

DAFTAR PUSTAKA

- Abdullah, A. (2007). Gelombang Rayleigh Groundroll. Retrieved Mei 26, 2019, from Ensiklopedi Seismik Blogspot: <http://ensiklopediseismik.blogspot.com/2007/06/gelombang-rayleigh-groundroll.html>
- Ariestianty, S. K., Taha, M. R., Nayan, K. A. M., & Chik, Z. (2009). Penentuan modulus geser tanah menggunakan metode analisis multi channel gelombang permukaan. *Jurnal Ilmiah Semesta Teknik*, 12(2), 185–198.
- Bathia, A. B. (1986). *Mechanics of Deformable Media*. University of Sussex Press.
- Das, B. M., & Ramana, G. V. (2010). *Principles of Soil Dynamics* (Second Edi). Cengage Learning.
- Das, B. M., Noor, E., & Mochtar. I. B. (1995). *Mekanika Tanah Jilid 2 (Prinsip-Prinsip Rekayasa Geoteknis)*. Jakarta: Erlangga.
- Federal Emergency Management Agency. (2003). NEHRP Recommended Provisions for Seismic Regulations for New Buildings and Other Structures (FEMA 450). In Part 1 (Issue Fema 450). FEMA. <https://doi.org/10.1016/j.compgeo.2013.09.005>
- Foti, S., Lai, C., Rix, G. J., & Strobbia, C. (2014). Surface Wave Methods for Near-Surface Site Characterization. In *Surface Wave Methods for NearSurface Site Characterization*. <https://doi.org/10.1201/b17268>
- Hartantyo, E. D. (2010). Analysis On MASW Near And Far Offset At High Vs Velocity Limestone. International Conferences Of HAGI-SEG Joint Convention. Bali: HAGI-SEG.
- Heisey, J. (1982). Determination Of In Situ Shear Wave Velocity From Spectral Analysis Of Surface Waves. Austin: University Of Texas.
- Indanartha, N. G., Warnana, D. D., & Widodo, A. (2018). Aplikasi Metode Multichannel Analysis Of Surface Wave (MASW) Sebagai Evaluasi Tapak Lokal Surabaya. *Jurnal Geosaintek*, 59-66.
- Irsyam M, dkk., (2010), Peta Zonasi Gempa Indonesia, Kementerian Pekerjaan Umum, Jakarta
- Komariah, R. H. (2019). Pemetaan Batuan Mengandung Bijih Besi Menggunakan Metode IT (Intercept Time) dan MASW (Multichannel Analysis of Surface Waves). *Jurnal Inovasi dan Pembelajaran Fisika*, 6(1), 56-61.
- Laksono, A., Rasimeng, S., & Rustadi. (2018). Interpretasi Nilai Kecepatan Gelombang Geser (Vs30) Menggunakan Metode Seismik Multichannel Analysis Of Surface Waves (MASW) Untuk Memetakan Daerah Rawan Gempa Bumi Di Kota Bandar Lampung. *Jurnal Geofisika Eksplorasi Vol. 3/No. 3*.

- Lowrie, W. (2007). *Fundamental of Geophysics* (2nd ed.). Melbourne: Cambridge University.
- Maemunah. (2018). *Analisis Daya Dukung Tanah Pada Pondasi Jembatan di Desa Lembar Kecamatan Lembar (NTB) Menggunakan Metode Seismik*. Universitas Mataram.
- Najoan. (2002). Interpretasi Hasil Uji Dan Penyusunan Laporan Penyelidikan Geoteknik. Badan Litbang PU Departemen Pekerjaan Umum.
- Nasri, M. (2020) *Analisis daya dukung tanah menggunakan metode multichannel analysis of surface waves (masw)*. Universitas Hasanuddin
- Nurcandra, N., Darsono, & Koesuma, S. (2013). Penentuan Tingkat Kekerasan Batuan Menggunakan Metode Seismik Refraksi di Jatikuwung Karanganyar. *Indonesian Journal of Applied Physics*, 3(1), 29-35.
- Olafsdottir, E. A., Erlingsson, S., & Bessason, B. (2018). Tool for analysis of multichannel analysis of surface waves (MASW) field data and evaluation of shear wave velocity profiles of soils. *Canadian Geotechnical Journal*, 55(2), 217–233. <https://doi.org/10.1139/cgj-2018-0078>
- Park, C. B., Miller, R. D., & Xia, J. (1998). Imaging dispersion curves of surface waves on multi-channel record. 1998 SEG Annual Meeting. <https://doi.org/10.1190/1.1820161>
- Park, C. B., Miller, R. D., Xia, J., & Inanov, J. (2007). *Multichannel Analysis Of Surface Waves (MASW)-Active And Passive Method*. Lawrence, USA: Kansas Geological Survey.
- Rab. Sukamto, Dkk. (1973). *Peta Geologi Tinjau Lembar Palu, Sulawesi*.
- Rasimeng, S., Laksono, A., & Rustadi. (2018). Interpretasi Nilai Kecepatan Gelombang Geser (V_{s30}) Menggunakan Metode Seismik Multichannel Analysis Of Surface Waves (MASW) Untuk Memetakan Daerah Rawan Gempa Bumi Di Kota Bandar Lampung. *Jurnal Geofisika Eksplorasi*, 3(3).
- Richart, F. E., Hall, J. R., & Woods, R. D. (1970). *Vibrations of soils and foundations*. In *Prentice Hall*.
- Roser, J., & Gosar, A. (2010). Determination of V_{s30} for seismic ground classification in the ljubljana area, Slovenia. *Acta Geotechnica Slovenica*, 7(1), 61–76.
- Rosyidi, S. A. P. (2013). *Metode Analisis Gelombang Permukaan Untuk Penyelidikan Sub-Permukaan*. LP3M - Universitas Muhammadiyah Yogyakarta. <http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf>
- Rosyidi, S. A. P. (2015). *Pemetaan Daya Dukung Tanah Dan Diskontinuitas Struktur Tanah Dasar Menggunakan Metode Multi Channel Analysis of*

- Surface Waves (MASW). Seminar Nasional Teknik Sipil V Tahun, 2004, 161–169
- Saenger, E. H., Schmalholz, S. M., Lambert, M.-A., Nguyen, T. T., Torres, A., Metzger, S., Mendez-Hernandez, E. (2009). A Passive Seismic Survey Over A Gas Filed: Analysis Of Low-Frequency Anomalies. *Geophysics*, 74, 29-40.
- Shearer, P. M. (2009). *Introduction To Seismology* 2nd Edition. New York: Cambridge University Press.
- Stacey, F. D. (1977). A thermal model of the Earth. *Physics of the Earth and Planetary Interiors*, 15(4), 341-348.
- Stokoe, K. I., Wright, S. G., Bay, J. A., & Roesset, J. M. (1994). Characterization Of Geotechnical Sites By SASW Method. In R. D. Woods, *Technical Review: Geophysical Characterization Of Sites* (pp. 15-25). New Delhi:: Oxford Publishers.
- Susilawati. (2008). *Penerapan Penjalaran Gelombang Seismik Gempa pada Penelaahan Struktur Bagian dalam Bumi*. Universitas Sumatera Utara.
- Syihab, M. F. (2021). *Evaluasi kompaksi tanah menggunakan metode multichannel analysis of surface waves (masw)* (doctoral dissertation, universitas hasanuddin).
- Telford, W. M., Geldart, L. P., Sheriff, R. E., & Keys, D. A. (1990). *Applied Geophysics* (2nd ed.). Cambridge University Press.
- Terzaghi, K., & Peck, R. B. (1976). *Soil Mechanics in Engineer Practice* (2nd ed.). London: John Wiley & Sons.
- Tezcan, S. S., & Ozdemir, Z. (2012). Allowable Bearing Pressure in Soils and Rocks through Seismic Wave Velocities. *Earth Science Research*, 1(1), 98–108. <https://doi.org/10.5539/esr.v1n1p98>
- Tezcan, S. S., Ozdemir, Z., & Keceli, A. (2009). Seismic Technique to Determine The Allowable Bearing Pressure in Soils and Rocks. *Earthquake Resistant Engineering Structures VII*, 104, 253-263.
- Thompson, G. R., & Turk, J. (1997). *Introduction To Physical Geology*. Brooks Cole.
- Van Leeuwen, T. M., (1994). 25 Years of Mineral Exploration and Discovery in Indonesia, *Journal of Geochemical Exploration*, 50, h.13-90.
- Wangsadinata, W. (2006). *Perencanaan Bangunan Tahan Gempa Berdasarkan SNI 1726-2002*. Shortcourse HAKI.
- Wibowo, H. T. (2014). *Analisis Hasil Pengujian Sondir Untuk Mengetahui Peningkatan Kekuatan Tanah Sangat Lunak Di Lokasi Gate House Dalam*

Pekerjaan “Grouting At Semarang Pumping station & Retarding Pond”.
Doctoral dissertation, Diponegoro University.

Widyaningrum, R. (2012). Penyelidikan geologi teknik potensi liquifaksi daerah Palu, Provinsi Sulawesi Tengah. *Laporan Penelitian. Pusat Sumber Daya Air Tanah dan Geologi Lingkungan. Badan Geologi. Kementerian Energi dan Sumber Daya Mineral.*

Xia, J., Miller, R. D., Park, C. B., Harris, J. B., & Hunter, J. A. (2000). Comparing Shear-wave Velocity Profiles From MASW Technique With Borehole Measurements In Unconsolidated Sediments Of The Fraser River Delta. *Journal Environment Engineers Geophysics*, 848-870.

LAMPIRAN

Lintasan L1

Vs (m/s)	Kedalaman (m)	n	Vs perjenis material (m/s)	Kedalaman (m)	Unit Berat (kN/m³)	Daya dukung batas (qu) (kN/m²)	Daya dukung izin (qa) (kN/m²)	Tebal lapisan
222	1.7	4	233.5	0-3.8	16.80893419	63.87394992	15.96848748	3.8
245	3.8							
290	6.3	4	290	3.8-6.3	17.74467114	44.36167785	11.09041946	2.5
309	9.2	4	344	6.3-30	18.51859638	438.8907343	109.7226836	23.7
340	12.5							
345	16.3							
345	20.4							
350	25							
375	30							

Lintasan L2

Vs (m/s)	Kedalaman (m)	n	Vs per lapisan (m/s)	Kedalaman (m)	Unit Berat (kN/m³)	Daya dukung batas (qu) (kN/m²)	Daya dukung izin (qa) (kN/m²)	Tebal lapisan
224	1.7	4	231	0-3.8	16.76376062	63.70229034	15.92557259	3.8
238	3.8							
304	6.3	4	304	3.8-6.3	17.95505962	44.88764904	11.22191226	2.5
299	9.2	4	299	6.3-9.2	17.88077147	51.85423727	12.96355932	2.9
312	12.5	4	334.4	9.2-30	18.38802234	382.4708647	95.61771618	20.8
336	16.3							
343	20.4							
338	25							
343	30							

Lintasan L3

Vs (m/s)	Kedalaman (m)	n	Vs per lapisan (m/s)	Kedalaman (m)	Unit Berat (kN/m³)	Daya dukung batas (qu) (kN/m²)	Daya dukung izin (qa) (kN/m²)	Tebal lapisan
207	1.7	4	217	0-3.8	16.50377861	62.7143587	15.67858968	3.8
227	3.8							
265	6.3	4	282	3.8-12.5	17.62100736	153.3027641	38.32569101	8.7
281	9.2							
300	12.5							
302	16.3	4	315.5	12.5-30	18.12250785	317.1438873	79.28597183	17.5
308	20.4							
314	25							
338	30							