



- the cementitious materials: A comparative study with metakaolin, fly ash, and blast furnace slag." *Journal of Building Engineering*, 53, <https://doi.org/10.1016/j.jobe.2022.104535>.
3. , Huff, T., and VandenBerge, D. R. (2021). "Modeling of Rayleigh Damping for the Elastic and Inelastic Dynamic Response of MDOF Structures." *Practice Periodical on Structural Design and Construction*, 26(3) [https://doi.org/10.1061/\(ASCE\)SC.1943-5576.0000596](https://doi.org/10.1061/(ASCE)SC.1943-5576.0000596).
  4. VandenBerge, D. R., , and Steiakakis, C. (2021). "Case History: Rapid Drawdown Analyses of Sparmos Dam." *Journal of Geotechnical and Geoenvironmental Engineering*, 147(9), [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0002593](https://doi.org/10.1061/(ASCE)GT.1943-5606.0002593).
  5. VandenBerge, D. R., , and Li, R. (2021). "Mobilized bearing capacity analysis of global stability for walls supported by rammed aggregate piers," *Journal of Geotechnical and Geoenvironmental Engineering*, 147(6), [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0002540](https://doi.org/10.1061/(ASCE)GT.1943-5606.0002540).
  6. VandenBerge, D. R., Valentine, R. J., Brandon, T. L., and Wright, S. G. 2021. "Failure of the 73-m tall reinforced soil slope at Yeager Airport, Charleston, WV." *Journal of Geotechnical and Geoenvironmental Engineering*. [https://doi.org/10.1061/\(ASCE\)GT.1943-5606.0002430](https://doi.org/10.1061/(ASCE)GT.1943-5606.0002430).
  7. VandenBerge, D. R. and McGuire, M. P. 2019. "Practical use of modified Hoek Brown criterion to predict stability of soil slopes," , *Geotechnical and Geological Engineering*, <https://doi.org/10.1007/s10706-019-00991-1>.
  8. and VandenBerge, D. R. 2018. "Comparison of FEA and Analytical methods for determining stability of a RAP supported MSE wall," *DFI Journal*, <https://doi.org/10.1080/19375247.2018.1562593>.
  9. VandenBerge, D. R., Castellanos

20. VandenBerge, D. R. 2014. "Total stress rapid drawdown analysis of the Pilarcitos Dam failure using the finite element method," *Frontiers of Structural and Civil Engineering*, DOI 10.1007/s11709-014-0249-7, 115-123.

Note: boldface indicates undergraduate or graduate research assistant

Note: boldface indicates undergraduate or graduate research assistant

1. VandenBerge, D. R. and (2023). "Probability of Levee Instability Following Rapid Drawdown." *Proc. of GeoRisk 2023*.
2. VandenBerge, D. R. and (2023). "Building Critical Thinking Skills through Geotechnical CAT-Apps," *Proc. of GeoCongress 2023*.
3. VandenBerge, D. R., and Shiri, Y. (2023). "A Comparison of Approaches for the Determining the Virgin Compression Line of Remolded Saturated Soils," *Proc. of GeoCongress 2023*.
4. and VandenBerge, D. R. (2023). "Statistical Analysis of Undrained Strength as Linear Function of Depth." *Proc. of GeoCongress 2023*.
5. VandenBerge, D. R. and (2021). "Insights into Rapid Drawdown Stability and Rate from Infinite Slope Analysis." *Proc. Dam Safety 2021, ASDSO*.
6. Ohanian, O. J., Huang, Y., Zolfaghari, N., Bungler, A.P., and VandenBerge, D. R. (2021). "High-Resolution Distributed Fiber Optic Measurement of Borehole Fractures to Enable In-situ Stress Measurement." *Proc. 55th US Rock Mechanics/Geomechanics Symposium, American Rock Mechanics Association*.
7. McGuire, M. P., Loux, T. A., and VandenBerge, D. R. 2021. "Field-scale tests to evaluate foamed glass aggregate compaction." *Proc. IFCEE 2021*.
8. , VandenBerge, D. R., and 2020. "Unsaturated soil model effects on the propagation of the saturated zone in levees during flooding." *Proc. Dam Safety 2020, ASDSO*.
9. Boone, M. D., Thompson, M. J., and VandenBerge, D. R. 2020. "Practical guidelines for assessing undrained shear strength from triaxial compression with isotropic and anisotropic consolidation." *Proc. GeoCongress 2020*.
10. VandenBerge, D. R., McGuire, M. P., and Castellanos, B. A. 2020. "Effective stress failure envelope forms and parameter variability." *Proc. GeoCongress 2020*.
11. VandenBerge, D. R., Gregory, G. H., and 2019. "Case History: Rapid Drawdown Analysis of Village Creek Plant Levee," *GeoCongress 2019*.
12. , and VandenBerge, D. R. 2018. "Parametric study of levee saturation for undrained rapid drawdown analysis," *Proc. of USSD 2018*, 15 pp.
13. McGuire, M. P., Sloan, J. A., and VandenBerge, D. R. 2018. "Application of Reliability Analyses for Serviceability Design of Column-Supported Embankments," *Proc. of IFCEE 2018*, 10 pp.
14. VandenBerge, D. R. and McGuire, M. 2017. "Response surfaces for probabilistic analyses of slope stability," *Proc. of 19th Intl. Conf. Soil Mech. and Geotech. Eng.*, Seoul, 4 pp.
15. Zwetchkenbaum, J. D., Castellanos, B. A., VandenBerge, D. R., Brandon, T. L., and Pandey, U. 2017. "Potomac clay of Northern Virginia: Fully softened shear strengths," *29th Central Pennsylvania Geotechnical Conference, Hershey, PA*, 16 pp.
16. Thompson, M. J. and VandenBerge, D. R. 2017. "Shear strength of remolded and compacted Beaumont Clay," *GeoFrontiers 2017*.
17. VandenBerge D. R. 2017. "V-Shaped failure surfaces in bearing capacity type limit equilibrium analyses," *GeoFrontiers 2017*.
18. VandenBerge, D. R., Duncan, J. M., and Brandon, T. L. 2017. "Practical considerations for measuring the shear strength of compacted clay," *GeoFrontiers 2017*.
19. , , VandenBerge, D. R. and Kalyanapu, A. K. 2016. "South Carolina flooding and dam failures," *ASDSO Dam Safety 2016*.
20. VandenBerge D. R. 2016. "Probabilistic analysis of rapid drawdown," *Proceedings of the 12th International Symposium on Landslides, Napoli, Italy*.

21. Thompson, M. J., Bentler, D. J., Brandon, T. L., and VandenBerge, D. R. 2016. "Shear strength of compacted Beaumont clay for consolidated-undrained conditions,"

13. Duncan, J. M., O'Neil, B., Brandon, T. L., and VandenBerge, D. R. 2011. *Evaluation of potential for erosion in levees and levee foundations*, CGPR #64, Center for Geotechnical Practice and

US Army Corps of Engineers (USACE) – 4-day Shear Strength Course

2015

Embankment Dam Risk Yield Acceleration Study

since 2023

Chemical Subgrade Stabilization for Pavements in Tennessee

since 2022

Best Practices for Bridges with Pipe Piles

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