9.0 PUBLICATIONS ARISING FROM THIS STUDY

Publication of the following peer review papers:

1. Jalaludin, Z., Hill C.A.S., Curling S.F., Samsi H.W. & Husain H. 2009. Moisture adsorption isotherms of *Acacia mangium* and Sesenduk using dynamic vapour sorption. *Journal of Tropical Forest Science*, 21, 277-285.

2. Jalaludin, Z., Hill C.A.S., Curling S.F., Samsi H.W. & Husain H. 2010. The kinetics of water vapour sorption: analysis using the parallel exponential kinetics model on six Malaysian hardwoods. *Journal of Tropical Forest Science*, 22, 107-117.

3. Jalaludin, Z., Hill C.A.S., Xie, Y., Samsi H.W., Husain H., Awang K. & Curling S.F. 2010. Analysis of the water vapour sorption isotherms of thermally modified Acacia and Sesendok. *Wood Material Science & Engineering*, 5, 194-203.

4. Jalaludin, Z., Hill C.A.S., Samsi H.W., Husain H. & Xie, Y. 2010. Analysis of water vapour sorption of oleo-thermal modified wood of *Acacia mangium* and *Endospermum malaccense* by a parallel exponential kinetics model and according to the Hailwood-Horrobin model. *Holzforschung*, 64, 763-770.

5. Xie, Y., Hill, C.A.S., Xiao, Z., Jalaludin, Z., Militz, H. & Mai, C. 2010. Water vapour sorption kinetics of wood modified with glutaraldehyde. *Journal of Applied Polymer Science*, 117, 1674–1682.

6. Xie, Y., Hill C.A.S., Jalaludin, Z., Curling S.F., Anandjiwala R. D., Norton, A.J. & Newman, G. 2011. The dynamic water vapour sorption behaviour of natural fibres and kinetic analysis using the parallel exponential kinetics model. *Journal of Materials Science*, 46, 479-489.

7. Sharratt, V., Hill C.A.S., Jalaludin, Z. & Kint, D.P.R. 2010. Photodegradation and weathering effects on timber surface moisture profiles as studied using dynamic vapour sorption. *Polymer Degradation and Stability*, 95, 2659-2662.

8. Sharratt, V., Hill C.A.S., Jalaludin, Z. & Kint, D.P.R. 2011. The influence of photodegradation and weathering on the water vapour sorption kinetic behaviour of scots pine earlywood and latewood. *Polymer Degradation and Stability,* 96, 1210-1218.

9. Jalaludin, Z., Hill C.A.S., Samsi H.W., Jantan M.D. & Sun D. 2011. Analysis of the water wapour sorption isotherms of oil palm trunk and rubberwood. *Journal of Tropical Forest Science*, 23, 97-105.

10. Xie, Y., Hill, C.A.S., Jalaludin, Z. & Sun, D. 2011. The water vapour sorption behaviour of three celluloses: analysis using parallel exponential kinetics and interpretation using the Kelvin-Voigt viscoelastic model. *Cellulose*, 18, 517-530.

11. Hill, C.A.S., Moore, J., Jalaludin, Z., Levenue, M. & Mahrdt, E. 2011. Influence of earlywood/latewood and ring position upon the water vapour sorption properties of sitka spruce. *International Wood Products Journal*, 2, 12-19.

12. Hill, C.A.S., Keating, B., Jalaludin, Z. & Mahrdt, E. 2011. A rheological description of the water vapour sorption kinetics behaviour of wood invoking a model using a canonical assembly of Kelvin-Voigt elements and a possible link with sorption hysteresis. *Holzforchung*, DOI 10.1515/HF.2011.115.

13. Xie, Y., Hill, C. A. S., Sun, D., Jalaludin, Z., Wang, Q. & Mai, C. 2011. Effects of dynamic aging (hydrolysis and condensation) behaviour of organofunctional silanes in the aqueous solution on their penetrability into the cell walls of wood. *BioResources*, 6, 2323-2339.

Publication of the following conferences:

1. Zaihan Jalaludin. Callum Hill & Abdy Kermani. 2009. *Moisture Adsorption Isotherms of Wood using Dynamic Vapour Sorption*. Poster presentation in Edinburgh Research Partnership (ERP) in Engineering and Mathematics seminar: 22 Jan 2009 Edinburgh Napier University.

2. Jalaludin, Z., Hill C.A.S & Curling S.F. 2009. *Moisture Adsorption Isotherms of Wood using a Dynamic Vapour Sorption apparatus*. Poster presentation in FECCI Research Seminar 2009: 24 May 2009, Edinburgh Napier University.

3. Jalaludin, Z., Hill C.A.S & Curling S.F. *Moisture Adsorption Isotherms of Wood using Dynamic Vapour Sorption* A*pparatus*. Proceeding of the 40th Annual Meeting IRG on Wood Protection Beijing, China: 24-28th May 2009.

4. Sharratt, V, Hill C.A.S., Curling, S.F, Zaihan J & Kint, D.P.R. 2010. Photodegradation and weathering effects on timber surface moisture profiles as studied using Dynamic vapour sorption. Poster in Conference COST Action 53 – The future of quality control for wood and wood products, Edinburgh, 4-7th May 2010.

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