

## DAFTAR PUSTAKA

- Apandi, T., & Bachri, S., 1977, Peta Geologi Regional Lembar Kotamobagu. Pusat Penelitian dan Pengembangan Geologi.
- Apriyono, A., & Sumiyanto, 2010, Tinjauan Kekuatan Sistem Penyangga Terowongan dengan Menggunakan Metode Elemen Hingga. *Dinamika Rekayasa* Vol. 6., No. 1.
- Arifin, S., 2009, Terowongan dalam Pelaksanaan. PT. Mediatama Saptakarya, Jakarta.
- Asiyanto, 2012, Metode Konstruksi Terowongan. Penerbit Universitas Indonesia (UI-Press), Jakarta.
- ASTM (*American Society for Testing and Material*) D 2166, *Standard Test Methods for Unconfined Compressive Strength of Cohesive Soil*. U.S.
- ASTM (*American Society for Testing and Material*) D 4318, *Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils*. U.S.
- Badan Geologi, 2011, Peta Rawan Bencana Gempabumi Provinsi Gorontalo.
- Barton, N., et al., 1974, *BartonLienandLunde1974.Engineering classification of rock masses for. In Rock Mechanics* (Vol. 6, Issue 106, pp. 189–236).
- Bell, F. G., 2007, *Engineering Geology Second Edition*. Elsevier Ltd., USA.
- Bieniawski, Z.T., 1989, *Engineering Rock Mass Clasifications*. John Wiley and Sons.
- BSN, 2017, SNI (Standar Nasional Indonesia) 8460: *Persyaratan Perancangan Geoteknik*. Jakarta.
- BWS Sulawesi II, 2016, *SID Bendungan Bulango Ulu Kabupaten Gorontalo dan Model Test*. Gorontalo.
- BWS Sulawesi II, 2018, *Sertifikasi Bendungan Bulango Ulu Kabupaten Gorontalo: Laporan Geologi*. Gorontalo.
- Callister Jr., W. D., 2007, *Materials Science and Engineering an Introduction Seventh Edition*. Jhon Wiley & Sons, Inc. U.S.
- Chen, P, Y., 1977, *Table of Key Lines in X-ray Powder Diffraction Patterns of Minerals in Clays and Associated Rocks*. Departement of Natural Resources Geological Survey Occasional Paper 21, Indiana.
- Craig, R. F., 2004, *Craig's Soil Mechanics Seventh Edition*. Spon Press Taylor and Francis Group. London.
- Das, B. M., 1988, *Mekanika Tanah Jilid 1 (Prinsip-Prinsip Rekayasa Geoteknis) – Terjemahan Noor Endah dan Indrasurya B. Mochtar*, Penerbit Erlangga, Jakarta.
- Das, B. M., 2010, *Principal of Geotechnical Engineering – Seventh Edition*. California State University, Sacramento.
- Dearman, W. R., 1991, *Engineering Geological Mapping*. Butterworth – Heinemann Ltd.
- Federal Highway Administration, 2009, *Technical Manual for Design and Construction of Road Tunnel-Civil Element*. US Department of Transportation. US
- Geo-Slope International Ltd, 2012, *Stability Modelling with SLOPE/W – an Engineering Methodology*.

Gonzalez de Vallejo, L., dan Ferrer, M., 2011, *Geological Engineering*. CRC Press Balkema, The Netherlands.

Goodman, R. E., 1989, *Introduction to Rock Mechanics* 2nd Edition. John Wiley and Sons.

Hardiyatmo, H C., 2002, *Mekanika Tanah 1*. Gadjah Mada University Press. Yogyakarta.

Hoek, E and Brown E.T. *The Hoek-Brown Failure Criterion and GSI: 2018 edition*. Journal of Rock Mechanics and Geotechnical Engineering.

Hoek, E., Marinos, P., dan Benissi, M., 1998, *Applicability of The Geological Strength Index (GSI) Classification for Very Weak and Sheared Rock Masses the Cases of The Athens Schist Formation*. *Bull Emg Geol Env*: 151 – 160.

Holtz, R. D., dan Kovacs, W. D., 1981, *An Introduction to Geotechnical Engineering*. University of Washington.

ISRM (International Society for Rock Mechanics), 1978, *Standardization of Laboratory and Field Test*. *Int. J. Rock Mech. Min. Sci. & Geotech.*, Vol. 15, pp. 319 – 368.

JSCE (Japan Society of Civil Engineers), 2007, *Standard Specifications for Tunneling-2006: Mountain Tunnels*. Japan.

Kementerian Pekerjaan Umum dan Perumahan Rakyat, 2015, Surat Edaran Menteri Pekerjaan Umum dan Perumahan Rakyat No: 30/SE/M/2015 Tanggal 23 April 2015. *Pedoman Metode Perencanaan Penggalian dan Sistem Perkuatan Terowongan Jalan pada Media Campuran Tanah – Batuan*. Jakarta.

Kurniawan, P., & Hadimulyono, B., 2020, *Applied Geotechnics for Engineer 1.pdf* (G. Risky (ed.); I). ANDI.

LeMaitre, R. Et al., 2002, A classification and glossary of terms. In *International Union of Geological Sciences Subcommittee on the Systematics of Igneous Rocks*.

Marinos, P., V. Marinos, E. Hoek, 2007, *The Geological Strength Index (GSI): A Characterization Tool for Assessing Engineering Properties for Rock Masses, Proceedings of the International Workshop on Rock Mass Classification in Underground*. Pittsburg: National Institute for Occupational Safety and Health, p. 87 – 94.

Masum, M., Akbar, M.A., 2019, *The Pacific ring of fire is working as a home country of geothermal resources in the world*. IOP Conf. Series: Earth Env. Sci. 249, 012020. doi: 10.1088/1755-1315/249/1/012020.

Nugroho, W. K., 2020, *Evaluasi kondisi geologi teknik dan analisis kestabilan terowongan pengelak bendungan pamukkulu provinsi sulawesi selatan*.

Pambudi, R., & Ichsandi, M., 2017, *Metode Pelaksanaan Pembangunan Terowongan Pengelak (Tunnel) Pada Proyek Waduk Bendung Ponorogo*. Institut Teknologi Sepuluh Nopember.

Pratama, A. N., 2015, *Analisis Stabilitas Lereng dengan Metode Rock Mass Rating (RMR) dan Limit Equilibrium Method (LEM) pada Penambangan Terbuka (Open Pit Mining) Batubara di Kecamatan Damai Kabupaten Kutai Barat Provinsi Kalimantan Timur*. Tesis, Prodi S-2 Teknik Geologi UGM, Yogyakarta.

Price, D. G., 2009, *Engineering Geology Principal and Practice*. Springer.

Pusat Studi Gempa Nasional. 2017. *Peta Sumber Bahaya dan Gempa Indonesia*. Jakarta. Kementerian Pekerjaan Umum dan Perumahan Rakyat.

Rocscience, 2018, *Rockscience (RS2) User's Guide*, Rocscience Inc. <https://www.rocscience.com/software> diakses pada 15 September 2021 pukul 13.22.

Rori, S. V. Et al., 2017, Analisa Tanah pada Bukaan Terowongan (Studi Kasus: Terowongan Kawasan Green Hill, Malendeng). *Jurnal Sipil Statik*, Vol. 5, No. 6.

SNI (Standar Nasional Indonesia) 1964-2008, Cara Uji Berat Jenis Tanah. Badan Standarisasi Nasional, Jakarta.

SNI (Standar Nasional Indonesia) 1965:2008, Cara Uji Penentuan Kadar Air untuk Tanah dan Batuan di Laboratorium. Badan Standarisasi Nasional, Jakarta.

SNI (Standar Nasional Indonesia) 1966:2008, Cara Uji Penentuan Batas Plastis dan Indeks Plastisitas Tanah. Badan Standarisasi Nasional, Jakarta.

SNI (Standar Nasional Indonesia) 3420:2016, Metode Uji Kuat Geser Langsung Tidak Terkonsolidasi dan Tidak Drainase. Badan Standarisasi Nasional, Jakarta.

SNI (Standar Nasional Indonesia) 3422:2008, Cara Uji Penentuan Batas Susut Tanah. Badan Standarisasi Nasional, Jakarta.

Sriyono, 2014, *Geologi dan Geomorfologi Indonesia*. Penerbit Ombak, Yogyakarta.

Surat Edaran Menteri Pekerjaan Umum dan Perumahan Rakyat, Nomor : 23/SE/M/2015 Tanggal 23 April 2015, Pedoman Metode Perencanaan Penggalian dan Sistem Perkuatan Terowongan Jalan pada Media Campuran Tanah – Batuan. Jakarta.

Todd, D. K. & Mays., L. W., 2005, *Groundwater Hydrology Third Edition*. Jhon Wiley & Sons, Inc. U.S.

Tsiambaos, G., and Saroglou, H., 2010, *Excavatability assessment of rock masses using the Geological Strength Index (GSI): Bulletin of Engineering Geology and the Environment*, v. 69, p. 13–27, doi:10.1007/s10064-009-0235-9.

van Bemmelen, R. W., 1949, *The Geology of Indonesia Vol. IA: Government Printing Office, The Hague*, 732 p.

van Zuidam, R. W., 1983, *Guide to Geomorphologic-Aerial Photographic Interpretation and Mapping*. Netherland.