UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Adawiyah, R., 2008, Pola Wilayah Bahaya Likuifaksi di Provinsi D.I. Yogyakarta (Studi Kasus Gempabumi Yogyakarta 27 Mei 2006), Skripsi, Universitas Indonesia, Jakarta

Agustawijaya, D.S., dan Syamsuddin, 2009, Pengembangan Metode Analisis Risiko Bencana: Sebuah Studi Kasus Pulau Lombok, *Dinamika TEKNIK SIPIL*, 146-150.

Al Hattamleh, O.H., Al-Deeky, H.H., and Akhtar, M.N., 2013, The Consequence of Particle Crushing in Engineering Properties of Granular Materials, *International Journal of Geosciences*, 4(2013), 1055-1060.

Amat, A. S., 2007, Elastic Stiffness Moduli of Hostun Sand, Dissertation, University of Bristol

Anco Engineers, Inc., Indonesia UGM R-1-1-H-1.5 Uniaxial Horizontal Seismic Shake Table Manual, Rev. 1.0 23 May 2015

Arab, A., Shahrour, I., and Lancelot, L., 2011, A Laboratory Study of Liquefaction of Partially Saturated Sand, *Journal of Iberian Geology*, 37(1)2011, 29-36, www.ucm.es/info/estratig/journal.htm,doi:10.5209/rev_JIGE.2011.v37.n1.2.

Aramaki, N., Okabayashi, T., and Hyodo, M., 2007, Liquefaction Characteristics of Crushable Volcanic Soil "Shirasu", *4th International Conference on Earthquake Geotechnical Engineering*, June 25-28, 2007**,** Paper No. 1288.

Arulanandan, K., Muraleetharam, K.K., and Yogachandram, C., 1997, Seismic Response of Soil Deposit in San Fransisco Marina District, Journal of Geotechnical and Geoenvironmental Engineering, Vol. 123, No. 10, October.

Ashmawy, A, Sukumaran, B., and Hoang, V.V., 2003, Evaluating the Influence of Particle Shape on Liquefaction Behaviour Using Discrete Element Modelling, Paper No. 2003-PCW-05

ASTM D422 – 63, 1992, Standard Test Method for Particle-Size Analysis of Soils, Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics, *Annual Book of ASTM Standards*, ASTM 1916 Race Street, Philadelphia, PA 19103-1187 USA.

ASTM D854 – 91, 1992, Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer, Volume 04.08, Soil and Rock; Dimension Stone;

UNIVERSITAS
GADJAH MADA
PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Geosynthetics, *Annual Book of ASTM Standards*, ASTM 1916 Race Street, Philadelphia, PA 19103-1187 USA.

ASTM D2487 – 90, 1992, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System, USCS), Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics, *Annual Book of ASTM Standards*, ASTM 1916 Race Street, Philadelphia, PA 19103-1187 USA.

ASTM D4253 – 00, 2000, Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table, *ASTM International*, West Conshohocken, PA 19428-2959, United States.

ASTM D5311 – 92, 2004, Standard Test Method for Load Controlled Cyclic Triaxial Strength of Soil, *ASTM International*, West Conshohocken, PA 19428-2959, United Stated.

ASTM D4767 – 88, 1992, Standard Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils, Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics, *Annual Book of ASTM Standards*, ASTM 1916 Race Street, Philadelphia, PA 19103-1187 USA.

Badan Standardisasi Nasional, 2012, *SNI 1726:2012: Tata Cara Perencanaan Ketahanan Gempa untuk Struktur Bangunan Gedung dan Non Gedung*, Jakarta.

Banerjee, R., Konai, S., Sengupta, A., and Deb, K., 2017, Shaking Table Tests and Numerical modeling of Liquefaction of Kasai River Sand, *Geotechnical Geology Engineering* (2017) 35:1327-1340, DOI 10.1007/s10706-017-178-z

Barnes, D.M., 2015, Monotonic and Cyclic Shear Response of Reconstituted Natural Silt, Thesis, University of British Columbia

Baxter, C.D.P., Bradshaw, A.S. and Veyera, G.E., 2005, Liquefaction Potential Of Inorganic And Organic Silts, *URITC PROJECT NO. 00060*, Prepared for University of Rhode Island, Transportation Center, University of Rhode Island, December 2005.

Belkhatir, M., Missoum, H., Ahmed Arab, A., Della, N., and Schanz, T., 2011, Undrained Shear Strength of Sand-silt Mixture: Effect of Intergranular Void Ratio and Other Parameters, *Journal of Civil Engineering*, 15(8):1335-1342, 2011.

Benahmed, N., Cano, J., and Dupla, J.-C., 2015, Liquefaction Properties and Initial Structure of A Loose Sand, 6th International Conference on Earthquake

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Geotechnical Engineering, 1-4 November 2015, Christchurch, New Zealand.

Bhattacharya, S., 2003, Pile Instability during Earthquake Liquefaction, *PhD Dissertation*, University of Cambridge, Cambridge, UK.

Bhattacharya, S., Dash, S.R., and Adhikari, S., 2008, On The Mechanics of Failure of Pile-supported Structures in Liquefiable Deposits during Earthquakes, *CURRENT SCIENCE*, 94(5):605-612, 2008.

Byrne, P.M., Naesgaard, E., Beaty, M.H., 2008, State of Art Dynamic Liquefaction Analysis, Itasca FLAC Conference, Minnesota, August 25, 2008

California Department of Transportation Caltrans, 2014, *Geotechnical Manual*: *Liquefaction Evaluation*, pp 4-5, December, 2014, http://dot.ca.gov/hq/esc/geotech/geo_manual/manual.html.

Cassagrande, A., 1976, Liquefaction and Cyclic Deformation of Sands: A Critical Review, *Harvard Soil Mechanics Series No. 88*, Cambridge, Massachusetts.

Castro, G., 1969, Liquefaction of Sands, *Harvard Soil Mechanics No. 81*, Cambridge, Massachusetts.

Chang, F.K., and Krinitzsky, E.L., 1977, Duration, Spectral Content, and Predominant Period of Strong Motion Earthquake Records from Western United States, *Miscellaneous Paper S-73-1: State-Of-The-Art for Assessing Earthquake Hazards in The United States*, Report 8 of a Series, December 1977

Chang, B. and Hutchinson, T.C., 2010, Experimental Wvaluation of P-Y Curves Considering Liquefaction Development, WA-RD 762.1, Washington State Department of Transportation, December 2010

Chen, H.T., Ridla, B.C., Simatupang, R.M., and Lee, C.J., 2013, Seismic Responses of Liquefiable Sandy Ground with Silt Layers, *Journal of Applied Science and Engineering*, Vol. 16, No. 1, pp. 9-14

Chen, C-C., Lee, W.F., Chen, J-W., and Ishihara, K., 2014, Liquefaction Potential of Non-Plastic Silty Sand, *Journal of Marine Science and Technology*, 22(2), pages 137-145.

Chern, S., Tsai, J-H., and Lee, C-Y., 2003, Study of Yuen-Lin Liquefaction during Chi-Chi Earthquake, *Jounal of Marinir Science and Technology*, 11(2): 113-119.

UNIVERSITAS
GADJAH MADA
PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Choudhary, S.S., Maheshwari, B.K., and Kaynia, A.M., 2010, Liquefaction Resistance of Solani Sand under Cyclic Loads, Indian geotechnical Conference, IIT Bombay, December 2010

Craig, R.F., 1994, *Mekanika Tanah*, Edisi Kempat, Alih Bahasa Soepandji, B.S., Erlangga, Jakarta.

Daga, W., M.W.L., 2010, Rasio Redaman Tanah Pasir Dengan Uji Triaksial Siklis (Cyclic Triaxial Test**)**, *Master Tesis*, Universitas Gadjah Mada, Yogyakarta.

Das, Braja M., 1993, *Principles of Soil Dynamics*, PWS-KENT Publishing Company, Boston.

Das, Braja, M., 1985, *Mekanika Tanah* (*Prinsip-prinsip Rekayasa Geoteknis*), Jilid 1, Alih Bahasa: Endah, N. dan Mochtar, I.B., Penerbit Erlangga, Jakarta

De Alba, P., Seed, H., and Chan, C., 1976, Sand Liquefaction in Large-scale Simple Shear Tests, *Journal of the Geotechnical Engineering Division ASCE*, 102 (9): 909-927.

Della, N. and Arab, A., 2010, Laboratory Investigation on The Saturation and Initial Structure Effects on The Undrained Behavior of Granular Soil Under Static Loading, Acta Polytechnica Hungarica, Vol. 7, No. 5.

De Groot, M.B., Bolton, M.D., Foray, P., Meijers, P., Palmer, A.C., Sandven, R., Sawicki, A., and Teh, T.C., 2006, Physics of Liquefaction Phenomena Around Marine Structures, Journal of Waterway, Port, Costal and Ocean Engineering, ASCE, Juli-August 2006, pp. 227-243

Deniz, P., 2004, Technical Note: Investigation of Breakage Behaviour of Two Different Pumice Stones, The European Journal of Mineral Processing and Environmental Protection, Vol. 4, No. 2, 1303-0868, 2004, pp. 162-167

Díaz-Rodríguez, J.A., and Antonio–Izarraras, V.M., 2004, Mitigation Of Liquefaction Risk Using Colloidal Silica Stabilizer, *13th World Conference on Earthquake Engineering*, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 509.

Dobry, R. and Liu, L., 1994, Centrifuge modelling of Soil Liquefaction, Earthquake Engineering, Tenth World Conference, Balkema, Rotterdam

Ecemis, N., Demirci, H.M., and Karaman, M., 2014, Effects of Relative Density and Coefficient of Consolidation on Re-liquefaction Potential of Sand, Second European Conference on Earthquake Engineering and Seismology, Istambul, August, 25-29.

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Erten, D., and Maher, M.H., 1995, Cyclic Undrained Behavior of Silty Sand, *Soil Dynamics and Earthquake Engineering*, 14 (2): 115-123.

Esposito, L and Guadagno, F.M., 1998, Some Special Geotechnical Properties of Pumice Deposits, Bull Eng Geol Env (1998) 57: 41-50

Evans, E.J., Inglethorpe, S.J.D., and Wetton, P.D., 1999, Evaluation of Pumice and Scoria Samples from East Africa AS Lightweight Aggregates, British Geological Survey: Mineralogy and Petralogy Tehnical Report, Nottingham

Ferritto, J.M., 1997, Seismic Design Criteria for Soil Liquefaction, *Technical Report TR-2077-SHR*, June1997.

Flitti, A., Della, N., and Flores, R., 2017, Experimental Study of The Shear Resistance of Granular Material: Influence of Initial State, Journal of Theoretical and Applied Mechanics, 55, 2, pp. 523-533, Warsawa 2017

Geotechnical Design Procedure GDP-9, 2015, Liquefaction Potential of Cohesionless Soils, Revision #3, *Geotechnical Engineering Bureau*, Department of Transportation, State of New York, August 2015.

Geitgey, R.P., 1992, Special Paper 25: Pumice in Oregon, State of Oregon Department of Geology and Mineral Industries, Portland, Oregon

Ghorbani, A., Veiskarami, M., Hamidzadeh, N., and Mersa, A.N., 2013, International Symposium on Advances in Science and Technology, 7-8 March 2013, Bandar-Abbas, Iran

Grennan, J.T., 2010, Characterization of A Reconstituted Low Plasticity Silt, Master of Science, Massachusetts Institute of Technology

Hakam, A., 2012, Soil Liquefaction in Padang due to Padang Earthquake 30 September 2009, *Civil Engineering Dimension*, Vol. 14, No. 2, September 2012, halaman 64-68, ISSN 1410-9530 print / ISSN 1979-570X online.

Hakam, A., dan Darjanto, H., 2013, Penelusuran Potensi Likuifaksi Pantai Padang Berdasarkan Gradasi Butiran dan Tahanan Penetrasi Standar, *Jurnal Teknik Sipil*, Vol. 20, No. 1, April 2013, halaman 33-38.

Hardin, B.O., 1985, Crushing of Soil Particles, *Journal of Geotechnical Engineering,* Vol. III, No. 10, October, 1985, pages 1177-1192.

Hardiyatmo, H.C., 2010, *Mekanika Tanah 1*, Edisi Kelima, Gadjah Mada University Press, Yogyakarta.

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Hardiyatmo, H.C., 2007, *Mekanika Tanah 2*, Edisi Keempat, Gadjah Mada University Press, Yogyakarta.

Hasmar, H.A.H., 2007, Evaluasi Potensi Likuifaksi Akibat Gempa Bumi Tektonik Lapisan pasir Jenuh Air dengan Metode Shaking Table (Studi Kasus pada Lapisan Pasir Kali Krasak Yogyakarta), LOGIKA, Vol. 4, No. 1, Januari 2007

Hazirbaba, K., and Rathje, E.M., 2009, Pore Pressure Generation of Silty Sands due to Induced Cyclic Shear Strains, *Journal of Geotechnical and Geo-environmental Engineering*, 135(2009), 1892-1905.

Herina, S.F., 2012, Pengaruh Kadar Kehalusan Butir Terhadap ketahanan Geser Tanah Pasir Vulkanik, *Jurnal Permukiman*, Vol. 7, No. 1, April 2012: 13-23.

Hyodo, M., Aramaki, N., Itoh, M., and Hyde, A.F.L., 1996, Cyclic Strength and Deformation of Crushable Carbonate Sand, *Soil Dynamics and Earthquake*, 15 (1996): 331-336.

Hyodo, M., Yamamoto, Y., Fuji, T., 1996, Cyclic Strength and Stability of Clay Subjected to Initial Shear Strees, *Eleventh World Conference on Earthquake Engineering*, Paper No. 1093.

Hyodo, M., Hyde, A.F.L., and Aramaki, N., 1998, Liquefaction of Crushable Soils, *Géotechnique*, 48 (4): 527-543.

Hyodo, M., Nakata, Y., Aramaki, N., Hyde, A.F. and Inoue, S., 2000, Liquefaction and Particle Crushing of Soil, *Proceeding 12th World Conference on Earthquake Engineering*, 2000.

Ibanez, P., ANCO Engineers, Inc., 2008, An Introduction to Shake Tables for Seismic Testing of Equipment and Glossary of Vibration Terminology, Release 2.0, October 1.

Ibsen, L. B., 1998, The Mechanism Controlling Static Liquefaction and Cyclic Strength of Sand, *Proceeding International Workshop on Physics and Mechanics of Soil Liquefaction*, Baltimore, A.A. Balkema, ISBN 9058090388, pages 29-39.

Islam, M.N., Siddika, A., Hossain, M.B., Rahman, A., and Asad, M.A., 2011, Effect of Particle Size on The Shear Strength Behaviour of Sand, Australian Ceomechanics, Vol. 46, No. 3, September 2011

UNIVERSITAS
GADJAH MADA
PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Ishihara, K., 1981, Poor Water Pressure Rises during Earthquake, *Proceeding: First International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics*, April 26 – May 3, 1981, St Louis, Missouri, pages 1201-1204.

Ishihara, K., and Ansal, A.M., 1982, Dynamic Behaviour of Soils, *Soil Amplification and Soil-Structure Interaction*, UNDP Project Executed by UNESCO in Association with Undro (RER/79/014)

Ishihara, K., 1985, Stability of Natural Deposits during Earthquakes, *Proceeding 11th International Conference on Soil Mechanics and Foundation Engineering*, Vol. 1, A. A. Balkema, Rotterdam, Netherlands.

Ishihara, K., 1993, Liquefaction and Flow Failure during Earthquakes. The 33rd Rankine Lecture, *Geotechnique*, 43(3): 351-415.

Ishihara, K., 1996, *Soil Behaviour in Earthquake Geotechnical*, Oxford University Press Inc., New York.

Ishihara, K., 2006, Liquefaction of Subsurface Soils during Earthquake, *Journal of Disaster Research*, Vol. 1 No.2.

Ishihara, K., 2009, New Challenges in Geotechnique for Ground Hazards Due to Intensely Strongth Earthquake Shaking, *Earthquakes and Tsunamis, Geotechnical, Geological, and Earthquake Engineering*, 11, pages 91-114.

Istijono, B., and Hakam, A., 2015, New Method for Liqufaction Assessment Based on Soil Gradation and Relative Density, *IJARSE*, Vol. 4, Special Issue (01), August 2015.

Juneja, A. and Raghunandan, M.E., 2010, Effect of Sample Preparation on Strength of Sands, Indian Geotechnical Conference, 2010, GEO*trendz*, December 16-18, 2010, IGS Mumbai Chapter & IIT Bombay.

Kitamura, R., and Hidaka, M., 1988, Cyclic Loading Test on Sandy Soil by True Triaxial Testing Apparatus, *Proceedings of Ninth World Conference on Earthquake Engineering*, Vol. III, August 2-9, 1988, Tokyo-Kyoto, Japan.

Kramer, S.L., and Elgamal, A-W., 2001, Modeling Soil Liquefaction Hazards for Performance-Based Earthquake Engineering, PEER Report 2001/13 Pacific Earthquake Engineering Research Center College of Engineering, University of California, Berkeley, February, 2001

Kusumawardani, R., Suryolelono, K.B., Suhendro, B., dan Rifa'i, A., 2014, The Loading Frequency Effects of Yogyakarta's sand Under Cyclic Triaxial

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Testing, *International Journal of Civil & Environmental Engineering*, IJCEE-IJENS, 14(02): 7-12.

Kusumawardani, R., 2014, Variabel Penentu Likuifaksi Berdasarkan Eksperimen Dengan Frekuensi Sangat Rendah Pada Cleand Sand, *PhD Disertasi*, Universitas Gadjah Mada, Yogykarta.

Kusumawardani, R., Suryolelono, K.B., Suhendro, B., and Rifa'i, A., 2016, The Dynamic Response of Unsaturated Clean Sand at A Very Low Frequency, *International Journal of Technology*, (2016) 1, pages 123-131.

Komaji, R.F., 2014, Studi Eksperimental Pengaruh Beban Terhadap Potensi Likuifaksi Menggunakan Alat Shaking Table, *Magister Tesis*, Universitas Gadjah Mada

Lade, P.V., Yamamuro, J.A., and Bopp, P.A., 1996, Significance of Particele Crushing in Granular Materials, Journal of eotechnical Engineering, Vol. 122, No. 4, April, 1996, pp. 309-316

Lee, I-K, 1991, Mechanical Behaviour of Compacted Decomposed Granite Soil, Dissertation, City University, London

Lee, W.F., Ishihara, K., and Chen, C-C., 2012, Liquefaction of Silty Sand Prelimenary Studies from Recent Taiwan, New Zealand, and Japan Earthquake, *Proceedings of the International Symposiom on Engineering Lessons Learned from the 2011 Great East Japan earthquake*, March 1-4, 2012, Tokyo, Japan.

Ling, X.Z., Gao, X., Tang, L., Xu, P. J., and Wu, L. Q., 2009, Shake Table Test on Seismic Response of Non-Free Liquefiable Site, Critical Issue in Transportation Systems Planning, Development, and Management, ICCTP 2009, pp. 2569-2576

Liu, L., Orense, R.P., and Pender, M.J., 2015, Crushing-induced Liquefaction Characteristics of Pumice Sand, *NZSEE Conference*.

Maheshwari, B.K., Kaynia, A.M., and Paul, D.K., 2008, Liquefaction Susceptibility of Soil in Himalayan Region, *The 14th World Conference on Earthquake Engineering*, October 12-17, 2008, Beijing, Cina

Mangga, A, S., Atmawinata, S., Hermanto, B., dan Amin, T.C., 1994, *Peta Geologi Lembar Lombok, Nusa Tenggara*, Lembar 1807, Pusat Penelitian dan Pengembangan Geologi, Direktorat Jendeal Geologi dan Sumberdaya Mineral, Departemen Pertambangan dan Energi, Bandung.

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Marks S., Larkin T.J., and Pender M.J., 1998, The Dynamic Properties of A Pumiceous Sand, *Bulletin of the New Zealand National Society for Earthquake Engineering*, 31(2): 86-102.

Martin, G.R., and Lew, M., 1999, Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction in California, *Southern California Earthquake Center*, University of Southern California.

Mase, L.Z., 2013, Analisis Potensi Likuifaksi di Kali Opak Imogiri Daerah Istimewa Yogyakarta (Studi Eksperimental dan Analisi Empiris), *Magister Tesis*, UGM, Yogyakarta

Mase, L.Z., 2017, Experimental Liquefaction Study of Southern Yogyakarta Using Shaking Table, *Jurnal Teknik Sipil*, Vol 24 No.1, April 2017, hal. 11-18

Meidji, I.U., 2014, Kajian Karakteristik Dinamika Tanah Terhadap Resiko Kerawanan Seismik dan Dampaknya Terkait Rencana Tata Ruang Wilayah di Kota Mataram Bagian Timur, *Tesis*, Ilmu Fisika, Universitas Gadjah Mada, Yogyakarta.

Minaka, U. S., 2016, Analisi Modulus Geser dan Rasio Redaman Pada Tanah Pasir Yang Berpotensi Likuifaksi, *Tesis*, Universitas Gadjah Mada, Yogyakarta

Miura, N., and Yamanouchi, T., 1971, Drained Shear Characteristics of Toyoura Sand under High Confining Stress, *Proceeding of Japanese Society of Civil Engineers*, 260, pages 69-7.

Miura, S. and Toki, S., 1982, A Sample Preparation Method and Its Effect on Static and Cyclic Deformation-Strength Properties of Sand, Soil and Foundation, JSSMFE, Vol. 22, No. 1, Mar. 1982

Mueck, M., dan Spahn, H., 2013, Peta-Peta Bahaya Tsunami untuk Lombok, *Dokumen Teknis*, http://www.gitews.org/tsunami-kit/id/ E1/sumberlainnya/peta_bahaya/lombok/Dokumentasi%20Teknis%20Peta-Peta%20Bahaya%20Tsunami% 20untuk%20Lombok.pdf

Muhajirah, Prabowo, A., dan Ashari, I., 2013, Evaluasi Awal Potensi Likuifaksi di Kota Mataram, *Lembaga Penelitian Universitas Mataram*, DIPA Universitas Mataram Tahun Anggaran 2013 No. 023.04.2.415278/2013.

Muhajirah, Prabowo, A., dan Ashari, I., (2014), Evaluasi Awal Potensi Likuifaksi di Kota Mataram, *Lembaga Penelitian Universitas Matara*m, DIPA Universitas Mataram Tahun Anggaran 2014 No. 216X/SPP-AUPT-BOPTN/H18.12/PL/2014.

UNIVERSITAS
GADJAH MADA
PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Mulilis, J.P., Horz, Jr., R.C., and Townsend, F.C., 1976, The Effects of Cyclic Triaxial Testing Techniques on The Liquefaction Behaviour of Monterey No. 0 Sand, *Miscellaneous Paper S-76-6*, Soils and Pavements Laboratory.

Muntohar, A.S., 2009, Evaluation of Peak Ground Acceleration Using CPT Data for Liquefaction Potential, 4th Annual International Workshop & Expo on Sumatra Tsunami Disaster & Recovery 2009

Muntohar, A.S., 2014, Research on Earthquake Induced Liquefaction in Padang City and Yogyakarta Areas, *Jurnal Geoteknik HATTI IX*, 1(2014), ISSN 0853 – 4810, pages 1-9.

Nugraha, dkk. Evaluasi Karakteristik Kekuatan Geser dan Permeabilitas Batu Apung dan Scoria dari Gunung Kelud Blitar Sebagai Alternatif Bahan Urugan

Oakes, C.R., Shaking Table Testing to Evaluate Effectiveness of Prefabricated Vertical Drain for Liquefaction Mitigation, Thesis, Brigham Young University

Okada, W., Terzaghi, S., Cooper, J.Q., Patel, M.A., and Adhikary, T.P., 2003, Seismic Design of A Highway in Pumiceous Land, *Pacific Conference on Earthquake Engineering*, Paper Number 119.

Omarov, M., 2010, Liquefaction Potential and Post-liquefaction Settlement of Saturated Clean Sands and Effect of Geofiber Reinforcement, Thesis, University of Alaska Fairbanks, Alaska

Orense, R.P., 2011, Soil Liquefaction during the 2010 Darfield and 1990 Luzon Earthquakes: A Comparative Study, *Proceedings of the Nineth Pacific Conference on Earthquake Engineering Building an Earthquake-Resilient Society*, 14-16 April, 2011, Auckland, New Zealand, Paper Number 043.

Orense, R.P., Pender, M.J., and O'Sullivan, A.S., 2012, Liquefaction Characteristics of Pumice Sands, *EQC Project 10/589*, March 2012.

Orense, R.P., Hyodo, M., and Kaneko, T., 2012, Dynamic Deformation Characteristic of Pumice sand, New Zealand SEE

Orense R.P., Asadi, M.S., Rouholamin M., Bhattacharya, S., 2017, Comparison of The Post-liquefaction Behaviour of Hard-grained and Crushable Pumice Sands, *Proc. 20th NZGS Geotechnical Symposium.* Eds. GJ Alexander & CY Chin, Napier

UNIVERSITAS
GADJAH MADA
PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Özener, P.T., Özaydin, K., and Berilgen, M.M., 2009, Investigation of Liquefaction and Pore Water Pressure Development in Layered Sands, *Bull Earthquake Engineering*, 7: 199-219, DOI 10.1007/s10518-008-9076-3

Pathak, S. R., Dalvi, R. S., and Katdare, A. D., 2010, Earthquake Induced Liquefaction Using Shake Table Test, *International Conferences on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics*. 13. http://scholarsmine.mst.edu/icrageesd/05icrageesd/session04/13

Pathak, S.R., and Dalvi, R.S., 2011, Effect of Sample Preparation Method on Liquefaction of Sandy Soil, *EJGE*, Vol. 16, pages 1411-1426.

Pathak, S.R. and Dalvi, R.S., 2011, Liquefaction of clean sand using triaxial test, 2011 Pan-Am CGS Geotechnical Conference

Pathak, S.R., and Patki, M.A., 2013a, Strain Criterion for Initiation of Liquefaction Using Shake Table Test, *International Journal of Engineering Research & Technology* (IJERT), Vol. 2 Issue 5, May-2013

Pathak, S.R., Kshirsagar, M.P., and Joshi, M.S., 2013b, Liquefaction Triggering Criterion Using Shake Table Test, *International Journal of Engineering and Technology* (IJET), Volume 5, No. 5, October-November 2013, pp. 4439-4449

Pender, M.J., 1996, Earthquake Resistant Design of Foundation, *Bulletin of The New Zealand National Society for Earthquake Engineering*, 29(3), September 1996.

Prasad, S.K., Towhata, I., Chandradhara, Nanjundaswamy, P., 2004, Shaking Table Tests in Earthquake Geotechnical Engineering, Special Section: Geotechnics and Earthquake Hazards, *CURRENT SCIENCE*, Vol. 87, No. 10, 25 November 2004, pp.1398-1404.

Raghunandan, M.E., Juneja, A., and Hsiun, B.C.B., 2012, Technical Note: Preparation of Reconstituted Sand Samples in The Laboratory, International Journal of Geotechnical Engineering

Rahmi, N., 2011, Perilaku Regangan-Siklus Pembebanan Tanah Pasir Prambanan Dengan Uji Triaksial Siklis, *Master Tesis*, Universitas Gadjah Mada, Yogyakarta.

Ramasamy, U. and Tikalsky, P., 2012, Report for Hess Pumice Products, Evaluation Report of Hess Pumice, The University of Utah,

Rasouli, R., Towhata, I., and Rattez, H. (2014), Shaking Table Model Tests on Mitigation of Liquefaction-induced Distortion

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

K. Ranga Swamy, A. Boominathan, and K. Rajagopal, "Undrained Response and Liquefaction Behaviour of Non-Plastic Silty Sands Under Cyclic Loading" (May 24, 2010). *International Conferences on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics.* Paper 41 http://scholarsmine.mst.edu/icrageesd/05icrageesd/session04/41

Kramer, S.L., 1996, Geotechnical Earthquake Engineering, Prentice-Hall International Series, New Jersey

Rascol, E., 2009, Cyclic Properties of Sand: Dynamic Behaviour for Seismic Application, Dissertation, Ecole Polytecnique Federale De Lausanne, Swistzerland

Sadrekarimi, A. and Olson, S.M., 2012, Effect of Sample-Preparation Method on Critical-State Behaviour of Sands, *Geotechnical Testing Journal*, Vol. 35, No. 4, Paper ID GTJ104317

Saebimoghaddam, A., 2010, Liquefaction of Early Age Cemented Paste Backfill, Dissertation, Unversity of Toronto

Saikia, R., and Chetia, M., 2013, Critical Review on the Parameters Influencing Liquefaction of Soils, *International Journal of Innovative Research in Science, Engineering and Technology*, Volume 3, Special Issue 4, March 2014, pages 110-116.

Seed, H. B., and Lee, K. L., 1966, Liquefaction of Saturated Sands during Cyclic Loading, *Journal Soil Mechanics and Foundation Division*, ASCE, 92(SM6): 105-134.

Seed, H.B., and Idriss, I.M., 1971, Simplified Procedure for Evaluating Soil Liquefaction Potential, *Journal of Soil Mechanics and Foundation Division*, ASCE, Vol. 97, No. 9, pages 1249-1273.

Seed, H. B., and Peacock, W. H., 1971, Test Procedures for Measuring Soil Liquefaction Characteristics, *Jounal Soil Mechanics and Foundations. Division*, ASCE, 97(SM8), pages 1099-1119.

Seed, H. B., Idriss, I. M., and Arango, I., 1983, Evaluation of Liquefaction Potential using Field Performance Data, *Journal Geotechnical Engineering*, ASCE, 109(3), 458-482.

Silver, M.L., Chan, C.K., Ladd. R.S., Lee, K.L., Tiedemann, D.A., Townsend, F.C., Valera, J.E., and Wilson, J.H., 1976, Cyclic Triaxial Strength of Standard Test Sand, *Journal of ASCE,* 102, GT5, pages 511-23.

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Steven L. Kramer, 1996, *Geotechnical earthquake engineering*, Prentice Hall International Series.

Soebowo, E., Tohari, A., dan Sarah, Dwi., 2007, Studi Potensi Likuifaksi di Daerah Zona Patahan Opak Patalan-Bantul Jogjakarta, *Prosiding Seminar Geoteknologi Kontribusi Ilmu Kebumian Dalam Pembangunan Berkelanjutan*, Bandung, 3 Desember 2007.

Soehaimi, A., Marjiyono, dan Setianegara, R., 2015, Mikrozonasi Bahaya Gempa Kota Mataram, *GEOMAGZ Majalah Geologi Populer*, Vol. 5, (No. 3), September 2015, http://geomagz.geologi.esdm.go.id/file/2012/09/GEOMAGZ-VOL-5-NO-3-SEPTEMBER-2015.pdf

Sulistiawati, B.H., (2016), Pengaruh Kerapatan Relatif dan Tekanan Kekang Terhadap Potensi Likuifaksi, Tesis, UniversitasGadjah Mada, Yogyakarta

Supriyanto, 2013, Gempa 5 SR goyang Mataram 22 juni 2013, http://www.tempo.co/read/news/2013/06/22/058490356/Gempa-54-SR-Goyang-Mataram, diakses 1 Mei 2014.

Suzuki, M., and Yamamoto, T., 2004, Liquefaction Characteristic of Undisturbed Volcanic Soil In Cyclic Triaxial Test, *13th World Conference on Earthquake Engineering*, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 465.

Tatsuoka, F., Ochi, K., Fujii, S., and Okamoto, M., 1986, Cyclic Undrained Triaxial and Torsional Shear Strength of Sand for Different Sample Preparation Methods, Soil and Foundation, 26(3):23-41

Test Method Nev. T206H, Method of Test for Washing and Sieve Analysis of Coarse and Fine Aggregate, State of Nevada Departement of Transportation Material Devisison, Januari 1, 2019

Tsuchida, H., 1970, Prediction and Countermeasure against the Liquefaction in Sand Deposits, Abstact, *Seminar Port Harbour Res. Inst*., 3, pages 1-33.

Ueng, T-S., 2006, Inference of Behavior of Saturated Sandy Soils During Earthquakes from Laboratory Experiments, *Journal of GeoEngineering*, Vol. 1, pp. 1-9, August 2006

Ueng, T-S., Chen, C-H., Tsou, C-F., and Chen, Y-C., 2008, Shaking Table Test on a Large Specimen of Mailiao Silty Sand, Geotechnical Earthquake Engineering and Soil Dynamic IV

Varghese, R.M., and Latha, G.M., 2011, Free Field Liquefaction Studies Through Shaking Table Test, Proceedings of Indian Geotechnical Conference, December 15-17, Kochi, (Paper No. J-096)

UNIVERSITAS
GADJAH MADA

PENGARUH KANDUNGAN PUMICE (BATU APUNG) PADA POTENSI LIKUIFAKSI PASIR
MUHAJIRAH, ST.MT., Dr. Ir. Ahmad Rifa'i, M.T. dan Ir. Agus Darmawan Adi, M.Sc., Ph.D.
Universitas Gadjah Mada, 2019 | Diunduh dari http://etd.repository.ugm.ac.id/

Varghese, R.M., and Latha, G.M., 2014, Shaking Table Studies on the Conditions of Sand Liquefaction, *Geo-Congress 2014 Technical Papers*, GSP 234 © ASCE 2015, pp. 1244-1253

Wang, J., 2006, The Stress-Strain and Strength Characteristics of Portaway Sand, Dissertation, University of Nottingham

Wesley, L.D., 2010, *Geotechnical Engineering in Residual Soils*, John Wiley & Sons, Inc.

Whitman, R.V., 1987, Liquefaction — The State Of Knowledge, *Bulletin of The New Zealand National Society for Earthquake Engineering*, Vol. 20, No. 3, September 1987.

Wu, J., Kammerer, A.M., Riemer, M. F.., Seed, R.B., and Pestana, J.M., 2004, Laboratory Study of Liquefaction Triggering Criteria, *13th World Conference on Earthquake Engineering*, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 2580.

Xiaoyan, Z., 2015, Particle Breakage in Uniform and Gap-graded Soil, Dissertation, The University of Hong Kong

Yadi, S., 2019, Respon Dinamik Model Jembatan *Cable-Stayed* Tipe *Floating* Terskala Akibat Beban Gempa Pada Masa Konstruksi Dengan Metode *Balanced Cantilever* Pada *Uji Shaking Table*, Disertasi, Universitas Gadjah Mada, Yogyakarta.

Yıldız, M. and Soğancı, A.S., 2012, Geotechnical Characteristics of Granular Pumice Soils in Nevşehir Region, *3rd International Conference on New Developments in Soil Mechanics and Geotechnical Engineering*, 28-30 June 2012, Near East University, Nicosia, North Cyprus, pages 447-454.

Yildiz, M. and Soganci, A.S., Improvement of The Strength of Soil Which Comprises Granular Pumice by Injection of Cement Under Low Pressure, Scientia Iranica, Transactions A: Civil Engineering, 2015, 22(1), 81 - 91

Zeng, X. and Liu, G., 2012, Liquefaction of Dense Sand under Earthquake Loading, GeoCongress 2012, pp. 1670-1679

Zulfikar, F., 2000, Pengaruh Frekuensi Rendah Terhadap Potensi Likuifaksi Pasir Kwarsa Menggunakan Triaksial Siklik, *Master Tesis*, Program Pascasarjana Bidang Ilmu Teknik, Universitas Indonesia, Jakarta.