

DR RUDRAJIT MITRA

LECTURER



QUALIFICATIONS

B.E. Mining Engineering, Bengal Engineering College, 2001
M.S. Mining Engineering, Pennsylvania State University, 2003
Ph.D. Mining Engineering, Virginia Polytechnic Institute and State University (Virginia Tech), 2006

EMPLOYMENT

2006 – present UNSW School of Mining Engineering. Lecturer
2007 – present Undergraduate Coordinator

PROFESSIONAL SOCIETIES

Society of Mining, Metallurgy and Exploration, Inc. (SME)
Australian Institute of Mining & Metallurgy (AusIMM)

TEACHING AREAS

Mining Systems
Rock Mechanics
Mine Ventilation

RESEARCH

Numerical modelling in rock mechanics, strata control
Acoustic Emission
Laboratory Tomography
Subsidence
Mine Ventilation

SELECTED PUBLICATIONS & REPORTS

Mitra, R. and E.C. Westman. Investigation of the Stress Imaging in Rock Samples using Numerical Modelling and Laboratory Tomography. *IACMAG 2008*. Goa, India, Oct 1 – 6, 2008.

Lau, V., S. Saydam, Y. Cai and R. Mitra. Laboratory Investigation of Support Mechanism for Thin Spray-on Liners. *IACMAG 2008*. Goa, India, Oct 1 – 6, 2008.

Payne, T. and R. Mitra. A review of heat issues in underground metalliferous mines. *12th US/North American Mine Ventilation Symposium*. Reno, NV, June 9 – 11, 2008.

Stothard, P.M., R. Mitra and A. Kovalev. Assessing Levels of Immersive Tendency and Presence Experienced by Mine Workers in Interactive Training Simulators Developed for the Coal Mining Industry. *SimTect 2008*, Melbourne, May 12 – 15, 2008.

Mitra, R., M.M. Murphy and E. C. Westman. Study on the effect of anisotropy in rocks on stress redistribution using numerical modeling. *Deep Mining 07. Proceedings of the Fourth International Seminar on Deep and High Stress Mining*, Perth, Nov 7 – 9, 2007. Ed. Y. Potvin

Mitra, R., W. B. Johnson and E. C. Westman. 2005. Stress redistribution imaging through coupled laboratory testing and numerical modeling. *2005 SME Annual Meeting and Exhibit*, Salt Lake City, UT, Feb 28 – Mar 2, 2005. Preprint No. 05-107.

Mitra, R., E. C. Westman and M. J. Mrugala. 2004. Use of Numerical Modeling for Longwall Roof Performance Analysis. *Gulf Rocks 2004: Rock Mechanics across Borders & Disciplines. Proceedings of the 6th NARMS Conference*, Houston, TX. June 2004. D. P. Yale, S. M. Willson, and A. S. Abou-Sayed, Eds. Paper No. ARMA/NARMS 04-483.

Mrugala, M.J. and R. Mitra. 2003. Performance of coal mine pillars under varying roof and floor conditions. *2003 SME Annual Meeting and Exhibit*, Cincinnati, OH. Feb 24 – 26, 2003. Preprint No. 03-036.

PROFESSIONAL INTERESTS AND CONSULTING

Numerical Modeling in Rock Mechanics
Acoustic Emission Monitoring
Laboratory Tomography
Subsidence
Mine Ventilation