mo, L. J. Bignell, T. Steele, D. Alexiev "Activity measurements of  $^3\text{H}$  using the TDCR method and observation of source stability". *Appl. Rad. Isotop.*, **68**, pp 1540-1542 (2010).
3. L. J. Bignell, L. Mo, D. Alexiev, S. R. Hashemi-Nezhad "Sensitivity and uncertainty analysis of the simulation of  $^{123}\text{I}$  and  $^{54}\text{Mn}$  gamma and x-ray emissions in a liquid scintillation vial", *Appl. Rad. Isotop.*, **68**, pp. 1495-1502 (2010).
4. B. E. Zimmerman, T. Altitzoglou, D. Rodrigues, R. Broda, P. Cassette, L. Mo, G. Ratel, B. Simpson, W. van Wyngaardt, C. Wätjen "Comparison of triple-to-double coincidence ratio (TDCR) efficiency calculations and uncertainty assessments for  $^{99}\text{Tc}$ ", *Appl. Rad. Isotop.*, **68**, pp. 1477-1481 (2010).
5. G. P. Lee, L. J. Bignell, T. C. Romero, J. M. Razal, R. L. Shepherd, J. Chen, A. I. Minett, P. C. Innis, G. G. Wallace "The citrate-mediated shape evolution of transforming photomorphonic silver nanoparticles". *Chem. Commun.*, **46**, pp. 7807-7809 (2010)
6. M. L. Smith, L. J. Bignell, D. Alexiev, L. Mo "Sipping Test: Checking for failure of fuel elements at the OPAL reactor". *Nucl. Eng. Tech.*, **42**(1), pp. 125-130 (2010).
7. T. Steele, L. Mo, L. Bignell, M. Smith and D. Alexiev "FASEA: A FPGA Acquisition System and Software Event Analysis for liquid scintillation counting". *Nucl. Instr. Meth. A*, **609**, pp. 217-220 (2009).
8. T. Steele "An Investigation into Digital Pulse Analysis Techniques for Scintillation Detectors", Honours Thesis, The Australian National University (2009).
9. L. J. Bignell, L. Mo, D. Alexiev, S. R. Hashemi-Nezhad "Sensitivity and Uncertainty Analysis of the simulation of  $^{123}\text{I}$  and  $^{54}\text{Mn}$  decay in liquid scintillation vials". Oral presentation at ICRM 2009, Bratislava, Slovak Republic (2009).
10. T. Steele, L. Mo, L. Bignell, M. Smith, D. Alexiev "FPGA based software coincidence analysis for a  $4\pi\beta(\text{LS})-\gamma$  TDCR detector". Oral presentation at ICRM 2009, Bratislava, Slovak Republic (2009).
11. L. Mo, L. J. Bignell, T. Steele, M. L. Smith, D. Alexiev "Activity measurements of  $^3\text{H}$  using the TDCR method and observation of source stability". Poster presentation at ICRM 2009, Bratislava, Slovak Republic (2009).