

Dr Alan Thompson

Email address A.Thompson@curtin.edu.au

Telephone Number (08) 9088 6162

Fax Number (08) 9088 6151

Position Principal Research Fellow



Teaching Responsibilities Selected topics within undergraduate mining course and post graduate MEngSc in Mining Geomechanics.

Research Interests

- Rock mechanics applied to surface and underground excavations in rock.
- Rock reinforcement and support.
- Testing and analysis of the response of reinforcement to dynamic loading.
- Computer software for the analysis of the stability of excavations in blocky rock masses.

Professional Affiliations

MIEAust CPEng NPER-3
MAusIMM
ISRM
ARMA
AUCTA
AGS

Professional Experience

18 years applied research in mining with CSIRO Exploration and Mining involving collaboration with companies and research groups in Australia, Canada, PNG, Chile and South Africa.
12 years independent research and specialist consulting to the mining industry in Australia, Argentina, Brazil and South Africa.

Publications

SELECTION OF PUBLICATIONS:

Thompson, A.G. 2007. Simulation and visualisation of the installation of cable bolt anchors. 11th ISRM Congress on Rock Mechanics, Lisbon, July.

Thompson, A.G. and C.R. Windsor 2007. Block formation around excavations using deterministic and

probabilistic methods. 11th ISRM Congress on Rock Mechanics, Lisbon.

E.C. Morton, A.G. Thompson, E. Villaescusa, & A. Roth 2007. Testing and analysis of steel wire mesh for mining applications of rock surface support. 11th ISRM Congress on Rock Mechanics, Lisbon.

Thompson, A.G. 2006. Energy absorption of shotcrete and reinforcement schemes. GoldenRocks, Proc 50th US Symposium on Rock Mechanics, Paper .

Hassell, R C., E. Villaescusa and A.G. Thompson 2006. Testing and evaluation of corrosion on cable bolt anchors. GoldenRocks, Proc 50th US Symposium on Rock Mechanics.

Thompson, A.G., J.R. Player and E. Villaescusa 2004. Simulation and analysis of dynamically loaded reinforcement systems. Ground Support in Mining and Underground Construction (Eds. E. Villaescusa and Y. Potvin), 341-355, Balkema:Leiden.

Player J.R., A. G. Thompson and E. Villaescusa 2004. Dynamic testing of rock reinforcement using the momentum transfer concept. Ground Support in Mining and Underground Construction (Eds. E. Villaescusa and Y. Potvin), 327-339, Balkema:Leiden.

Hassell, R., E. Villaescusa, A. G. Thompson and B. Kinsella 2004. Corrosion assessment of ground control systems. Ground Support in Mining and Underground Construction (Eds. E. Villaescusa and Y. Potvin), 529-542, Balkema:Leiden.

Thompson, A.G., P.R. O'Bryan and C.M. Orr 2004. Artificial rehabilitation and control of open pit crests and batters. Ground Support in Mining and Underground Construction (Eds. E. Villaescusa and Y. Potvin), 271-278, Balkema:Leiden.

Thompson, A.G. 2004. Performance of cable bolt anchors: An update. Massmin 2004 (Eds. A. Karzulovic and M.A. Alfaro), 317-323, Instituto de Ingenieros de Chile:Sanitiago.[pdf](#)

O'Bryan, P.R., A.G. Thompson, E. Smithikul and S. Sanguankaeo 2003. Integrated stabilization and rehabilitation of a rock slope in Thailand. International Conference on Slope Engineering, 8-10 December, University of Hong Kong.[pdf](#)

Thompson, A.G 2002. Stability assessment and reinforcement of block assemblies near underground excavations. Mining and Tunnelling Innovation and

Opportunity (Eds. Hammah, Bawden, Curran and Telesnicki), Proc. of 5th North American Rock Mechanics Symposium and the 17th Tunnelling Association of Canada Conference: NARMS-TAC 2002, V2, 1439-1446, University of Toronto Press:Toronto.

Thompson, A.G. 2001. Rock support action of mesh quantified by testing and analysis. International Seminar on Mine Surface Support Liners: Membranes, Shotcrete and Mesh, Section 1, 19p, Australian Centre for Geomechanics:Perth.

Thompson, A.G. and D.J. Finn 1999. The performance of grouted split tube rock bolt systems. Rock Support and Reinforcement Practice in Mining, (Eds. Villaescusa, Windsor and Thompson), 91-102, Balkema:Rotterdam.

Thompson, A.G., C.R. Windsor and G.W. Cadby 1999. Performance assessment of mesh for ground control applications. Rock Support and Reinforcement Practice in Mining, (Eds. Villaescusa, Windsor and Thompson), 119-130, Balkema:Rotterdam.

Thompson, A.G. and C.R. Windsor 1998. Cement grouts in theory and reinforcement practice. Proc. of NARMS 98 ,Cancun, Paper Aus-330-2 (10p), CD and Special Issue of Int. J. Rock Mech. And Min Sc.

Thompson, A.G, C.R. Windsor, W.V. Robertson and I.G. Robertson, I.G. 1995. Case study of an instrumented reinforced pit slope. Proc. 35th US Rock Mechanics Symposium, Lake Tahoe, 381-386, Balkema:Rotterdam.

Thompson, A.G. and C.R. Windsor 1995. Tensioned cable bolt reinforcement – an integrated case study. Proc. 8th Int. Cong. On Rock Mechanics, Tokyo, V2, 679-683, Balkema:Rotterdam.

Thompson, A.G. 1992. Tensioning reinforcing cables. Proc. International Symposium on Rock Support, Sudbury, June, 285-291, Balkema:Rotterdam.

Thompson, A.G. 1989. Analysis of a reinforced arbitrary shaped block. Proc. International Conference on Computational Techniques and Applications, CTAC-89, W.L. Hogarth and B.J. Noye (eds.), 10-12 July, 723-730, Hemisphere Publishing, New York.

Thompson, A.G. and C.R. Windsor 1992. A Classification System for reinforcement and its Use in Design. Western Australian Conference on Mining Geomechanics (Editors T Swedzicki, G.R. Baird and

T.N. Little), Western Australian School of Mines,
Kalgoorlie, June, 115-125, Curtin University:Perth.

Thompson, A.G., S.M. Matthews, C.R. Windsor, S.
Bywater and V.H. Tillmann 1987. Innovations in rock
reinforcement technology in the Australian mining
industry. ISRM 6th International Congress on Rock
Mechanics, Canada, September, V2, 1275-1278.