

DAFTAR PUSTAKA

- Alemdag S., Z. Gurucak, A. Cevik, F. Cabalar, C. Gokceoglu, Modeling deformation modulus of a stratified sedimentary rock mass using neural network, fuzzy inference, and genetic programming, *Engineering Geology*, Vol. 203. P. 70-82. March 2016
- Akbar, Wahyu Nusantara dan Qoidul Masa'id. 1 Identifikasi Bahaya Geoteknik Dalam Penggalian Lubang Bukaam Tambang Bawah Tanah. *Student Paper Mining Contest University of Pembangunan Nasional Veteran Yogyakarta*. Februari 2020. DOI: 10.13140/RG.2.2.34320.84480
- Anugrah, Cakra. *Analisis Penyangga (Weld Mesh) Lubang Bukaam Tambang Bawah Tanah PT. Freeport Indonesia, Timika, Kabupaten Mimika, Provinsi Papua*. 2015. Skripsi. Teknik Pertambangan UPN Veteran Yogyakarta.
- Basu, A., & Aydin, A. (2006). Evaluation of ultrasonik testing in rock material characterization. *Geotechnical Testing Journal*, 29(2), 117-125.
- Bath, M. 1979. Seismik Risk In Turkey- A Premelimitary Approach. *Tectonophysics*. 54 (1-2), 9-16
- Beheshti, S. H., Yarahmadi Bafghi, A., Ghorbani, A., & Rezvanianzadeh, M. R. (2022). Relationship between physical and mechanical properties of jointed rocks in Central Iran (Bafgh Block). *Journal of Analytical and Numerical Methods in Mining Engineering*, 12(31), 1-13.
- Bery, A.A. and Saad, R. (2012) Correlation of Seismic P-Wave Velocities with Engineering Parameters (N Value and Rock Quality) for Tropical Environmental Study. *International Journal of Geoscience*, 3, pp.749–757.
- Biringen, E., & Davie, J. (2013). Correlation Between VS and RQD for Different Rock Types. *7th Conference of the International Conference on Case Histories in Geotechnical Engineering*. Missouri University of Science and Technology
- Cahyani, Dwi Nur. 2011. *Pemetaan deposit dan porositas batuan kapur di Desa Pagak Kabupaten Malang menggunakan metode geolistrik konfigurasi Wenner Saouding Mapping*. Perpustakaan Digital: Universitas Negeri Malang

- Casten, T, Parinta, A & Rumbino, H 2016, Deep Mill Level Zone – from feasibility to production, *Proceedings of the Seventh International Conference & Exhibition on Mass Mining*, The Australasian Institute of Mining and Metallurgy, Melbourne, pp. 681–688.
- Cao, A., Dou, L., Cai, W., Gong, S., Liu, S., Jing, G., 2015. Case study of seismic hazard assessment in underground coal mining using passive tomography. *Int. J. Rock Mech. Min. Sci.* 78, 1–9. doi:10.1016/j.ijrmms.2015.05.001
- Deere, D. U. (1964). Technical description of rock cores for Engineering purposes' *Rock Mechanics and Engineering Geology* Vol-1. L7-22.
- Deere, D.U. 1968. *Geological Considerations, Rock Mechanics in Engineering Practice*. New York: Wiley
- Deere, D. U., Hendron Jr, A. J., Patton, F. D., & Cording, E. J. (1967). Design of Surface and near Surface Construction in Rock. In *Proc. 8th Symp. of Rock Mech. on Failure and Breakage of Rock, Minnesota*.
- Dentith, Michael, & Mudge, S., 2014, *Geophysics for the Mineral Exploration Geoscientist*, New York: Cambridge University Press.
- Elnashai, Amr S., dan Sarno, Luigi Di. 2008. *Fundamentals of Earthquake Engineering*. United Kingdom: John Wiley & Sons, Ltd.
- Green, R. E., 1991, "Introduction to Ultrasonik Testing," Ultrasonik Testing, A. S. Birks, R. E. Green, and P. McIntire, Eds., *American Society for Nondestructive Testing*, Metals Park, Ohio, pp. 1–21.
- Hadiyan, dan Hasywir Thaib Siri. 1993. *Pengujian Sifat Fisik dan Mekanik Batu Marmer Citatah Jawa Barat*. Laporan Penelitian. Fakultas Tambang UPN "Veteran" Yogyakarta.
- Hair, Jr., Joseph F., et. al. (2011). *Multivariate Data Analysis. Fifth Edition*. New Jersey: PrenticeHall, Inc.
- He H, Dou L M, Li X W, Qiao QQ, Chen TJ, Gong SY. Active Velocity Tomography For Assessing Rock Burst Hazard Sina Kilometer Deep Mine. *Min Sci Technol* 2011; 21:673–6.
- He, C., Wang, Y., Lu, Y., Liu, Y., & Wu, B. (2016). Design and fabrication of air-based 1-3 piezoelectric composite transducer for air-coupled ultrasonik applications. *Journal of Sensors*, 2016.

- Hidayat, W., Sahara, D. P., Widiyantoro, S., Suharsono, S., Wattimena, R. K., Melati, S., & Riyanto, E. (2022). Testing the Utilization of a Seismik Network Outside the Main Mining Facility Area for Expanding the Microseismik Monitoring Coverage in a Deep Block Caving. *Applied Sciences*, 12(14), 7265.
- Hidayat, Rizki. 2016. *Relokasi Hiposenter Data Microearthquake (Meq) Menggunakan Prinsip Double Difference (DD) Untuk Identifikasi Struktur Di Lapangan Panas Bumi Muaralaboh*. Skripsi. Program Studi Geofisika Fakultas Mipa Universitas Gadjah Mada Yogyakarta
- Ibrahim, Z., Said, L. B., & Alifuddin, A. (2021). Analisis Poisson Ratio dan Ketahanan Deformasi Campuran AC-WC Substitusi Pasir Silika. *Jurnal Teknik Sipil MACCA*, 6(1), 36-47.
- International Soecity for Rock Mechanics and Rock Engineering (ISRM) *Suggested Methods for Determining Water Content, Porosity, Density, Absorption, and Related Properties and Swelling and Slake-Durability Index Properties* (1977). No. 143-151
- Jones, I. F. (2010). *Tutorial: Velocity estimation via ray-based tomography. first break*, ION GX Tchnology, UK. 28(2).
- Kahraman, S., 2001. Evaluation of simple methods for assessing the uniaxial compressive strength of rock. *Int. J. Rock Mech. Min. Sci.* 38, 981–994. [http://dx.doi.org/10.1016/S1365-1609\(01\)00039-9](http://dx.doi.org/10.1016/S1365-1609(01)00039-9).
- Kayal, J R. 2008. *Microearthquake Seismology and Seismotectonics of South Asia*. India: Capital Publishing Company.
- Kurtuluş, C., Üçkardeş, M., Sarı, U., & Onur Güner, Ş. (2012). Experimental studies in wave propagation across a jointed rock mass. *Bulletin of Engineering Geology and the Environment*, 71(2), 231-234.
- Laitupa, K. (2020). Pengaruh Pelapukan Terhadap Rekahhan Batuan Utuh Melalui Pengujian Di Laboratorium. *INTAN Jurnal Penelitian Tambang*, 3(1), 26-34.
- Lay, Thorne dan Terry C. Wallace. (1995). *Modern Global Sesmology*. California: Academic Press
- Lund B, Berglund K, Tryggvason A, Dineva S, Jonsson L (2017) *Local event tomography in the Kiirunavaara iron ore mine, Sweden*

- Luxbacher K, Westman E, Swanson P, Karfakis M. Three-dimensional time-lapse velocity tomography of an underground longwall panel. *Int J Rock Mech Min Sci* 2008;45(4):478–85.
- Melati, S. (2019). Prediksi Modulus Elastisitas Batuan Utuh dan Modulus Deformasi Massa Batuan dari Kurva Perilaku Konstitutif: Prediction of Modulus of Elasticity of Intact Rock and Rock Mass Deformation Modulus from Constitutive Behavior Curves. *Jurnal Jejaring Matematika dan Sains*, 1(2), 77-84.
- Nazir, Ramli, Ehsan Momeni, Danial Jahed Armaghani, dan Mohd For Mohd Amin. 2013. Correlation Between Unconfined Compressive Strength and Indirect Tensile Strength of Limestone Rock Samples. *Electronic Journal of Geotechnical Engineering*. January 2013. Vol. 18 [2013], Bund. I Hal.1737-1746
- Novianti, Henytiah. 2013. *Kemampuan Batuan Terhadap Uji Kuat Tekan (Mekanika Batuan)*. Jurusan Teknik: Universitas Mulawarman Samarinda.
- Nugraha, DA. (2017): *Tomografi Seismik*. Penerbit ITB Press 2017, ISBN 978-602-5417-48-1.
- Nurwidyanto, M. Irham and Noviyanti, Ita and Widodo, Sugeng (2005) Estimasi Hubungan Porositas Dan Permeabilitas Pada Batupasir (Study Kasus Formasi Kerek, Ledok, Selorejo). *Berkala Fisika*, 8 (3). pp. 87-90. ISSN 1410 – 9662
- Olhoeft, G. (1989). *Densities of Rocks and Minerals Carmichael (ed.) Practical Handbook of Physical Properties of Rocks Minerals, Section II*: Boca Raton. Florida: CRC Press.
- Prasetya, Adi. 2013. Kajian Jenis Agregat dan Proporsi Campuran Terhadap Kuat Tekan dan Daya Tembus Beton Porus. *Jurnal Teknik* Vol. 3 No.2 Jurusan Teknik Sipil, Fakultas Teknik, Universitas Janabadra, Yogyakarta.
- Priest, S. D., & Hudson, J. A. (1976, May). Discontinuity spacings in rock. In *International Journal of Rock Mechanics and Mining Sciences & Geomechanics Abstracts* (Vol. 13, No. 5, pp. 135-148). Pergamon.
- Rawlinson, N., Pozgay, S., Fishwick, S., 2010. Seismic tomography: A window into deep Earth. *Phys. Earth Planet. Inter.* 178, 101–135. doi:10.1016/j.pepi.2009.10.002

- Rohadi, S. Masturyono. 2015. Lineasi Patahan Geologi Berdasarkan Distribusi Hiposenter Relokasi di Wilayah Jawa. *Jurnal Meteorologi dan Geofisika* Vol. 16 No. 3. h 199- 208
- Ruswanto, Fatimah, M. R., Yuningsih, E. T., dan Purwariswanto, B. A. (2017): Minegrafi batuan penyusun tambang Deep Mill Level Zone (DMLZ) PT. Freeport Indonesia, *Bulletin of Scientific Contribution Geology*, 15, 173-180
- Salaamah, A. F., Fathani, T. F., & Wilopo, W. (2018). Correlation of P-wave velocity with rock quality designation (RQD) in volcanic rocks. *Journal of Applied Geology*, 3(2), 62-72.
- Setiadi, H., Nurhandoko, B. E. B., & Wely, W. (2012, September). Passive Seismik Tomography Based on Fresnel Zone for Subsurface Fracture Prediction. In *Istanbul 2012-International Geophysical Conference and Oil & Gas Exhibition* (pp. 1-4). Society of Exploration Geophysicists and The Chamber of Geophysical Engineers of Turkey.
- Sharma, A., & Sinha, A. K. (2018). Ultrasonik testing for mechanical engineering domain: present and future perspective. *International journal of research in industrial engineering*, 7(2), 243-253.
- Sjøgren, B., Øfsthus, A., & Sandberg, J. (1979). Seismik classification of rock mass qualities. *Geophysical prospecting*, 27(2), 409-442.
- Suharsono. 2004. *Penggunaan Kaedah Analisis Spektral Gelombang Permukaan Sebagai Teknik Baru Untuk Pengelasan Jasad Batuan Dalam Geologi Kejuruteraan*. Disertasi. Universiti Kebangsaan Malaysia.
- Suharsono, Abdul Rahim Samsudin & Abdul Ghani Rafek 2004. Computation or rock quality designation (RQD) using spectral analysis surface wave method. *Buletin Geological Society of Malaysia* 49: 51-55
- Sunyoto, W., MacDonald, G., and De Jong, G., 2015, From DiscoVery to Inventory – PT. Freeport Indonesia Story in Papua Province, Indonesia. *HAGI-IAGI-IAFMIIATMI Joint Convention*, Balikpapan, 2- 4 October 2015
- Susilawati. 2008. *Penerapan Gelombang Seismik Gempa*. Sumatera Utara: USU Repository.
- Vatcher J, McKinnon SD, Sjöberg J (2016) Developing 3-D mine-scale geomechanical models in complex geological environments, as applied to the

Kiirunavaara Mine. *Eng Geol* 203:140–150. <https://doi.org/10.1016/j.enggeo.2015.07.020>

Vatcher J, McKinnon SD, Sjöberg J (2018) Rock Mass Characteristics and Tomographic Data. *Rock Mechanics and Rock Engineering* (2018) 51:1615–1619 <https://doi.org/10.1007/s00603-018-1428-y>

Waldhauser, F., and Ellsworth, W.L. (2000): A Double-Difference Earthquake Location Algorithm: Method and Application to the Northern Hayward Fault, California. *Bulletin of the Seismological Society of America* 90, 1353–1368. <https://doi.org/10.1785/0120000006>

Zhang, L. (2005) *Engineering Properties of Rock*. USA: Elsevier.

Zhang, L. (2016). Determination and applications of rock quality designation (RQD). *Journal of Rock Mechanics and Geotechnical Engineering*, 8(3), 389-397.

Zhao, Dapeng. 2015. *Multiscale Seismic Tomography*. Japan: Springer