DAFTAR PUSTAKA

Adikari, G.S.N., Donald, I.B., and Parkin, A.K., 1982, Analysis of the Construction Behaviour of Dartmouth Dam, *Proceedings 4th Intl Conference on Numerical Methods in Geomechanics Ed by Z. Eisenstein,* Edmonton, Canada, Vol 2, pp 645-654.

Alonso, E.E., Battlle, F., Gens, A., and Lloret, A., 1988, ConsolidationAnalysis of Partially Saturated Soil, Application to Earth Dam Construction, Proc 6th International Conference on Numerical Methods in Geomechanics, Innsbruck, A.A. Balkema, Vol 2, pp 1303-1308.

Andersen, K.H., Rawlings, C.G., Lunne, T.A., and By, T.H., 1994, Estimation of hydraulic pressure in clay, *Canadian Geotechnical Journal,* Vol. 31, No. 6, pp 817-828.

Anson, R.W.W. and Hawkins, A.B., 1998, The Effect of calcium ions in pore water on the Residual Strength of kaolinite and Sodium Montmorillonite, *Geotechnique,* Vol. 48, No. 6, pp 787-800.

Arya, L.M., and Paris, J.F., 1981, A physicoempirical model to predict the soil moiusture characteristic from particle size distribution and bulk density data, *Soil Science Society of America Journal,* Vol 45, pp 1023-1030.

ASTM. 2003, *Annual Book of ASTM Standards,* vol 04.08, ASTM, Philadelphia, PA,

ASTM. 2003, *Annual Book of ASTM Standards,* vol 04.09, ASTM, Philadelphia, PA,

Aubertin, M., Mbonimpa, M., Bussiere, B, and Chapuis, R.P., 2003, A Model to predict the Water Retention Curve from Basic Geotechnical Properties, Canadian Geotechnical Journal, Vol.40, No.6, pp 1104-1122.

Aung, K.K., Rahardjo, H., Toll, D.G., and Leong, C.C., 2000, Mineralogy and Microfabric of Unsaturated Residual Soil, *Proc of The Asian Conference on Unsaturated Soil, Unsat-Asia 2000,* Singapore, A.A. Balkema, pp 317-321.

Bai, X., and Smart, P., 1997, Change in Microstructure of Kaolin in Consolidation and Undrained Shear, *Geotechnique,* Vol. 47, No.5, pp 1009-1017.

Bardet, J.P., 1997, *Experimental Soil Mechanics,* Prentice Hall, New Jersey.

Biot, M.A., 1941, General theory of three dimensional consolidation, *Journal of Allied Physic,* Vol. 12, pp 155-164.

Benson, C.H., and Daniel, D.E., 1990, Influence of Clod on Hydraulic Conductivity of compacted clay, *Journal of Geotechnical Engineering,* ASCE, Vol. 116, pp 1231-1248.

Bertram, G.E., 1940, An experimental investigation of protective filters, Graduate School of Engineering, Harvard University, *Soil Mechanics Series 7.*

Brindley, G.W., 1953, *On X-ray Methods for Studying the Orientation of Micaceous Minerals in Shale, Clays and similar Materials*, John Wiley & Sons, New York.

British Standard., 1990, *BS 1377 Part 4. Compaction related tests.* British Standard Institution.

Carter, J.P., Booker, J.R., and Yeung, S.K., 1986, Cavity expansion in cohesive frictional soils, *Geotechnique,* Vol.36, no. 3, pp. 349-358.

Cavounidis, S., and Hoeg, K., 1977, Consolidation during Construction of Earth Dams, Journal of Geotechnical Engineering Division, ASCE, Vol 103, No.10, pp 1055-1067.

Cavounidis, S., and Vaziri, H., 1982, Effect of Plasticity on Load Transfer in Zoned Dams, *Proc 4th Intl Conf on Numerical Methods in Geomechanics,* Edmonton, Vol 2, pp 663-669.

Cook, R.D., Malkus, D.S., and Plesha, M.E., 1989, *Concepts and Applications of Finite Element Analysis, 3rd Edition,* John Wiley & Sons, New York

Covarurrubias, S.W., 1969, Cracking of Earth and Rockfill Dams, a Theotretical Invcstigation by means of Finite Elemen Mcthod, PhD thesis, Harvard University, Cambridge, Massachusset.

Dakshanamurthy, V., Fredlund, D.G., and Rahardjo, H., 1984, Coupled three dimension consolidation theory of unsaturated porous media, *Proc 5th International Conference on Expansive Soils,* Adelaide, Australia, pp 99-103.

Di Maio, C., and Fenelli, G.B., 1994, Residual Strength of Kaolin and Bentonite: The Influence of their constituent pore fluid, *Geotechnique,* Vol. 44, No.4, pp 217-226.

Djarwadi, D., 2002, Sifat-sifat Geoteknik dan Perilaku core selama Pelaksanaan Dam tipe Urugan (studi kasus dam Batutegi), tesis Magister Teknik, Pascasarjana Universitas Gadjahmada, Yogyakarta.

Dolezalova, M., and Leitner, F., 1981, Prediction of Dalesice Dam Performance, Proceedings 10th International Conference on Soil Mechanics and Foundation Engineering, Stockholm, Vol 1, pp 111-114.

Dolezalova, M., Horeni, A., Zemanova, V., 1988, Experience with Numerical Modeling of Dams, Proc 6th International Conference on Numerical Methods in Geomechanics, Innsbruck, A.A. Balkema, Vol 2, pp 1279-1290.

Donnelly, C.R., 2006, Save and Secure, Risk Based Techniques for Dam Safety, Article posted on 14 November 2006, URL:ttp://www.waterpowermagazine.com/story.asp?StoryCode,2040340.

Dounias, G.T., Potts, D.M., and Vaughan, P.R., 1996, Analysis of Progressive Failure and Cracking in old British Dams, *Geotechnique,* vol. 46, no. 4, pp 621 – 640.

Duncan, J.M., and Chang, C.Y., 1970, Non-Lincar Analysis of Stresses and Strain in Soils, *Journal Soil Mechanics and Foundation Engineering,* ASCE, vol.96, no:SM5, pp 1629-1654.

Duncan, J.M., Byrne, P., Wong, K.S., and Phillip Mabry., 1980, Strength, Stress-Strain and Bulk Modulus Parameters for Finite Element Analyses of Stresses and Movements in Soil Masses, Report no. UCB/GT/80-01, Dept of Civil Engineering University of California. Berkeley, USA.

Eisenstein, Z., and Naylor, D.J., 1986, Static Analysis of Embankment Dams, Bulletin 53 of International Committee on Large Dams, Paris, 147 pp.

Fell, R., MacGregor, P., and Stapledon, P., 1992, Geotechnical Engineering of Embankment Dams, A.A Balkema, Rotterdam.

Fell, R., Wan, C.F. and Foster, M., 2004, Methods for Estimating the Probability of Failure of Embankment Dams by Internal Erosion and Piping through the Embankment, *Uniciv Report R-428, May 2004,* University of New South Wales, Australia, ISBN: 85841 395 7.

Foster, M., Fell, R., and Spannagle, M. 2000, The statistics of embankment dam failures and accidents, Canadian Geotechnical Journal, Vol.37, pp 1000 – 1024.

Foster, M. and Fell, R., 2000, Use of Event Trees to Estimate the Probability of Failures of Embankment Dams by Internal Erosion and Piping, *Proc 20th Intl Congress on Large Dams,* Beijing, Vol.1, pp.237-258.

Foster, M. and Fell, R., 2001. Assessing Embankment Dam Filters that do not Satisfy Design Criteria, *Journal Geotechnical and Geoenvironmental Enngineering,* ASCE, Vol 127, no. 5, pp 399-407.

Fredlund, D.G., and Rahardjo, H., 1988, State of Development in the Measurement of Soil Suction, *Proc of the International Conference on Engineering Problems of Regional Soils,* Beijing, China, pp 582-588.

Fredlund, D.G., and Rahardjo, H., 1993, Soil Mechanics for Unsaturated Soils, John Wiley & Sons, New York, 517pp.

Fredlund, D.G., and Xing, A., 1994, Equations for the soil-water characteristic curve, *Canadian Geotechnical Journal,* Vol 31, no.3, pp 521-532.

Fredlund, D.G., Xing, A., and Huang, S.Y., 1994, Predicting the permeability function for unsaturated soils using the soil-water characteristic curve, *Canadian Geotechnical Journal*, Vol.31, no. 4, pp 533-546.

Fredlund, M.D., Sillers, W.S., Fredlund, D.G., and Wilson, G.W., 1996, Design of a knowledge-based system for unsaturated soil properties, *Third Canadian Conference on Computing in Civil and Building Engineering,* Montreal, pp 659-677.

Fredlund, M.D., Wilson, G.W., and Fredlund, D.G., 1997a, Prediction of the soil-water characteristic curve from grain-size distribution and volume-mass properties, *Proc 3rd Brazilian Symposium on Unsaturated Soils,* Rio de Janciro, Brazil, Vol 1, pp 13-23.

Fredlund, M.D., Wilson, G.W., and Fredlund, D.G., 1997b, Estimation of Hydraulic Properties of an Unsaturated Soil using A Knowledge Based System, *Proc Conf on Characterization and Measurement of the Hydraulic Properties of Unsaturated Porous Media,* Riverside, California.

Fredlund, M.D., Fredlund, D.G and., Wilson, G.W., 2000a, An Equation to represent grain-size distribution, *Canadian Geotechnical Journal,* Vol.37, pp 817-827.

Fredlund, M.D., Wilson, G.W., and Fredlund, D.G., 2000b, Use of grainsize functions in unsaturated soil mechanics, *Proc Advances in Unsaturated Geotechnics,* Denver, ASCE Geotechnical Special Publication no.99, pp 69-84.

Gabousi, J., and Kim, K.J., 1982, Analysis of Saturated and Partially Saturated Soils, Proc International Symposium on Numerical Models in Geomechanics, Zurich, Pp 377-390.

Green, R.E., and Corey, J.C., 1971, Calculation of Hydraulic Conductivity: A Further Evaluation of Some Predictive Methods, *Proceedings Soil Science Society of America,* Vol.35, pp. 3-8.

Guan, Y., and Fredlund, D.G., 1997, Direct measurement of high soil suction, *Proc 3rd Brazilian Symposium on Unsaturated Soils.* Rio de Janeiro, Brazil, Vol 2.

Harr, M.E., 1977, Mechanics of particulate media. McGraw-Hill International Book Company, New York, pp 27-33.

Hassani, A.W., Singh, B., Saini, S.S., and Goel, M.C., 1985, Laboratory Simulation of Hydraulic Fracturing, *Proc 11th International Conference on Soil Mechanics and Foundation Engineering,* San Francisco, Vol.2, pp 1081-1084.

Hazen, A., 1892, Physical roperties of sands and gravels with reference to their use in filtration, Report of the Massachusetts State Board of Health.

Honjo, Y. and Venezario, D., 1989, Improved Filter Criterion for Cohesionless Soils, *Journal of Geotechnical Engineering,* ASCE, Vol.115, No.1, pp 75-94.

Huang, S.Y., 1994, Evaluation and Laboratory Measurement of the Coefficient of Permeability in Deformable, Unsaturated Soils, Ph.D thesis, Department of Civil Engineering, University of Saskatchewan, Saskatooon. Canada.

Independent Panel to Review Cause of Teton Dam Failure., 1976, *Report to US Department of the Interior and the State of Idaho on Failure of Teton Dam,* Superintendent of Documents, US Government Printing Office, Washington D.C.

Indraratna, B. and Locke, M.R., 1999, Design Methods for Granular Filters Critical Review, *Paper no. 11758, Proc Institution of Civil Engineers, Geotechnical engineering,* Vol.137, pp 137-147.

International Committee on Large Dams (ICOLD)., 1974, Lesson from dam incidents, Paris, 1069 pp.

International Committee on Large Dams (ICOLD), 1999, Lesson from Dam Incidents (re-issue of the 1974 book), 1069 pp.

Janbu, N., 1963, Soil Compressibility as determined by oedometer and triaxial tests, *Proc European Conf on Soil Mechanics and Foundation Engg, Weisbaden, Germany, vol1, pp 19-25.*

Jaworski, G.W., Duncan, J.M., and Seed, H.B., 1981, Laboratory Study of Hydraulic Fracturing, *Journnal of Geotechnical Engineering Division,* ASCE, Vol 107, No.6, pp 713-732.

Jian-Xin, Y., and Yuan Mao., 1982, Non-Linear Incremental Analysis of an Earth Dam using Modified Secant Modulus, *Proceedings 4th Intl Conference on Numerical Methods in Geomechanics Ed by Z. Eisenstein,* Edmonton, Canada, Vol 2, pp 731-739.

Kennard, R.M., 1970, The Measurement of Soil Permeability In Situ by the Constant Hrad Test, *Ph.D thesis,* University of London, England.

Kenney, T.C., Chahal, R., Chiu, E., Ofoegbu, G.I., Omange, G.N., and Ume, C.A., 1985, Controlling Constriction Sizes of Granular Filters, *Canadian Geotechnical Journal,* Vol. 22, No. 1, pp 32-43.

Khor, C.H. and Woo, H.K., 1989, Investigation of crushed rock filters for dam embankment, *Journal Geotechnical Engineering,* ASCE, Vol. 115, No. 3, pp 399-412.

Kjaernsli, B., and Torblaa, I., 1968, Leakage through horizontal cracks in the core of Hyttejuvet Dam, *Norwegian Geotechnical Institute*, Publication no. 80, pp 39-47.

Konder, R.L., 1963, Hyperbolic Stress-Strain Response: Cohesive Soils, *Journal Soil Mechanics and Foundation Engineering,* ASCE, vol.89, no: SM1, pp115-143.

Kulhawy, F.H., Duncan, J.M., and Seed, H.B., 1969, Finite Element Analysis of Stresses and Movements in Embankments during Construction, Report no. TE 69-4, Office of Research Service, University of California at Berkeley.

Kulhawy, F.H., and Duncan J.M., 1972, Stress and Movements in Oroville Dam, *Journal Soil Mechanic and Foundation Engineering,* ASCE, Vol. 98, no. SM7, pp 653-665.

Kulhawy, F.H., and Gurtowski. T.M., (1976), Load transfer and hydraulic fracturing in zoned dams, *Journal Soil Mechanics and Foundation Engineering,* ASCE, Vol.102, No.GT9, pp 963-974.

Lefebvre, G., Duncan, J.M., and Wilson, E.L., 1973, Three-Dimensional Finite Element Analysis of Dams, *Journal Soil Mechanics and Foundation Engineering,* ASCE, vol 99, no. SM 7, pp 495-507.

Lo, K.Y., and Kaniaru, K., 1990, Hydraulic Fracture in earth and rockfill dams, *Canadian Geotechnical Journal*, Vol. 27, no. 4, pp 496-506.

Loftquist, B.,1951, Earth Pressure in a Thin Impervious Core, *Transaction of 4th International Congress on Large Dams*, New Delhi, Vol 1, pp.99-109.

Marinho, F.A.M., and Stuermer, M.M., 2000, The Influence of the Compaction Energy on the SWCC of a Residual Soils, *Proc Advances in Unsaturated Geotechnics*, Denver, ASCE Geotechnical Special Publication no.99, pp 125-141.

Martin, R.T., 1962, *Research on the Physical properties of Marine Soils*, Publ. No.127, Soils Eng. Div., Massachusetts Institute of Technology, USA

Martin, R.T., 1966, Quantitative fabric of wet kaolinite, *Proc. Of the 14th Nat. Conf. Clays and Clay Minerals*, Berkeley, California, Pergamon Press, pp 271-287.

McConnachie, I., 1974, Fabric changes in consolidated kaolin, *Geotechnique*, Vol. 24, no.2, pp 207-222.

Mesri, G., and Olson, R.E., 1970, Shear strength of montmorilonite, *Geotechnique*, vol. 20, no.3, pp 261-270.

Mesri, G., and Olson, R.E., 1971, Consolidation characteristics of montmorillonite, *Geotechnique*, vol. 21, no.4, pp 341-352.

Mitchell, J.K., 1993, *Fundamentals of Soil Behavior, Second Edition*, John Wiley & Sons, New York, 437 pp.

Morgenstern, N.R. and Vaughan, P.R., 1963, Some Observation on Allowable Grout Pressure, *Proc of the Conference on Grouts and Drilling Muds*, Institution of Civil Engineers, London.

Mori, A., and Tamura, M., 1987, Hydrofracturing pressure of cohesive soils. *Journal of Soils and Foundation*, JSSMFE, Vol. 27, no.1, pp 14-22.

National Research Council, 1983, *Safety of Existing Dams, Evaluation and Improvement*, National Academy Press.

Naylor, D.J., 1978, Stress-strain Laws for Soil, *Chapter 2 of Development in Soil Mechanics*, Ed. C.R. Scott, Applied Science, England

Naylor, D.J., Maranha das Neves, E., Mattar, D., and Viega Pinto, A.A., 1986, Prediction and Construction Performance of Beliche dam, *Geotechnique*, vol. 36, no. 3, pp 359 – 376.

Naylor, D.J., Knight, D.J., and Ding, D., 1988. Coupled Consolidation Analysis of Construction and Subsequent Performance of Monasavu Dam, Computers and Geotechnics, No.6, pp 95-129.

Naylor, D.J. 1990, *Stress-strain laws and Parameter Values,* Chapter 11 on Advances in Rockfill Structures, Edited by E. maranha das Neves, NATO ASI Series E, Vol. 200, Kluwer Academic Publisher. Doordrech.

Naylor, D.J., Maranha, J.R., Maranha das Neves, E.,and Viega Pinto, A.A., 1997, A Back Analysis of Beliche dam, *Geotechnique,* vol. 47, no. 2, pp 221 – 233.

Nelson, J. and Baron, M.L., 1971. Application of Variable Moduli to Soil Behavior, Intl Juornal of Solids and Structures, no.7, pp 399-417.

Ng, K.L.A., and Small, J.C., 1999, A Case Study of Hydraulic Fracturing using finite element. *Canadian Geotechnical Journal,* Vol 36, pp 861 –875.

Nobari, E.S., Lee, K.L., and Duncan, J.M., 1973, Hydraulic fracturing in Zoned Earth and Rockffill Dams, A Report of an Investigation, *US Army Engineer Waterways Experiment Station,* Report no. TE-73-1, Vicksburg. 76pp.

Ohne, Y., Narita, K., Okumura, T., and Nakamura, Y., 2004, Hydraulic fracturing of a rockfill dam during the 1995 Hyogoken-Nambu earthquake, *New Developments in Dam Engineering, ed by Wieland, Ren & Tan. Proc 4th Intl Conference on Dam Engineering,* A.A. Balkema. pp 683-692.

Ohtsubo, M., Egashira, K., and Kashima, K., 1995, Depositional and Post Depositional Geochemistry, and it's Correlation of Geotechnical properties of Marine Clay in Ariake Bay, Japan, *Geotechnique,* Vol.45, No.3, pp 509-523.

Olson, R.E., 1962a, The Shear Strength Properties of Calcium Illite. *Geotechnique,* Vol. 12, No.1, pp 23-43.

Olson, R.E., 1962b, The Shear Strength Properties of Calcium Illite. Discussion by Roscoe, K.H., Schofield, A.N., Wroth, C.P., and Thurairajah, A. *Geotechnique,* Vol.12, No.3, pp 246-247

Panah, A.K., and Yanagisawa, E., 1989, Laboratory studies on hydraulic fracturing criteria in soil, *Journal of Soils and Foundation,* JSSMFE, Vol. 29, no.4, pp 14-22.

Paris, P.C., and Sih, G.C., 1965, Stress analysis of crack, *Fracture Toughness Testing and its Applicatio,* ASTM STP 381, ed by W.F. Brown, Philadelphia. pp 30-81.

Park, Y.J., 2003. Investigation of the Ability of Filter s to Stop Erosion through Cracks in Dams, *Ph.D thesis Virginia Polytechnic Institute and State University,* Blacksburg, USA.

Parkin, A.K., and Yu, C.L., 1989, Hydraulic fracturing tests in simulated earth dams. *Proc 12th Intl Conf on Soil mechanics and Foundation Engineering.* Rio de Janeiro, vol 1. pp 385-389.

Pinto Seco E, P.S., and Das Neves, E.M., 1985, Hydraulic Fracturing in Zoned Earth and Rockfill Dams. *Proc 11th International Conference on Soil mechanics and Foundation Engineering.* San Francisco. A.A. vol 4. pp 2025-2030.

Pott, D.M., Dounias, G.T., and Vaughan, P.R., 1990, Finite Element Analysis of Progressive Failure of Carsington Dam. *Geotechnique,* vol. 40, no.1, pp 79 – 101.

Rahardjo, P.P dan Meilinda. L., 1999, Evaluasi Performance Bendungan Kalola, Sulawesi Selatan. *Prosiding Seminar Nasional Geoteknik '99.* Jurusan Teknik Sipil, Fak Teknik, Universitas Gadjah Mada, Yogyakarta.

Roscoe, K.H., Schofield, A.N., Wroth, C.P., and Thurairajah, A., 1962, Discussion on The Shear Strength Properties of Calcium Illite by R.E. Olson. *Geotechnique.* Vol. 12. No.3. pp 246-247.

Ross, C.T.F. 1993. *Finite Element Methods in Engineering Science.* Ellis Horwood. New York.

Schnitter, N.J., 1979, Technical Sessions – Question 49 on Deterioration or Failure of Dams. 13th ICOLD Congress. New Delhi. Vol. V, pp 488-493.

Seed, H.B., Leps, T.M., Duncan, J.M., and Bieber, R.E., 1976, Hydraulic fracturing and its possible role in the Teton Dam failure. Report to US Department of the Interior and State of Idaho on Failure of Teton dam by Independent Panel, US Government Printing office. Washington D.C. Appendix D.

Sherard, J.L., Decker, R.S. and Ryker, N.L. 1972. Hydraulic Fracturing in Low Dams of Dispersive Clay. *Proceedings Specialty Conference on Performance of Earth and Earth Supported Structures.* ASCE. Vol.1, Part I, pp 653-689.

Sherard, J.L., (1973), Embankment Dam Cracking. *Embankment Dam Engineering*, Casagrande Volume, edited by R.C. Hirschfield and S.J. Poulos, John Wiley & Sons, New York, pp 271-354.

Sherard, J.L., Dunnigan, L.P., and Talbot, J.R. 1984a. Basic Properties of Sand and Gravel Filters. *Journal of Geotechnical Engineering.* ASCE. Vol 110, No.6. pp 684-700.

Sherard, J.L., Dunnigan, L.P., and Talbot, J.R. 1984b. Filters for Silts and Clays. *Journal of Geotechnical Engineering.* ASCE. Vol 110, No.6. pp 701-718.

Sherard, J.L., and Dunnigan, L.P., (1985), Filter and Leakage Control in Embankment Dams. *Proceedings Symposium on Seepage and Leakage from Dams and Impoundments,* ASCE, Denver, pp 1-30.

Simons, N.E., 1962, Discussion on The Shear Strength Properties of Calcium Illite by R.E. Olson. *Geotechnique.* Vol. 12. No.3. pp 244-245.

Skermer, N.A., 1975, Mica Dam Embankment Stress Analysis. *Journal of Geotechnical Engineering. ASCE,* vol. 101, no. 3, pp 229-242.

Sun, Y., and Ting, C. 1988. *Introduction to a New Apparatus for Hydraulic Fracturing Tests.* Geotechnical Testing Journal. Vol .11, No.4, dec. 1988, pp.288-292.

Terzaghi, K. 1922. Der Grundguch an Stauwerken und Seine Verhutung. *Die Wasserkraft.* Vol.17, pp.445-449.

Tovey, N.K., 1986, Microfabric, Chemical and Mineralogical Studies of Soils: Techniques. *Journal Geotechnical Engineering.* SEAGS, Vol.17. No.2. pp 131-166.

USBR. 1955. The use of laboratory tests to develop design criteria for protective filters. Earth Laboratory Report No. EM-425. Bureau of Reclamation.

USBR. 1977. *Design of Small Dams.* United States Department of the Interior. Bureau of Reclamation.

USBR., 1990, Earth Manual Part 2, *Procedure for Performing Unconsolidated-Undrained Triaxial Shear Testing of Soils. (USBR 5745)*, Denver, pp776-806.

USBR., 1994. *Design Standard No.13 Embankment Dams, Chapter 5 Protective Filters.* USBR Technical Service Centre. Denver, CO. USA.

United States Committee on Large Dams (USCOLD). 1988. Lessons from Dam Incident USA II. ASCE. New York.

US Corps of Engineers. 1941. Investigation of filter requirements for underdrain. US Corps of Engineers. Waterways Experiment Station Technical Memorandum No.183-1.

USDA., 1994. *National Engineering Handbook Part 633, Chapter 26. Gradation of Sand and Gravel Filters.* National Resources Conservation Services. 33 pp.

van Genuchten, M. Th., 1980, A closed-form equation for predicting the hydraulic conductivity of unsaturated soils. *Soil Science Society of America Journal.* Vol.44. pp 892-898.

Vanapalli, S.K., 1994, Simple Test procedures and their Interpretation in Evaluating the Shear Strength of Unsaturated Soils. Ph.D. thesis. Department of Civil Engineering, University of Saskatchewan. Saskatoon. Canada.

Vaughan, P.R., Kluth, D.J., Leonard, M.W., and Pradoura, H.H.M., 1970, Cracking and Erosion of the Rolled Clay Core of Balderhead Dam and Remedial Works Adopted for its Repair. *Transaction of the 10th International Congress on Large Dams.* Montreal. Vol 1. pp 73 – 93.

Vaughan, P.R. 1970. Cracking of Clay Cores of Dams. *Proceedings British Geotechnical Society.*

Vaughan, P.R. 1978. Design of Filters for the Protection of Cracked Dam Cores against Internal Erosion. ASCE Convention and Exposition, Chicago.

Vaughan, P.R., and Soares, H.F, 1982. Design of filters for clay cores of dams. *Journal of Geotechnical Engineering.* ASCE. Vol 108, No. 1. 1982.

Verma, N.S., Pare, J.J., Boncompain, B., Garneau, R., and Rattue, A., 1985, Behavior of the LG4 main dam. *Proc 11th Intl Conf on Soil mechanics and Foundation Engineering.* San Francisco, vol 4. pp 2049-2054.

Vestad, H., 1976, Viddalsvatn dam, A History of Leakage and Investigations. *Transaction of the 12th International Congress on Large Dams.* Mexico City. Vol 2. pp 369 – 390.

Wesley, L.D., 1973, Some Basic Engineering Properties of halloysite and Allophane Clays in Java, Indonesia. *Geotechnique.* Vol.23. no.3. pp 471-494.

Widjaja, H., Duncan, J.M., and Seed, H.B., 1984, Scale and Effects in hydraulic fracturing. *US Army Engineer Waterways Experiment Station.* Miscellaneous Paper, GL-84-10. Vicksburg. 192 pp.

Wood, D.M., Kjaernsli, B., and Iloeg, K., 1976, Thoughts Concerning the Unusual Behaviour of Hyttejuvet Dam. *Transaction of the 12th International Congress on Large Dams.* Mexico City. Vol 2. pp 391 – 414.

Yanagisawa, E. and Panah, A.K. 1994. Two Dimensional Study of Hydraulic Fracturing Criteria in Cohesive Soils. *Soils and Foundations.* Vol.34, No.1, pp.1-9.

Zhang, L., and Du, J., 1997, Effects of abutment slopes on the performance of high rockfill dams. *Canadian Geotechnical Journal.* Vol.34. no. 4. pp 489-497.

Zhu, J.G., and Wang, J.J. 2004. Investigation to arch action and hydraulic fracturing of core rockfill dam. *New Development in Dam Engineering. Proc 4th Intl Conf on Dam Engineering.* Taylor & Francis Group. London, pp 1171-1180.