

List of Publications – Allan Thomas (Author or co-author), in chronological order.

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- 1 Thomas, A.D. and Flint, L.R. (1974). Pressure Drop Prediction for Flow of Solid-Liquid Mixtures in Horizontal Pipes, *5th Australasian Conf. on Hydraulics and Fluid Mechanics, Christchurch, New Zealand, 9-13 Dec., 1974.*
- 2 Thomas, A.D. (1975). Factors Affecting the Hydraulic performance of Slurries, *Thermofluids Conf., Brisbane, Australia, 3-5 Dec., 1975.*
- 3 Thomas, A.D. (1976). Some results of applying scale-up equations to predict slurry pressure drop in large pipes. *Internal Report, M.D. Research Company Pty Ltd, North Ryde, NSW, Australia.*
- 4 Thomas, A.D. (1976). Scale-Up Methods for Pipeline Transport of Slurries, *Int. Jnl of Mineral Processing, 3, 1976, pp 51-69.*
- 5 Thomas, A.D. (1977). A Rational Design Philosophy for Long Distance Slurry Pipelines, *Chemical Engineering in Australia, 1977.*
- 6 Thomas, A.D. (1977). Particle Size Effects in Turbulent Pipe Flow of Solid-Liquid Suspensions, *6th Australasian Hydraulics and Fluid mechanics Conference, Adelaide, 5-9 December 1977.*
- 7 Thomas, A.D. (1978). Coarse Particles in a Heavy Medium – Turbulent Pressure Drop Reduction and Deposition under Laminar Flow, *Hydrotransport 5 Conf., Hannover, 8-11 May, 1978.*
- 8 Thomas, A.D. (1979). Predicting the Deposit Velocity for Horizontal Turbulent Pipe Flow of Slurries, *Int Jnl Multiphase Flow, Vol. 5, pp 113-129, 1979.*
- 9 Thomas, A.D. (1979). Pipelining of Coarse Coal as a Stabilized Slurry – Another Viewpoint, *4th Int. Tech. Conf. on Slurry Transportation, Las Vegas, 28-30 March, 1979.*
- 10 Thomas, A.D. (1979). Settling of Particles in a Horizontally Sheared Bingham Plastic, *1st National Conference on Rheology, Melbourne, 30 May-1 June, 1979.*
- 11 Thomas, A.D. (1979). The Role of Laminar/Turbulent Transition in Determining the Critical Deposit velocity and the Operating Pressure Gradient for Long Distance Slurry Pipelines, *Hydrotransport 6 Conf, Canterbury, U.K., 26-28 Sept. 1979.*
- 12 Thomas, A.D. (1981). Slurry Pipeline Rheology, *Keynote Lecture, 2nd National Conf. on Rheology, Sydney, 14-15 May, 1981.*
- 13 Rigby, G.R., Jones, C.U., Mainwaring, D.E. and Thomas, A.D. (1982). Slurry Pipeline Studies on the BHP-BPA 30 Tonne per Hour Demonstration Plant, *Hydrotransport 8 Conference, Johannesburg, August 1982.*
- 14 Cowper, N.T., Venton, P.B. and Thomas, A.D. (1982). The Application, Potential, Development and Options for Coal Slurry Pipelining in Australia, *Australian Pipeline Industry Association Convention, Perth, 23-28 October 1982.*
- 15 Rigby, G.R. and Thomas, G.R. (1983). Slurry Handling and Transportation Developments, *Int. Conf. Bulk Materials Storage, Handling and Transportation, Newcastle, 22-24 August 1983.*
- 16 Thomas, A.D. (1983). Turbulent Pipe Flow of Bingham Plastics, *3rd National Conf. on Rheology, Melbourne.*
- 17 Wilson, K.C. and Thomas, A.D. (1985). A New Analysis of the Turbulent Flow of Non-Newtonian Fluids, *Can. Jnl Chem. Engrn, Vol. 63, August 1985.*
- 18 Thomas, A.D. and Rigby, G.R. (1985). A Study of Some Factors Affecting the Rheology of Coal-Water Slurries, *Chemeca Conference, Perth, Sept 1985.*
- 19 Thomas, A.D. and Cowper, N.T. (1986). The Effect of Rheology on Pipe Wear, *4th National Congress on Rheology, Adelaide, June 3-5, 1986.*
- 20 Thomas, A.D. (1986). Slurry Measurement Techniques, *Concentrated Slurry Technology Symposium, RMIT Melbourne, Australia, December 1986.*
- 21 Thomas, A.D. (1987). Viscosity Effects in Gold Processing, *Workshop, Kalgoorlie, Australia, September, 1987.*
- 22 Thomas, A.D. (1987). Alternative Tailings Disposal Technologies, *Workshop on Environmental Management in the Goldfields, Kalgoorlie, Australia, May 19-20, 1987.*
- 23 Thomas, A.D. and Wilson, K.C. (1987). New Analysis of Non-Newtonian Turbulent Flow – Yield Power Law Fluids, *Can. Jnl Chem Engrn, Vol 65, April 1987.*
- 24 Thomas, A.D. (1988). High Density Coal Ash Slurry Transport, *Lecture Paper, Power Generation School, University of W.A., January 1988.*

- 25 Thomas, A.D., Cowper, N.T. and Venton, P.B. (1988). On-Line Viscosity Measurement for the Mineral Processing Industry, *10th International Congress on Rheology, Sydney, Australia, August*.
- 26 Rigby, G.R. and Thomas, A.D. (1988), Pilot Plant Tests Comparing Various Alternative Coal Pipelining Options, *Bulk Solids Handling, Vol. 8, No. 6, December 1988*.
- 27 Foster, D. Brindley, R., Thomas, A.D. and Blake, K. (1990), Sand bypassing using the shore parallel trap, *I.E.Aust, Ports and Harbour Conference, Melbourne, 28-30 August*.
- 28 Thomas, A.D. and Cowper, N.T. (1992), Technical Considerations for Pipeline Transport of Lump Coal, *Int. Conf. on Bulk Materials Handling and Transportation, Symposium on Freight Pipelines, Wollongong, Australia 6-8 July 1992*.
- 29 Thomas, A.D. (1999). The Influence of Coarse Particles on the Rheology of Fine Particle Slurries, *Rheology in the Mineral Industry II, United Engineering Foundation Conference, Turtle Bay, Hawaii, March 1999*.
- 30 Thomas, A.D. (2000). Relationship between Viscometer Measurements and Laminar and Turbulent Pipe Flow, *Keynote Lecture presented at 10th International Conference Transport and Sedimentation of Solid Particles, Wroclaw, Poland, September 2000*.
- 31 Thomas, A.D. and Sobota, J. (2002). Influence of additives on energy loss in pipeline flow of flyash mixtures. *Hydrotransport 15 Conference, Banff, Canada*.
- 32 Thomas, A.D., Gaultier, P and Hoskins, M. (2002). Two 300 km Concentrate Pipelines Compared. Century Zinc/Lead Concentrate Pipeline, Australia and Antamina Copper/Zinc Concentrate Pipeline, Peru. *Hydrotransport 15 Conference, Banff, Canada*.
- 33 Thomas, A.D., Pullum, L. and Wilson, K.C. (2004). Stabilised Laminar Slurry Flow: Review, Trends and Prognosis. *Keynote Paper presented at Hydrotransport 16 Conference, Santiago, Chile, April 2004*.
- 34 Wilson, K.C. and Thomas, A.D. (2006). Analytic model of laminar-turbulent transition for Bingham plastics, *Can. Jnl Chem. Eng., October 2006*.
- 35 Thomas, A.D. and Wilson, K.C. (2007). *Rough-wall and turbulent transition analyses for Bingham plastics. Hydrotransport 17 Conference, Cape Town, South Africa*.
- 36 Thomas, A.D. and Park, L.J. (2007). Feasibility study of a 180 km nickel ore pipeline – rheological factors influencing slurry pipeline design. *Hydrotransport 17 Conference, Cape Town, South Africa*.
- 37 Thomas, A.D. and Cowper, N.T. Snr (2008). Air release valves (ARV) are conventionally installed on long distance water pipelines. Why ARVs are not required on slurry pipelines. *Presented at 14th International Conference on Transportation and Sedimentation of Solid Particles, 23-27 June, St Petersburg, Russia*.
- 38 Cowper, N.T., Thomas, A.D. and Dippenaar, J (2008). The OneSteel Whyalla 62 km magnetite slurry and return water pipelines. *14th International Conference on Transportation and Sedimentation of Solid Particles, 23-27 June, St Petersburg, Russia*.
- 39 Wilson, K.C. and Thomas, A.D. (2008). Hybrid rheological model for predicting non-Newtonian turbulent pipe flow (2008). *14th International Conference on Transportation and Sedimentation of Solid Particles, 23-27 June, St Petersburg, Russia*.
- 40 Cowper, N.T. Snr, Cowper, N.T. Jnr and Thomas, A.D. (2009). Slurry pipelines: Past, present and future. *I.E. Aust, Australian Journal of Multi-Disciplinary Engineering, Vol 7 No. 2*.
- 41 Cowper, N.T., Thomas, A.D. and Sobota, J. (2010). A technical appraisal of coal pipeline options. *Hydrotransport 18 Conference, Rio de Janeiro, Brazil, 22-24 September*.
- 42 Thomas, A.D. (2010). Method of determining the inherent viscosity of a slurry and other rheological trends as illustrated by a data bank of over 200 different slurries. *Hydrotransport 18 Conference, Rio de Janeiro, Brazil, 22-24 September*.
- 43 Thomas, A.D., Hart, S, Parker, B. and Edwards, I (2010). Newmont's Boddington Gold Mine tailings pipelines. Hydraulic design issues and comparisons with operating data. *Hydrotransport 18 Conference, Rio de Janeiro, Brazil, 22-24 September*.
- 44 Thomas, A.D. and Fitton, T (2011). Analysis of tailings beach slopes based on slurry pipeline experience. *Paste 2011 Conference, Perth, Western Australia, 5-7th April*.
- 45 Deans, J.A., Tucker, R.T. and Thomas, A.D. (2011). Pumped beach replenishment in Adelaide: Selecting the design sand., *Coasts and Ports 2011 Conference, 28-30 September 2011, Adelaide, South Australia. (Engineers Australia)*.
- 46 Cowper, N.T Snr, Cowper, N.T. Jnr, and Thomas, A.D. (2011) Iron ore slurry pipelines – Past present and future. *IRR Conference, Iron Ore Project Development and Logistics, 27-28 June 2011, Perth*.

- 47 Thomas, A.D. Cowper, N.T. Jnr and Cowper, N.T. Snr (2011). Review of recent slurry pipelines and the role of particle size in determining the distance between pump stations in a long distance slurry pipeline, *IRR Slurry Pipelines Summit, 28-30 November, Perth*.
- 48 Thomas, A.D. (2012). Innovations – Improving the efficiency of slurry transport, *IRR 2nd Annual Slurry Pipelines Conference, Fremantle, Western Australia, 20-21 Nov, 2012*.
- 49 Thomas, A.D. (2012). The design of the Century zinc-lead concentrate pipeline – the longest single pump station slurry pipeline in the world, *IRR 2nd Annual Slurry Pipelines Conference, Fremantle, Western Australia, 20-21 Nov, 2012*.
- 50 Thomas, A.D. (2012). High concentration laminar flows: Historical development and major issues, *IRR 2nd Annual Slurry Pipelines Conference, Fremantle, Western Australia, 20-21 Nov, 2012*.
- 51 Thomas, A.D. (2013) Innovations – Improving the efficiency of slurry transport, focusing on iron ore. *AJM Conference, Iron Ore – Improving Process and Beneficiation. 19-20 March 2013, Perth, Western Australia*.
- 52 Thomas, A.D. and Sellgren, A. (2013). A convenient method of correlating rheology data, *16th International Conference on Transport and Sedimentation of Solids particles, Rostock, Germany, 18-20 September, 2013*.
- 53 Thomas, A.D. (2013) Technical innovations in the design of the Nerang sands bypass system. *IRR 3rd Annual Slurry Pipelines Conference, Perth, Western Australia, 13-14 November 2013*.
- 54 Thomas, A.D. (2013) Controlling a tailings pipeline to maximize pumping concentration and minimize water consumption. *IRR 3rd Annual Slurry Pipelines Conference, Perth, Western Australia, 13-14 November 2013*.
- 55 Thomas, A.D. (2014) Slurries of most interest to the mining industry flow homogeneously and the deposit velocity is the key parameter. *Hydrotransport 19 Conference, Golden, Colorado, 24-26 Sept 2014*.
- 56 Cowper, N.T., Nankervis, L. and Thomas, A.D. (2014) Options for fixed mechanical sand bypassing at river entrances. *Hydrotransport 19 Conference, Golden, Colorado, 24-26 Sept 2014*.
- 57 Thomas, A.D., Cowper, N.T. (Snr) and Whitton, S. (2015) RFS (recycling fine slurry) – an alternative to paste for coarse rejects co-disposal in Queensland coal mines, *Paste 2015 Conference, Cairns, Queensland, Australia, 5-7 May*
- 58 Thomas, A.D. (2015), A modification to the Wilson & Judge deposit velocity equation, extending its applicability to finer particles and larger pipe sizes, *17th International Conference on Transport & Sedimentation of Solid Particles, Delft, Netherlands, 22-25 September 2015*
- 59 Thomas, A.D., Rieschick, R. and Roshdieh, A. (2017), Design of the Sar Cheshmeh gravity flow tailings pipeline, Iran. *Hydrotransport 20 Conf., Melbourne, 3-5 May 2017*
- 60 Thomas, A.D. and Cowper, N.T. (Snr) (2017), The design of slurry pipelines – historical aspects, *Hydrotransport 20 Conf., Melbourne, 3-5 May 2017*.
- 61 Thomas, A.D. (2018), Some observations regarding non-Newtonian turbulent pipe flow and transition, especially in relation to the Wilson-Thomas (1985) theory, *Paste 2018, Perth, Australia*.
- 62 Thomas, A.D., Whitton, S and Cowper, N.T. (2019), The effect of entrained micro bubbles of air on slurry pipeline flow behaviour and design, *19th Int. Conf. on Transport and Sedimentation of Solid Particles Conference, Capetown, South Africa 24th to 27th Sept 2019*.
- 63 Thomas, A.D. (2019), Deposition of wide size distribution, Bingham plastic slurries in turbulent pipe flow. *19th Int. Conf. on Transport and Sedimentation of Solid Particles, Capetown, South Africa 24th to 27th Sept 2019*.
- 64 Thomas, A.D. (2020), A review of deposit velocity prediction methods for medium particle size slurries, *Electronic Journal of Polish Agricultural Universities, Sept 2020*.
- 65 Pirouz, B, Javadi, S. and Thomas, A.D. (2023), Inclined slurry pipelines – Solids deposition at shutdowns, Pipe blockage and restart. *IHA Hydrotransport 21 Conf., Edmonton, Canada, 3-5 May 2023*.
- 66 Thomas, A.D. (2023), Using rotational viscometer test results to predict pipe flow of slurries, *IHA Hydrotransport 21 Conf., Edmonton, Canada, 3-5 May 2023*.
- 67 Thomas, A.D. (2023), Comparing predicted deposit velocities with operating velocities in four long-distance concentrate pipelines, *20th Int. Conf. on Transport and Sedimentation of Solid Particles, Wroclaw, Poland, 26-29 September 2023*.
- 68 Thomas, A.D. and Zhao, G. (2025), The Savage River magnetite pipeline utilizes turbulent pressure gradient reduction of Bingham plastics. *IHA Hydrotransport 22 Conf., Prague, Czech Republic, 27-30 May 2025*.
- 69 Javadi, S, Thomas, A.D. and Pirouz, B (2026), Paste and thickened tailings transportation: flow characterization, *Paste Conference, Lisbon, Portugal, 14-16 April 2026*.