

## DAFTAR PUSTAKA

- Aryal, K., Sandven, R., & Nordal, S. (2006). *Slope Stability Evaluation by Limit Equilibrium and Finite Element Methods*. Norwegian University of Science and Technology.
- Asrurifak, M. (2010). *Peta Respon Spektra Indonesia untuk Perencanaan Struktur Bangunan Tahan Gempa Berdasarkan Model Sumber Gempa Tiga Dimensi dalam Analisis Probabilitas*. Institut Teknologi Bandung.
- Bieniawski, Z. T. (1989). *Rock Mass Classification by Binawski*. John Wiley & Sons.
- BIG. (2022). *DEMNAS\_1407-63\_v1*. Badan Informasi Geospasial. <https://tanahair.indonesia.go.id/demnas/#/>
- Bina Marga, D. J. (2020). *Surat Edaran Direktur Jenderal Bina Marga Nomor 16.1/SE/Db/2020 tentang Spesifikasi Umum Bina Marga 2018 untuk Pekerjaan Konstruksi Jalan dan Jembatan (Revisi 2)*. Dirjen Bina Marga.
- Bishop, A. W. (1955). The Use of The Slip Circle in The Stability Analysis of Slopes. *Geotechnique* 5, 5(1), 7–17.
- BSN. (1996). *SNI 13-4175-1996 Penyiapan Sayatan Tipis Contoh Batuan dan Mineral untuk Analisis Petrografi*. Badan Standardisasi Nasional.
- BSN. (2008). *SNI 2825:2008 Uji Kuat Tekan Batu Uniaksial*. Badan Standardisasi Nasional.
- BSN. (2010). *SNI 7573:2010 Uji Petrografi*. Badan Standardisasi Nasional.
- BSN. (2017). *SNI 8460:2017 Persyaratan Perancangan Geoteknik*. Badan Standardisasi Nasional.
- Bushira, K. M., Gebregiorgis, Y. B., Verma, R. K., & Sheng, Z. (2018). Cut Soil Slope Stability Analysis Along National Highway at Wozeka–Gidole Road, Ethiopia. *Modeling Earth Systems and Environment*, 4(2), 591–600. <https://doi.org/10.1007/s40808-018-0465-6>
- Cheng, L. Y., Li, J., Chen, S. X., & Chu, X. J. (2013). An Application of the Maximum Shear Strain Increment in Searching Sliding Surfaces. *Applied Materials and Technologies for Modern Manufacturing*, 423, 1618–1622. <https://doi.org/10.4028/www.scientific.net/AMM.423-426.1618>
- Coşar, S. (2004). *Application of Rock Mass Classification Systems for Future Support Design of the Dim Tunnel Near Alanya* (Issue September). Middle East Technical University.
- Dearman, W. R. (1991). *Engineering Geological Mapping*. Butterworth-Heinemann, Ltd. <https://doi.org/10.1007/BF02634605>
- Deere, D. U., & Miller, R. . (1966). *Engineering Classification and Index Properties for Intact Rock*.
- Duncan, J. M., Wright, S. G., & Brandon, T. L. (2014). *Soil Strength and Slope Stability, Second Edition*. John Wiley & Sons.
- Dunham, R. J. (1962). Classification of Carbonate Rocks According to Depositional

- Texture1. In *Ed, WE Ham, Memorial American Association Petroleum Geology*. American Association of Petroleum Geologists. <https://doi.org/10.1306/M1357>
- Dyson, A. P., & Tolooiyan, A. (2018). Optimisation of Strength Reduction Finite Element Method Codes for Slope Stability Analysis. *Innovative Infrastructure Solutions*, 3(1), 38. <https://doi.org/10.1007/s41062-018-0148-1>
- Gunawan, R. P., Luthfi, M., & Kadarisman, D. S. (2017). Analisa Fasies Batugamping Formasi Wonosari Daerah Beji Dan Sekitarnya, Kecamatan Patuk Kabupaten Gunung Kidul, Provinsi D.I. Yogyakarta. *Jurnal Online Mahasiswa (JOM) Bidang Teknik Geologi*, 1(1), 1–15.
- Hamdhan, I. N. (2013). Slope Stability Analysis with Finite Element Method. *Proceedings The 2nd PhD Seminar on Civil Engineering 27 September 2010*. <https://doi.org/10.4028/www.scientific.net/AMR.538-541.819>
- Hoek, E. (1994). Strength of Rock and Rock Masses. *ISRM News Journal*, 2(2), 4–16.
- Hoek, E., & Brown, E. T. (1997). Practical estimates of rock mass strength. *International Journal of Rock Mechanics and Mining Sciences*, 34(8), 1165–1186. [https://doi.org/10.1016/S1365-1609\(97\)80069-X](https://doi.org/10.1016/S1365-1609(97)80069-X)
- Hoek, E., & Brown, E. T. (2019). The Hoek–Brown Failure Criterion and GSI – 2018 Edition. *Journal of Rock Mechanics and Geotechnical Engineering*, 11(3), 445–463. <https://doi.org/10.1016/j.jrmge.2018.08.001>
- Hoek, E., Carter, T. G., & Diederichs, M. S. (2013). Quantification of The Geological Strength Index Chart. *47th US Rock Mechanics / Geomechanics Symposium 2013*, 3, 1757–1764.
- Hoek, E., & Diederichs, M. S. (2006). Empirical Estimation of Rock Mass Modulus. *International Journal of Rock Mechanics and Mining Sciences*, 43(2006), 203–215. <https://doi.org/10.1016/j.ijrmms.2005.06.005>
- Husein, S., & Srijono. (2007). Tinjauan Geomorfologi Pegunungan Selatan DIY/Jawa Tengah : Telaah Peran Faktor Endogenik dan Eksogenik dalam Proses Pembentukan Pegunungan. <https://www.researchgate.net/publication/282946295>, 2(October). <https://doi.org/10.13140/RG.2.1.2784.0727>
- Irawan, L., Hasibuan, L. H., & Fauzi, F. (2020). Analisa Prediksi Efek Kerusakan Gempa Dari Magnitudo (Skala Richter) Dengan Metode Algoritma Id3 Menggunakan Aplikasi Data Mining Orange. *Jurnal Teknologi Informasi: Jurnal Keilmuan Dan Aplikasi Bidang Teknik Informatika*, 14(2), 189–201. <https://doi.org/10.47111/jti.v14i2.1079>
- Irvani, I., Wilopo, W., & Karnawati, D. (2013). Determination of nuclear power plant site in west bangka based on rock mass rating and geological strength index. *J. Se. Asian Appl. Geol.*, 5(2), 78 – 86. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054170715&partnerID=40&md5=6b5fe444b8efb25cdaa12c1efcbda422>
- ISRM, I. S. for R. M. (1981). *Suggested Methods for the Quantitative Description of Discontinuities in Rock Masses*. Pergamon Press.
- Karrech, A., Dong, X., Elchalakani, M., Basarir, H., Shahin, M. A., & Regenauer-Lieb, K. (2022). Limit analysis for the seismic stability of three-dimensional rock slopes using the generalized Hoek-Brown criterion. *International Journal of Mining Science and Technology*, 32(2), 237–245.

<https://doi.org/https://doi.org/10.1016/j.ijmst.2021.10.005>

- Komadja, G. C., Pradhan, S. P., Roul, A. R., Adebayo, B., Habinshuti, J. B., Glodji, L. A., & Onwualu, A. P. (2020). Assessment of stability of a Himalayan road cut slope with varying degrees of weathering: A finite-element-model-based approach. *Heliyon*, 6(11). <https://doi.org/10.1016/j.heliyon.2020.e05297>
- Li, J., Chen, S., & Yu, F. (2013). A Method for Searching Potential Failure Surface of Slope Based on Maximum Shear Strain Increment. *Yantu Lixue/Rock and Soil Mechanics*, 34, 371–378.
- Marinos, P., & Hoek, E. (2000). Gsi: A Geologically Friendly Tool For Rock Mass Strength Estimation. *Proceedings of the International Conference on Geotechnical and Geological Engineering (GeoEng2000)*.
- Marinos, V. (2010). New Proposed GSI Classification Charts for Weak or Complex Rock Masses. *Bulletin of the Geological Society of Greece*, 43. <https://doi.org/10.12681/bgsg.11301>
- Mulyono, A. T. (2016). Ketimpangan Produksi Angkutan Barang dan Penumpang Tiap Moda Transportasi Jalur Utama Pantura Jawa. *Jurnal HPJI*, 2(2), 71–77.
- Muzli, M., Masturyono, M., Murjaya, J., & Riyadi, M. (2016). Studi Awal Penyusunan Skala Intensitas Gempabumi Badan Meteorologi Klimatologi Dan Geofisika. *Jurnal Meteorologi Dan Geofisika*, 17(2), 89–100. <https://doi.org/10.31172/jmg.v17i2.440>
- Nichols, G. (2009). *Sedimentologi and Stratigraphy Second Edition* (Second Edi). Willey-Blackwell.
- Pradhan, S. P., Vishal, V., Singh, T. N., & Singh, V. K. (2014). Optimisation of Dump Slope Geometry Vis-à-vis Flyash Utilisation Using Numerical Simulation. *American Journal of Mining and Metallurgy*, 2(1), 1–7. <https://doi.org/10.12691/ajmm-2-1-1>
- Prasetyadi, C., Sudarno, I., Indranadi, V., & Surono. (2011). Pola dan Genesa Struktur Geologi Pegunungan Selatan, Provinsi Daerah Istimewa Yogyakarta dan Provinsi Jawa Tengah. *Jurnal Geologi Dan Sumberdaya Mineral*, 21(2), 91–107.
- PUSGEN. (2017). *Peta Sumber dan Bahaya Gempa Indonesia Tahun 2017*. Kementerian PUPR.
- PVMBG. (2009). *Peta Zona Kerentanan Gerakan Tanah Kabupaten Gunungkidul, D.I. Yogyakarta*. Pusat Vulkanologi dan Mitigasi Bencana Geologi.
- Raghuvanshi, T. K. (2019). Plane Failure in Rock Slopes – A Review on Stability Analysis Techniques. *Journal of King Saud University - Science*, 31(1), 101–109. <https://doi.org/10.1016/j.jksus.2017.06.004>
- Rai, M. A., Kramadibrata, S., & Watimena, R. K. (2014). *Mekanika Batuan* (pp. 1–515). Penerbit ITB.
- Renani, H. R., & Martin, C. D. (2020). Factor of Safety of Strain-Softening Slopes. *Journal of Rock Mechanics and Geotechnical Engineering*, 12(3), 473–483. <https://doi.org/10.1016/j.jrmge.2019.11.004>
- Robiana, R., & Indra, B. (2009). *Peta Kawasan Rawan Bencana Gempabumi D.I. Yogyakarta*. Pusat Vulkanologi dan Mitigasi Bencana Geologi.

- Rocscience. (2004). A New Era in Slope Stability Analysis: Shear Strength Reduction Finite Element Technique. *RocNews Summer*.  
<https://www.rocscience.com/documents/pdfs/library/StrengthReduction.pdf>
- Satker Pelaksanaan Jalan Nasional DIY. (2021). *Paparan: Pembangunan Jalan Lintas Selatan-Selatan Jawa (TRSS) di Prov. D.I. Yogyakarta*,.
- Satker Perencanaan dan Pengawasan Jalan Nasional DIY. (2020). *Laporan Penyelidikan Tanah Pembangunan Jalan Tepus-Jerukwudel*. Satker Perencanaan dan Pengawasan Jalan Nasional DI Yogyakarta.
- Sivakugan, N., Shukla, S. K., & Das, B. M. (2013). *Rock Mechanics: An Introduction* (First Edit). CRC Press.
- Sun, C., Chai, J., Xu, Z., Qin, Y., & Chen, X. (2016). Stability Charts for Rock Mass Slopes Based on The Hoek-Brown Strength Reduction Technique. *Engineering Geology*, 214, 94–106. <https://doi.org/10.1016/j.enggeo.2016.09.017>
- Surono. (2009). Litostratigrafi Pegunungan Selatan Bagian Timur Daerah Istimewa Yogyakarta dan Jawa Tengah. *Jurnal Geologi Dan Sumberdaya Mineral*, 19(3), 209–221.
- Surono, Toha, B., & Sudarno, I. (1992). *Peta Geologi Regional Lembar Surakarta-Girintontro* (p. 1). Pusat Penelitian dan Pengembangan Geologi.
- Vallejo, L. I. G. de, & Ferrer, M. (2011). *Geological Engineering*. CRC Press.
- Van Bemmelen, R. W. (1949). The Geology of Indonesia. General Geology of Indonesia and Adjacent Archipelagoes. In *Government Printing Office, The Hague* (pp. 1–766).
- Van Zuidam, R. A. (1985). *Aerial photo-interpretation in terrain analysis and geomorphic mapping*. Smits Publishers.
- You, G., Mandalawi, M. Al, Soliman, A., Dowling, K., & Dahlhaus, P. (2018). Finite Element Analysis of Rock Slope Stability Using Shear Strength Reduction Method. *Sustainable Civil Infrastructures*, 1(2004), 227–235. [https://doi.org/10.1007/978-3-319-61902-6\\_18](https://doi.org/10.1007/978-3-319-61902-6_18)
- Zaei, M. E., & Rao, K. S. (2017). Evaluating the Effect of Strong Earthquake on Slope Instability. *Procedia Engineering*, 173, 1771–1778. <https://doi.org/https://doi.org/10.1016/j.proeng.2016.12.217>
- Zhang, Q., Huang, X., Zhu, H., & Li, J. (2019). Quantitative assessments of the correlations between rock mass rating (RMR) and geological strength index (GSI). *Tunnelling and Underground Space Technology*, 83, 73–81. <https://doi.org/https://doi.org/10.1016/j.tust.2018.09.015>