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COLLEGE OF ENGINEERING

# Mining & Geological Engineering

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## Pinnaduwa Kulatilake

*Professor of Mining and Geological Engineering  
Professor of Materials Science and Engineering*

### Courses

#### Prob+Stat Geologic Media

MNE 402 (Spring 2018)

MNE 502 (Spring 2017)

MNE 402 (Spring 2017)

GEN 402 (Spring 2017)

#### Rock Slope Design

MNE 529 (Fall 2017)

MNE 529 (Fall 2016)

#### Dissertation

GEN 920 (Fall 2017)

GEN 920 (Spring 2017)

GEN 920 (Fall 2016)

### Selected Publications

#### Journals/Publications

- Yunfeng, G. e., Kulatilake, P. H., Tang, H., & Xiong, C. (2014). Investigation of natural rock joint roughness. *Computers and Geotechnics*, 55, 290-305.
- Kulatilake, P. H., & Wu, Q. (2013). Development of an orthotropic constitutive model for a jointed rock mass. *47th US Rock Mechanics / Geomechanics Symposium 2013*, 1, 555-562.
- Kulatilake, P. H., & Wu, Q. (2013). Tunnel stress analyses in 3-D using equivalent continuum and discontinuum procedures. *47th US Rock Mechanics / Geomechanics Symposium 2013*, 4, 2774-2781.

- Kulatilake, P. H., Qiong, W. u., Zhengxing, Y. u., & Jiang, F. (2013). Investigation of stability of a tunnel in a deep coal mine in China. *International Journal of Mining Science and Technology*, 23(4), 579-589.
- Nengxiong, X. u., Kulatilake, P. H., Tian, H., Xiong, W. u., Nan, Y., & Wei, T. (2013). Surface subsidence prediction for the WUTONG mine using a 3-D finite difference method. *Computers and Geotechnics*, 48, 134-145.
- Ren, Q., Tang, H., & Kulatilake, P. H. (2013). The deformation behavior of the soft rock applied in the construction of the underground pipe work engineering. *ICPTT 2013: Trenchless Technology - The Best Choice for Underground Pipeline Construction and Renewal, Proceedings of the International Conference on Pipelines and Trenchless Technology*, 812-817.
- H., P. (2012). Preface: Special issue on selected topics in rock mechanics and rock engineering. *Geotechnical and Geological Engineering*, 30(3), 523-524.
- Kulatilake, P. H. (2012). Preface: Special Issue on Selected Topics in Rock Mechanics and Rock Engineering. *Geotechnical and Geological Engineering*, 1-2.
- Kulatilake, P. H., Hudaverdi, T., & Qiong, W. u. (2012). New prediction models for mean particle size in rock blast fragmentation. *Geotechnical and Geological Engineering*, 30(3), 665-684.
- Kulatilake, P. H., Wang, X., & Song, W. (2012). Stability investigations in three-dimensions around a tunnel in a metal mine in China. *2012 SME Annual Meeting and Exhibit 2012, SME 2012, Meeting Preprints*, 640-652.
- Qiong, W. u., & Kulatilake, P. H. (2012). Application of equivalent continuum and discontinuum stress analyses in three-dimensions to investigate stability of a rock tunnel in a dam site in China. *Computers and Geotechnics*, 46, 48-68.
- Qiong, W. u., & Kulatilake, P. H. (2012). REV and its properties on fracture system and mechanical properties, and an orthotropic constitutive model for a jointed rock mass in a dam site in China. *Computers and Geotechnics*, 43, 124-142.
- Wang, L., Kulatilake, P. H., Tang, H., & Liang, Y. (2012). Rock slope stability study for Yujian River dam site based on kinematic analyses. *Advanced Materials Research*, 446-449, 2048-2055.
- Wang, X., Kulatilake, P. H., & Song, W. (2012). Stability investigations around a mine tunnel through three-dimensional discontinuum and continuum stress analyses. *Tunnelling and Underground Space Technology*, 32, 98-112.
- Zhang, Z. X., Xu, Y., Kulatilake, P. H., & Huang, X. (2012). Physical model test and numerical analysis on the behavior of stratified rock masses during underground excavation. *International Journal of Rock Mechanics and Mining Sciences*, 49, 134-147.



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