

DAFTAR PUSTAKA

- Adjji, B. M., Istijono, B., Hakam, A., Andriani, S., & Anshari, M. (2021). Liquefaction disaster mitigation on railway corridors in Padang City, West Sumatra. In IOP Conference Series: *Earth and Environmental Science* (Vol. 708, No. 1, p. 012025). IOP Publishing.
- Aguila, J. F., McDonnell, M. C., Flynn, R., Hamill, G. A., Ruffell, A., Benner, E. M. & Donohue, S. (2022). Characterizing groundwater salinity patterns in a coastal sand aquifer at Magilligan, Northern Ireland, using geophysical and geotechnical methods. *Environmental Earth Sciences*, 81(8), 231.
- Alizadeh Mansouri, M., & Dabiri, R. (2021). Predicting the liquefaction potential of soil layers in Tabriz city via artificial neural network analysis. *SN Applied Sciences*, 3, 1-31.
- Alanda, A., & Hadelina, R. (2020). Liquefaction potential map based on coordinates in Padang city with google maps integration. *JOIV: International Journal on Informatics Visualization*, 4(1), 32-34.
- Akbar, F. H. (2022). Analisis Kapasitas Daya Dukung Pondasi Tiang Pancang Pada Pembangunan Gedung Fortunate Citra Grand City Palembang Dengan Menggunakan Metode Analitis (Studi Kasus) (Doctoral dissertation, Fakultas Teknik, Universitas Islam Sumatera Utara).
- Aldefae, A. H., Mohammed, J., & Saleem, H. D. (2020). Digital maps of mechanical geotechnical parameters using GIS. *Cogent Engineering*, 7(1), 1779563.
- Amarullah, I. N., & Zardi, M. (2019). Pengaruh Penambahan Limbah Karbit Terhadap Stabilisasi Tanah Daerah Rawa. *Jurnal Teknik Sipil Unaya*, 5(1), 1-9.
- Ansori, A. L., & Artati, H. K. (2020). Analisis Potensi Likuifaksi Akibat Gempa Bumi Berdasarkan Data Insitu Test Menggunakan Metode Probabilitas. *Tugas Akhir. Universitas Islam Indonesia*. Yogyakarta.

- Aswant, I. A. (2016). Analisis Perbandingan Metode Interpolasi Untuk Pemetaan pH Air Pada Sumur Bor Di Kabupaten Aceh Besar Berbasis SIG. Bande Aceh: Jurusan Informatika Universitas Syiah Kuala.
- Badan Geologi. (2019). Atlas Zona Kerentanan Likuefaksi Indonesia Edisi. Pertama. Kementerian ESDM: Bandung
- Badan Perencanaan Pembangunan Daerah Kota Padang, 2010. Rencana Tata. Ruang Wilayah (RTRW) Kota Padang 2010-2030, Padang: Bappeda
- Badan Pusat Statistik (BPS) Kota Padang. (2024). Kota Padang Dalam Angka 2024.
- Ben-Zeev, S., Goren, L., Toussaint, R., & Aharonov, E. (2023). Drainage explains soil liquefaction beyond the earthquake near-field. *Nature Communications*, 14(1), 5791.
- Bird, J. F., Boulanger, R. W., & Idriss, I. M. (2005). Engineering Geology| Liquefaction.
- Budhu, M. (2010). *Soil mechanics and foundations*. John Wiley and Sons.
- Candra, A. I., Hanafi, M. A. A., Heru, R., & Rivianto, A. (2022). Analisa Ketahanan Geser Tanah Lempung di Wilayah Universitas Kadiri dengan Uji Kuat Geser Langsung. *Jurnal Riset Rekayasa Sipil*, 6(1), 11-20.
- Daswita, A., Pujiastuti, D., & Anggono, T. (2023). Studi Bahaya Seismik dengan Metode Probabilistic Seismic Hazard Analysis di Sumatera Barat. *Jurnal Fisika Unand*, 12(3), 445-451.
- Dungca, J., & Galupino, J. (2023). Developing Nomographs for the Unit Weight of Soils. *Buildings*, 13(9), 2315.
- Farni, I. (2021). An Evaluation Of Liquefaction Potential In The Region Of Padang City. *Jurnal Rekayasa*, 11(1), 67-77.
- Fauzi. (2017). Liquefaction Suscepibility Zonation Based On Correlation of Water Table With The Liquefactions Occurance Cause By September 2009 Earthquake In Padang City, West Sumatera. PROCEEDING, Seminar Nasional Kebumian Ke-X, 100-109.
- Gratchev, I., Jeng, D. S., & Oh, E. (2018). Soil mechanics through project-based learning. CRC Press.

- Hadi, B. S. (2013). Metode interpolasi spasial dalam studi geografi (ulasan singkat dan contoh aplikasinya). *Geo Media: Majalah Ilmiah dan Informasi Kegeografian*, 11(2).
- Harith, N. S. H., & Adnan, A. (2023). Seismic Hazard Map of ASEAN Countries towards Risk Assessment and Sustainability of Structures and Infrastructures. *The Eurasia Proceedings of Science Technology Engineering and Mathematics*, 26, 121-134.
- Hakam, A., (2008). *Rekayasa Pondasi*, Bintang Grafika, Padang.
- Hakam, A. (2012). Soil Liquefaction in Padang due to Padang Earthquake 30 September 2009. *Civil Engineering Dimension*, 14(2), 64-68.
- Hakam, A., & Darjanto, H. (2013). Penelusuran potensi likuifaksi Pantai Padang berdasarkan gradasi butiran dan tahanan penetrasi standar. *Jurnal Teknik Sipil ITB*, 20(1), 33-38.
- Hakam, A. (2020). Analisis Praktis Potensi Likuifaksi. *Padang: Andalas Press Kampus UNAND-Limau Manis*, 25176.
- Hardani. (2020). Metode Penelitian Kualitatif & Kuantitatif. Yogyakarta: CV Pustaka Ilmu.
- Hasiholan, F., Ismanti, S., & Rifa'i, A. (2023, September). Comparison Between Liquefaction Potential Index And Liquefaction Risk Index In Solo–Yogyakarta–YIA Kulon Progo Toll Road (STA. 07+ 500–STA. 16+ 700). In *IOP Conference Series: Earth and Environmental Science* (Vol. 1244, No. 1, p. 012029). IOP Publishing.
- Hettiarachchi, H., & Brown, T. (2009). Use of SPT blow counts to estimate shear strength properties of soils: energy balance approach. *Journal of Geotechnical and Geoenvironmental engineering*, 135(6), 830-834.
- Hwang, J. H., Yang, C. W., & Juang, D. S. (2004). A practical reliability-based method for assessing soil liquefaction potential. *Soil Dynamics and Earthquake Engineering*, 24(9-10), 761-770.
- Novasari, H., & Hakam, A. (2023, May). Liquefaction Mitigation Analysis Using Vertical Drain. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1173, No. 1, p. 012034). IOP Publishing.

- Idriss, I., & Bowlanger, R. (2008). Soil Liquefaction During Earthquake. California: Earthquake Engineering Research Institute.
- Ince, G. C., Ozaydin, K., Yildirim, M., & Tohumcu Ozener, P. (2007). Seismic Microzonation of Historical Peninsula (Istanbul) with respect to liquefaction susceptibility. In *4th international conference on earthquake geotechnical engineering (Thessaloniki-Greece)*.
- Ishihara, K. (1996). Soil behaviour in earthquake geotechnics. Oxford University Press.
- Ismanti, S., & Fathani, T. F. (2023, September). Liquefaction Potential Index Analysis in Solo–Yogyakarta-NYIA Kulon Progo Toll Road (Section Karanganyar to Klaten Regency) at Central Java. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1244, No. 1, p. 012031). IOP Publishing.
- Kamel, F., & Badreddine, S. (2022). Probabilistic liquefaction analysis using standard penetration test. *Studia Geotechnica et Mechanica*, 44(2).
- Kasim, M. N., & Raheem, A. M. (2021, June). Evaluation of some soil characteristics from field SPT values using random number generation technique. In *IOP Conference series: earth and environmental science* (Vol. 779, No. 1, p. 012017). IOP Publishing.
- Kementerian Pekerjaan Umum dan Perumahan Rakyat (PUPR) Direktorat Jendral Bina Marga. (2019). Kumpulan korelasi parameter geoteknik dan fondasi. *Kementerian Pekerjaan Umum dan Perumahan Rakyat*. Jakarta.
- Kusuma, R. I., & Mina, E. (2016). Tinjauan Sifat Fisis dan Mekanis Tanah (Studi Kasus: Jalan Carenang Kabupaten Serang). *Fondasi: Jurnal Teknik Sipil*, 5(2).
- Kusumawardani, R. (2009). Prosedur Analisis Liquefaction Dengan Menggunakan Metode Semi Empiris. *Jurnal Teknik Sipil dan Perencanaan*, 11(1), 1-10.
- Larasati, N. M., Subiyanto, S., & Sukmono, A. (2017). Analisis penggunaan dan pemanfaatan tanah (P2T) menggunakan sistem informasi

- geografis kecamatan banyumanik tahun 2016. *Jurnal Geodesi Undip*, 6(4), 89-97.
- Lirer, S., Chiaradonna, A., & Mele, L. (2020). Soil liquefaction: from mechanisms to effects on the built environment. *Rivista Italiana di Geotecnica*, 3, 2020.
- Maharani, I. A. (2024). Analisis Potensi Likuifaksi Dan Daya Dukung Fondasi Tanah Berdasarkan Data N-Spt (Studi Kasus: Proyek Pembangunan Gedung Informatika Politeknik Negri Cilacap) (Doctoral dissertation, Universitas Islam Sultan Agung Semarang).
- Maki, I. P., Boulanger, R. W., DeJong, J. T., & Jaeger, R. A. (2014). Overburden normalization of CPT data in sands to clays. In *Proceedings of the 3rd International Symposium on Cone Penetration Testing, CPT'14* (pp. 611-619).
- Mase, L. Z. (2018). Studi Kehandalan Metode Analisis Likuifaksi Menggunakan SPT Akibat Gempa 8, 6 Mw, 12 September 2007 di Area Pesisir Kota Bengkulu. *Jurnal Teknik Sipil*, 25(1), 53-60.
- Mavroulis, S., Lekkas, E., & Carydis, P. (2021). Liquefaction phenomena induced by the 26 November 2019, Mw= 6.4 Durrës (Albania) earthquake and liquefaction susceptibility assessment in the affected area. *Geosciences*, 11(5), 215.
- Minaka, U. S., & Amalia, G. (2022). Analisis Parameter Dinamik Tanah pada Tanah Pasir yang Berpotensi Likuifaksi. *Jurnal Tekno Global*, 11(2), 36-44.
- Mokoginta, N. K., & Irawan, A. (2022). Analisis Tingkat Potensi Likuifaksi Di Kota Manado Menggunakan Metode Liquefaction Potential Index. *Jurnal Kajian Teknik Sipil*, 7(2), 14-23.
- Muhajirah, M. (2020). PERILAKU PARTIKEL BERPORI TERHADAP BEBAN SIKLIK: Behavior of Porous Particles Due to Cyclic Load. *Spektrum Sipil*, 7(1), 61-72.
- Mudjiyanto, B. (2018). Metode Penelitian Evaluasi Komunikasi . 76 PROMEDIA Volume Ke- 4, No. 1, 76- 102.
- Naik, S. P., Gwon, O., Park, K., & Kim, Y. S. (2020). Land damage mapping and liquefaction potential analysis of soils from the epicentral region

- of 2017 Pohang Mw 5.4 earthquake, South Korea. *Sustainability*, 12(3), 1234.
- Niswar, M. (2024). Ground Subsurface Characterization Using Electrical Resistivity and Cone Resistance Value in Geotechnical Investigation. In *Proceedings of the 7th International Conference on Civil Engineering for Sustainable Development (ICCESD 2024)* (Vol. 34, p. 279). Springer Nature.
- Oladunjoye, H. T., Ishola, K. S., Oyedele, K. F., & Adeoti, L. (2024). Multi-parameters approach to assessment of soil liquefaction vulnerability in wetland areas of Lagos, Southwestern, Nigeria. *Discover Applied Sciences*, 6(2), 50.
- Pamungkas, I. S., Dananjaya, R. H., Purwana, Y. M., Chrismaningwang, G., & Jalil, A. (2023, July). Penggunaan metode LPI dalam menganalisis potensi likuefaksi di Kota Palu dengan lima variasi nilai Mw. *Proceeding Civil Engineering Research Forum*.
- Pawirodikromo, W. (2012). Seismologi Teknik & Rekayasa Kegempaan. Yogyakarta: Pustaka Pelajar.
- Peraturan Pemerintah (PP) No. 34 Tahun 2009. Pedoman Pengelolaan Kawasan Perkotaan.
- Pradiptiya, A., Agung, P. A. M., Mufti, M., & Djamal, A. (2023, August). Analisis Stabilisasi Tanah Lunak Mempawah, Kalimantan Barat dengan Sisa Hasil Pembakaran Power Plant Biomassa. In *Seminar Nasional Inovasi Vokasi* (Vol. 2, pp. 54-64).
- Pramono, G. H. (2008). Akurasi Metode IDW dan Krigging untuk Interpolasi Sebaran Sedimen Tersuspensi. *Forum Geografi*, Vol. 22, No.1, 97-110.
- Pramono, P. (2014). Kajian Geoteknik Infrastruktur Untuk Kota Padang Menghadapi Ancaman Gempa Dan Tsunami. Bandung: LIPI Universitas Katolik Parahyangan
- Pratama, K. (2016). Interpolasi Metode Deterministik Inverse Distance Weighted (IDW). Bandung: Fakultas Teknik Sipil dan Perencanaan Institut Teknologi Nasional.

- Purba, A. D. (2017). *Tinjauan Kuat Tekan Bebas dan Modulus Elastisitas Tanah Lempung Purwodadi Grobogan yang Distabilisasi dengan Mill* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Rahayu, W., Yuliyanti, I., & Bahsan, E. (2021). Analysis of potential liquefaction using cone penetration test data and grain size distribution test with case study of liquefaction in Lolu Village. In *IOP Conference Series: Earth and Environmental Science* (Vol. 622, No. 1, p. 012015). IOP Publishing.
- Ririska, R., Juniarti, J., & Darfis, I. (2023). Analisis Sifat Fisika-Kimia Tanah Berdasarkan Kelerengan pada Lahan Aren di Nagari Gadut, Agam. *JOURNAL OF TOP AGRICULTURE (TOP JOURNAL)*, 1(1), 1-10.
- Sarker, D., & Abedin, Z. (2015). Applicability of standard penetration test in Bangladesh and graphical representation of SPT-N value. *International Journal of Science and Engineering Investigations*, 3(6), 55-58.
- Seed, H. B., & Idriss, I. M. (1971). Simplified Procedure for Evaluating Soil Liquefaction Potential. Journal of the Soil Mechanics and Foundations Division.
- Sharo, A. A., Nusier, O. K., & Rababah, F. M. (2019). Spatial distribution of engineering soil properties in the northern region of the dead sea, Jordan. *Jordan Journal of Civil Engineering*, 13(2), 280-298.
- Siegel, T. C., & NeSmith, W. M. (2010). Large-Scale Plate Load Testing of Ground Improved Using Displacement Grout Columns. In *GeoFlorida 2010: Advances in Analysis, Modeling & Design* (pp. 2398-2405).
- Sitharam, T. G., Govindaraju, L., & Sridharan, A. (2004). Dynamic properties and liquefaction potential of soils. *Current science*, 87(10), 1370-1387.
- Stefanow, D., & Dudziński, P. A. (2021). Soil shear strength determination methods—State of the art. *Soil and Tillage Research*, 208, 104881.
- Sugiarto, B., Muslim, D., Haryanto, I., Zakaria, Z., Sukiyah, E., & Isnaniawardhani, V. (2021, March). Geophysical forensic for surface

- fault investigation in Padang, West Sumatra, Indonesia. In *AIP Conference Proceedings* (Vol. 2320, No. 1). AIP Publishing.
- Susilo, A. J., Sumarli, I., Sentosa, G. S., Prihatiningasih, A., & Wongkar, E. (2019, October). Effect of Compaction to Increase the Critical Height of a Slope without any Support. In *IOP Conference Series: Materials Science and Engineering* (Vol. 650, No. 1, p. 012026). IOP Publishing.
- Tanjung, D., & Nusa, A. B. (2018). Pengaruh Daya Dukung Pondasi Tiang Pancang Pada Proyek Pembangunan GIS (Gas Insulated Switch Gear) Di Kecamatan Payung Sekaki Pekanbaru. *Buletin Utama Teknik* Vol. 14, No. 1, 41-47.
- Tohari, A. (2020). Seismic microzonation of soil amplification and liquefaction for Padang City. In *E3S Web of Conferences* (Vol. 156, p. 02008). EDP Sciences.
- Tokimatsu, K., Yamazaki, T., & Yoshimi, Y. (1986). Soil liquefaction evaluations by elastic shear moduli. *Soils and Foundations*, 26(1), 25-35.
- Toprak, S., & Holzer, T. L. (2003). Liquefaction potential index: field assessment. *Journal of Geotechnical and Geoenvironmental Engineering*, 129(4), 315-322.
- Valizadeh, H. (2021). Investigation on the liquefaction potential of sand-granulated rubber mixture that used around the buried pipes: Numerical modeling and developing (Master's thesis, Izmir Institute of Technology (Turkey)).
- Verruijt, A. (2017). *An introduction to soil mechanics* (Vol. 30). Springer.
- Widoanindyawati, V., Widodo, B. T., Wardaya, T., Wiyana, Y. E., Pawiro, D. A., & Fatmawati, L. (2022, May). Analisa Kapasitas Dukung Tanah Dasar Lempung Lunak Treatment Dan Untreatment Berdasarkan Korelasi Nilai Modulus Elastisitas. In *Prosiding Seminar Hasil Penelitian dan Pengabdian Masyarakat* (Vol. 4, No. 1).
- Youd, T. L., & Idriss, I. M. (2001). Liquefaction resistance of soils: summary report from the 1996 NCEER and 1998 NCEER/NSF

- workshops on evaluation of liquefaction resistance of soils. *Journal of geotechnical and geoenvironmental engineering*, 127(4), 297-313.
- Yudanegara, R. A., Astutik, D., Hernandi, A., Soedarmodjo, T. P., & Alexander, E. (2021). Penggunaan Metode Inverse Distance Weighted (Idw) Untuk Pemetaan Zona Nilai Tanah (Studi Kasus: Kelurahan Gedong Meneng, Bandar Lampung). *Elipsoida: Jurnal Geodesi Dan Geomatika*, 4(2), 85-90.
- Yuliet, R., Mera, M., & Hidayat, K. (2021). Soil classification at Muaro Baru beach of Padang City using CPT data. In *E3S Web of Conferences* (Vol. 331, p. 03005). EDP Sciences.
- Yuliet, R., Silvy, A. L., Hakam, A., Mera, M., & Syuhada, S. (2023). The influence of various parameters of physical and mechanical properties on susceptibility to liquefaction of sandy soils. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1173, No. 1, p. 012021). IOP Publishing.