

CRISTINA DE HOLLANDA CAVALCANTI TSUHA, Ph.D.

PROFESSIONAL SUMMARY

Cristina Tsuha is professor at the Department of Geotechnical Engineering at the University of São Paulo in Brazil (since February 2010). She graduated from the Institute Mauá of Technology (São Paulo, Brazil) in 1994. She worked as civil engineer in engineering companies during several years (1995 – 2001). She has been involved in different projects related to geotechnical site investigations, foundations, and earth structures. She has got her MSc. and Ph.D. degrees in Geotechnical Engineering from the University of São Paulo (2003 and 2007). Her Ph.D research topic was related to the study of helical piles using centrifuge tests conducted at the Laboratoire Central des Ponts et Chaussées in France. In 2009 she did a Postdoctoral research on the cyclic behavior of deep foundations at the Technical University of Grenoble in France. Her main line of research has been the study of Foundations Engineering, with emphasis on the following topics: (i) reliability analysis of pile and shallow foundations, (ii) helical pile foundations, (ii) physical modelling of pile behavior in centrifuge and calibration chamber.

FORMAL EDUCATION

- Postdoctorate Geotechnical Engineering, January 2010. Institut National Polytechnique de Grenoble, INPG, France.
- Ph.D. Geotechnical Engineering, November 2007, University of São Paulo, Brazil.
- M.S. Geotechnical Engineering, September 2003, University of São Paulo, Brazil.
- B.S. Civil Engineering, December 1994, Institute Mauá of Technology, IMT, Brazil.

PARTIAL LIST OF PUBLICATIONS

- TSUHA, C.H.C. ; AOKI, N. . Relationship between installation torque and uplift capacity of deep helical piles in sand. *Canadian Geotechnical Journal*, v. 47, p. 635-647, 2010.
- YANG, Z. X. ; JARDINE, R. J. ; ZHU, B. T. ; FORAY, P. ; TSUHA, C.H.C. . Sand grain crushing and interface shearing during displacement pile installation in sand. *Geotechnique*, v. 60, p. 469-482, 2010.
- TSUHA, C.H.C. ; AOKI, N. ; RAULT, G. ; THOREL, L. ; GARNIER, J. . Modélisation physique de pieux hélicoïdaux mis en place dans du sable. *Révue Française de Geotechnique*, v. 130, p. 15-23, 2010
- TSUHA, C.H.C. ; AOKI, N. ; GARNIER, J. ; RAULT, G. ; THOREL, L. . Physical modelling of helical pile anchors. *International Journal of Physical Modelling in Geotechnics*, v. 7, p. 1-12, 2007.
- TSUHA, C.H.C. ; AOKI, N. ; RAULT, G. ; THOREL, L. ; GARNIER, J. . Physical modelling of helical screw piles in sand. In: 7th International Conference on Physical Modelling in Geotechnics (ICPMG 2010), 2010, Zurich. *Physical Modelling in Geotechnics*, 2010. v. 2. p. 841-846.
- FORAY, P. ; TSUHA, C.H.C. ; SILVA, M. ; JARDINE, R. J. ; YANG, Z. X. . Stress paths measured around a cyclically loaded pile in a calibration chamber. In: 7th International Conference on Physical Modelling in Geotechnics (ICPMG 2010), 2010, Zurich. *Physical Modelling in Geotechnics*, 2010. v. 2. p. 933-939.
- FORAY, P. ; TSUHA, C.H.C. ; SILVA, M. ; JARDINE, R.J. ; YANG, Z. X. ; RIMOY, S. . SOIL-PILE INTERACTION ON AN INSTRUMENTED PILE UNDER CYCLIC AXIAL LOADS IN SAND. In: 5th International Conference on Earthquake Geotechnical Engineering, 2011, Santiago- Chile. 5th International Conference on Earthquake Geotechnical Engineering, 2011.