

Curriculum Vitae

Name Prof. Dr.-Ing. Frank Rackwitz (ORCID: 0000-0003-2736-9193)

Academic qualifications

2002 Dr.-Ing. degree in Civil Engineering at the TU Berlin
1997 Dipl.-Ing. degree in Civil Engineering at the TU Berlin

Previous academic positions

2013-2015 Professor at the University of Applied Sciences in Regensburg
2012-2013 Visiting Professor at the Brandenburg Technische Universität Cottbus
2002-2012 Post-Doc Research Affiliate, Geotechnical Institute at the TU Berlin
1998-2002 Research Assistant at the Geotechnical Institute at the TU Berlin

Present academic position

Since May 2018 Managing Director of the Department of Civil Engineering at TU Berlin
Since October 2015 Full Professor and Head of the Chair of Soil Mechanics and Geotechnical Engineering at Technische Universität (TU) Berlin

Previous relevant research work

Theoretical and Experimental Soil Mechanics and Soil Dynamics, Numerical Modelling of Geotechnical Problems, Constitutive Modelling of Granular Materials, Onshore and Offshore Foundations of Wind Turbines

Publication records – A: Five most representative publications in recent five years

Le, V. & Rackwitz, F. (2020). *A New Cyclic Simple Shear Test Procedure with Multidirectional Loading*. Geotechnical Testing Journal 43, No. 1, ASTM, pp. 275-286. DOI: 10.1520/GTJ20180074.
Rackwitz, F. (2020). *Possibilities and Limitations of ALE Large Deformations Analyses in Geotechnical Engineering*. In Th. Triantafyllidis (ed.): *Recent Developments of Soil Mechanics and Geotechnics in Theory and Practice*. Lecture Notes in Applied and Computational Mechanics (LNACM), Vol. 91, Springer, pp. 97-112.
Labenski, J, Remspecher, F., Le, V., Moormann, Ch. & Rackwitz, F. (2019). *Lateral bearing behaviour of vibratory-driven monopiles in different model test set-ups*. Int. J. of Physical Modelling in Geotech., ICE (ahead of print), DOI: 10.1680/jphmg.18.00090.
Bakroon, M., Daryaei, R., Aubram, D. & Rackwitz, F. (2019). *Numerical evaluation of buckling in steel pipe piles during vibratory installation*. Soil Dynamics and Earthquake Engineering, Elsevier, Vol. 122, July 2019, pp. 327-336. DOI: 10.1016/j.soildyn.2018.08.003
Aubram, D., Rackwitz, F. & Savidis, S. (2017). *Contribution to the Non-Lagrangian Formulation of Geotechnical and Geomechanical Processes*. In Th. Triantafyllidis (ed.): *Holistic Simulation of Geotechnical Installation Processes: Theoretical Results and Applications*, Lecture Notes in Applied and Computational Mechanics, Vol. 82, Springer, pp 53-100. DOI 10.1007/978-3-319-52590-7.

Publication records – B: Up to five representative publications beyond the recent five years

Aubram, D., Savidis, S. & Rackwitz, F. (2016). *Theory and Numerical Modeling of Geomechanical Multi-material Flow*. In: *Holistic Simulation of Geotechnical Installation Processes. Benchmarks and Simulations*. Triantafyllidis, Th. (Hrsg.), LNACM, Vol. 80, Springer, pp. 187-229. DOI 10.1007/978-3-319-23159-4_10.
Aubram, D., Rackwitz, F., Wriggers, P. & Savidis, S. (2015). *An ALE method for penetration into sand utilizing optimization-based mesh motion*. Computers and Geotechnics, Vol.65, No.4, Elsevier, pp. 241-249, DOI 10.1016/j.compgeo.2014.12.012
Rackwitz, F., Savidis, S.A. & Rickriem, J. (2013). *Web-based Data and Monitoring Platform for Complex Geotechnical Engineering Projects*. J. Geot. Geolog. Engrg., Vol.31, No.3, Springer, pp. 927-939, DOI 10.1007/s10706-012-9592-4.
Rackwitz, F., Savidis, S.A. & Tasan, H. E. (2012). *New design approach for large diameter offshore monopiles based on physical and numerical modelling*. In: R.D. Hryciw, A. Athanasopoulos-Zekkos & N. Yesiller (eds.): *Geotechnical Special Publication GSP No. 225. GeoCongress 2012. State of the Art and Practice in Geotechnical Engineering*. Proc. GeoCongress 2012, ASCE, pp. 356-365.
Rackwitz, F. & Schüßler, M. (2010). *1g Model Test on Granular Soil Columns for Ground Improvement of Very Soft Soil*. Proc. ICPMG2010, 2010, Zurich, Switzerland, Vol. 2, pp. 1351-1356.

Others - Memberships

Member of the Executive Board of the German Society of Geotechnical Engineering (DGGT), Member of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Member of the Committee DIN 18088 “Wind Turbines”, Vice Chairman of the DGGT Working Group “Research in Geotechnical Engineering”, German Member of ISSMGE Technical Committee 104 “Physical Modelling in Geotechnics”