

## REFERENCE

- AKYÜZ, S. (2010). *Kargi barajyeri (çorum) litolojik birimlerin geçirgenlik özellikleri yönünden İncelenmesi*.
- Asadzadeh, M. (2010). *An introduction to the Finite Element Method (FEM) for differential equations in 1D*. Retrieved from [http://www.math.chalmers.se/~mohammad/teaching/%0APDEbok/Draft\\_I+II.pdf](http://www.math.chalmers.se/~mohammad/teaching/%0APDEbok/Draft_I+II.pdf)
- Bao, H., Hatzor, Y. H., & Huang, X. (2012). A new viscous boundary condition in the two-dimensional discontinuous deformation analysis method for wave propagation problems. *Rock Mechanics and Rock Engineering*, 45(5), 919–928. <https://doi.org/10.1007/s00603-012-0245-y>
- Bartholomew, C. L. (1989). *Failure of concrete dam*.
- Broberg, L., & Thorwid, M. (2015). *Evaluation of Failure Modes for Concrete Dams*.
- CEN, 2004. (2011). *Eurocode 7: Geotechnical design - Part 1: General rules Eurocode (Vol. 1)*.
- Cervera, M., Oliver, J., & Faria, R. (1995). Seismic evaluation of concrete dams via continuum damage models. *Earthquake Engineering & Structural Dynamics*, 24(9), 1225–1245. <https://doi.org/10.1002/eqe.4290240905>
- Chandrashekar, M. T., Sanjay, J. S., Chandrakant, P. M., & Kashinath, P. S. (2016). *Analysis of forces and stability checks of gravity - Case study: Middle Vaitarana dam*.
- Chapuis, R. P., & Aubertin, M. (2001). A simplified method to estimate saturated and unsaturated seepage through dikes under steady-state conditions. *Canadian Geotechnical Journal*, 38(6), 1321–1328. <https://doi.org/10.1139/t01-068>
- Chen, S. (2015). *Hydraulic Structures*.
- CHOPRA, A. K. (2012). *Dynamics of Structures—Theory and Applications to Earthquake Engineering*.
- CIGB, & ICOLD. (2019a). Role of Dams. Retrieved from [https://www.icold-cigb.org/GB/dams/role\\_of\\_dams.asp](https://www.icold-cigb.org/GB/dams/role_of_dams.asp)
- CIGB, & ICOLD. (2019b). World Register of Dams (General Synthesis). Retrieved from

[https://www.icold-cigb.org/GB/world\\_register/general\\_synthesis.asp](https://www.icold-cigb.org/GB/world_register/general_synthesis.asp)

- Deangeli, C., Giani, G. P., Chiaia, B., & Fantilli, A. P. (2009). Chapter 1. Dam failures. In *WIT Transactions on State of the Art in Science and Engineering* (Vol. 34, pp. 1755–8336). <https://doi.org/10.2495/978-1-84564>
- DIANA FEA. (2019). *Rayleigh Damping Parameters of a Gravity Dam*.
- Dr. M.Asrurifak. (2018). *Study two direction modified time history analysis for power house, surge tank and add dam Batang Toru*.
- Duffaut, P. (2013). The traps behind the failure of Malpasset arch dam, France, in 1959. *Journal of Rock Mechanics and Geotechnical Engineering*, 5(5), 335–341. <https://doi.org/10.1016/j.jrmge.2013.07.004>
- Ellis L. Krinitzsky, James P. Gould, P. H. (1993). *Fundamentals of Earthquake-Resistant Construction*. Retrieved from <https://books.google.co.id/books?id=upXRIHu7aH8C&printsec=frontcover#v=onepage&q&f=false>
- Fredlund, D. G. (2006). *Unsaturated Soil Mechanics in Engineering Practice*. 0241(May), 1304–1314. [https://doi.org/10.1061/\(ASCE\)1090-0241\(2006\)132](https://doi.org/10.1061/(ASCE)1090-0241(2006)132)
- H. M. Westergaard, (M.ASCE). (1993). Water Pressures on Dams During Earthquakes. *Proceedings of the American Society of Civil Engineers*, 57(9), 1303–1318.
- Henzel, Y., Bréard, J., Lang, D., & Trochu, F. (1999). *A Standard Characterisation of Saturated and Unsaturated Flow Behaviours in Porous Media*. (August 2015).
- Hoek, E., Carranza, C., & Corkum, B. (2002). Hoek-brown failure criterion – 2002 edition. *5th North American Rock Mechanics Symposium and 17th Tunneling Association of Canada Conference NARMSTAC, 1*, Pp. 267– 273., 267–273. [https://doi.org/10.1016/0148-9062\(74\)91782-3](https://doi.org/10.1016/0148-9062(74)91782-3)
- ICOLD-CIGB Bulletin 158. (2003). *Dam surveillance guide*.
- ICOLD. (1995). *Dam failures statistical analyses* (C. I. des G. Barrages., Ed.). Commission Internationale des Grands Barrages.
- Irsyam, M., Faisal, L., Natawidjaja, D. H., Widiyantoro, S., Meilano, I., Triyoso, W., ... Dkk. (2017). *Earthquake, Development, And Application Map For Structure Design*

- And Infrastructure Of Indonesia Earthquake Resistant*. (September), 1–19.
- Larry K. Nuss, P. ., Kenneth D. Hansen, P. ., Mastsumoto, N., & Lyvers, G. M. Seismic Analysis of Concrete Dams. , 2 Workshop 2017 USSD Annual Conference 963–994 (2017).
- Lysmer, J., & Kuhlemeyer, R. L. (1969). Finite Dynamic Model for Infinite Media. *Journal of Engineering Mechanics Division*, 95, 859–879.
- M, U. A., & M, H. H. (2016). Optimal location of drainage gallery under gravity dam by using finite. *International Journal of Multidisciplinary Research and Modern Education (IJMRME)*, II(I).
- Nourani, B., Salmasi, F., Abbaspour, A., & Oghati Bakhshayesh, B. (2017). Numerical Investigation of the Optimum Location for Vertical Drains in Gravity Dams. *Geotechnical and Geological Engineering*, 35(2), 799–808. <https://doi.org/10.1007/s10706-016-0144-1>
- Powers, J. P., & Corwin, A. B. (2007). *Construction dewatering and groundwater control*. PRESS, N. A., & ENGINEERING, C. O. E. (1990). *Earthquake engineering for concrete dams: design, performance, and research needs*. <https://doi.org/10.5860/choice.29-0926>
- Priscu, R., Popovici, A., Stematia, D., Stere, C., Academiei, E., Bucharest, ... Chichester. (1985). *Earthquake engineering for large dams*. 14(2), 406.
- Prof. B.S. Thandaveswara, hydraulics-I. I. of T. (n.d.). *Cause of Dam failure*.
- PT North Sumatera Hydro Energy. (2018a). *Basic Design Report ( Civil works of Dam and Appurtenant Structures )*.
- PT North Sumatera Hydro Energy. (2018b). *Dam Geological Report*.
- PT North Sumatera Hydro Energy. (2018c). *Stability Analysis of the Dam*.
- Robin Fell, MacGregor, P., Stapledon, D., & Bell, G. (2005). Geotechnical engineering of dams. In *Journal of Chemical Information and Modeling* (Vol. 53). <https://doi.org/10.1017/CBO9781107415324.004>
- Rocscience inc. (2018). Dynamic Analysis. Retrieved from 2018 website: [https://www.rocscience.com/help/rs2/pdf\\_files/theory/Dynamic\\_Analysis.pdf](https://www.rocscience.com/help/rs2/pdf_files/theory/Dynamic_Analysis.pdf)

- Rocscience Inc. (2018a). Deconvolution of the Earthquake Input. Retrieved from Rocscience website: [https://www.rocscience.com/help/rs2/index.htm#t=tutorials%2FRS2\\_\\_Dynamic\\_Slope\\_Analysis\\_A.htm](https://www.rocscience.com/help/rs2/index.htm#t=tutorials%2FRS2__Dynamic_Slope_Analysis_A.htm)
- Rocscience Inc. (2018b). Dynamic analysis. Retrieved from [https://www.rocscience.com/help/rs2/index.htm#t=tutorials%2FNew\\_Dynamic\\_Data\\_Analysis.htm](https://www.rocscience.com/help/rs2/index.htm#t=tutorials%2FNew_Dynamic_Data_Analysis.htm)
- Rocscience Inc. (2018c). Rocscience. Retrieved from Rocscience website: <https://www.rocscience.com/software/rs2>
- Rocscience Inc. (2018d). *RS2 Dynamic Analysis*. Retrieved from [https://www.rocscience.com/help/rs2/pdf\\_files/theory/Dynamic\\_Analysis.pdf](https://www.rocscience.com/help/rs2/pdf_files/theory/Dynamic_Analysis.pdf)
- Rocscience Inc. (2019). RS2. Retrieved from <https://www.rocscience.com/software/rs2>
- Rusnardi Rahmat, P., Junji, K., Yusuke, O., & Hari Ram, P. (2012). Seismic Hazard Analysis For Indonesia. *Journal of Natural Disaster Science*, 33(2), 59–70. Retrieved from [https://www.jsnds.org/jnds/33\\_2\\_1.pdf](https://www.jsnds.org/jnds/33_2_1.pdf)
- SL 139 Ministry of Water Resource P.R. China. (2005). *Design standard for concrete gravity dams*.
- Sooch, G. S., & Bagchi, A. (2014). A New Iterative Procedure for Deconvolution of Seismic Ground Motion in Dam-Reservoir-Foundation Systems. *Journal of Applied Mathematics*, 2014. <https://doi.org/10.1155/2014/287605>
- Tata, & Howard. (2016). *A History of Dams: From Ancient Times to Today*. Retrieved from <https://tataandhoward.com/2016/05/a-history-of-dams-from-ancient-times-to-today/>
- USACE EM 1110-2-2100. (2005). Stability Analysis of Concrete Structure. In *US Army Corps of Engineers Official Publications of HQ USACE Website*. <https://doi.org/10.1520/stp35826s>
- USACE EM 1110-2-2200. (1995). *Gravity Dam Design*. Retrieved from [https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals/?udt\\_43544\\_param\\_page=8](https://www.publications.usace.army.mil/USACE-Publications/Engineer-Manuals/?udt_43544_param_page=8)
- USACE EM 1110-2-3506. (2017). Engineering and Design Grouting Technology. In *US*



- Army Corps of Engineers Official Publications of HQ USACE Website*. Retrieved from  
[https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_1110-2-3506.pdf](https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-3506.pdf)
- USACE EM 1110-2-6051. (2003). *Time-History Dynamic Analysis of Concrete Hydraulic Structures*.
- USACE EM 1110-2-6053. (2007). *Earthquake Design and Evaluation of Concrete Hydraulic Structures*. <https://doi.org/10.1108/10222529200000006>
- Var. (2009). *Burst of a dam*. (December 1959), 1–7.
- Varagilal, I. A. (2018). *Stability analysis of gravity dams for the maximum design earthquake*.
- Wang, H. F., & Anderson, M. P. (1995). *Introduction To Groundwater Modeling*. [https://doi.org/10.1016/0022-1694\(83\)90201-9](https://doi.org/10.1016/0022-1694(83)90201-9)