

ACADEMIC SHORT CV



Department of Civil and Environmental Engineering
The University of Tokushima
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NAME: Jing-Cai JIANG

CURRENT POSITION: Associate Professor of Geotechnical Engineering

Academic Qualifications:

- 1997 D.E. Geotechnical Engineering, The University of Tokushima
- 1986 M.E. Geotechnical Engineering, Hohai University (China)
- 1983 B.E. Engineering Geology and hydrogeology, Hohai University (China)

Membership and Committees:

- 2007 Japan Association for Earthquake Engineering
- 2000 The Japan Landslide Society
- 1994 International Society for Soil Mechanics and Geotechnical Engineering
- 1994 Japan Society of Civil Engineers

The Japanese Geotechnical Society

Present and recent interests of research:

- Risk assessment of earthquake-induced landslides
- Seismic instability evaluation of large scale cut/rock slopes
- Characteristics of slip surfaces and ground water of landslides in fissure soils
- Static/dynamic shear strengths of landslide soils and slope stabilization design
- Rockfall numerical simulation using DEM and DDA

Research Publications:

Refereed Journal Articles:

- K. Zhang, Q. Yang and J.-C. Jiang: Numerical simulation of 2D crack growth with frictional contact in brittle materials, International Journal of GEOMATE (Geotechnique, Construction Materials and Environment), Vol. 3, No. 1&2, pp. 339-342, 2012.
- B. Zhou, X. Y. Xie, Y. B. Yang and J.-C. Jiang: A novel vibration-based structure health monitoring approach for the shallow buried tunnel, International Journal of Computer Modeling in Engineering and Science (CMES), Vol. 86 (4), pp. 321-348, 2012.
- T. Nian, J.-C. Jiang, S. Wan and M.T. Luan: Strength reduction FE analysis of the stability of bank slopes subjected to transient unsaturated seepage, The Electronic Journal of Geotechnical Engineering, Bundle A, Vol. 16, pp. 165-177, 2011.
- J.-C. Jiang, Y. Kanda and S. Nakano: A limit equilibrium-base seismic stability analysis and design of embankment slopes with a sheet pile, National Symposium on Earthquake Engineering, JAEE, pp. 3449-3454, 2010.(in Japanese)
- J.-C. Jiang, T. Yamagami and V. B. Nguyen: Case studies for earthquake-induced permanent displacements of embankment slopes, National Symposium on Earthquake Engineering, JAEE, pp. 149-155, 2009.(in Japanese)

- J.-C. Jiang, K. Yokino & T. Yamagami: Identification of DEM parameters for rockfall simulation analysis, Chinese Journal of Rock Mechanics and Engineering (accepted for publication in Jul., 2008).
- J.-C. Jiang & T. Yamagami: A new back analysis of strength parameters from single slips, Computers and Geotechnics, 35 (3), 286-291, 2008.
- J.-C. Jiang & T. Yamagami: Charts for estimating strength parameters from slips in homogeneous slopes, Computers and Geotechnics, 33 (6-7), 294-304, 2006.

Papers in Refereed Conference Proceedings:

- J.-C. Jiang and S. Nakano: A comparison of predicted and observed slope failures due to the 2004 Niigata-Ken Chuetsu Earthquake, Proceedings of the International Symposium on Earthquake-Induced Landslides, pp. 791-797, Nov. 2012.
- J.-C. Jiang, T. Yamagami and Q. Yang: Seismic instability assessment of rock slopes in a large area based on planar sliding mode, Proceedings of the 12th ISRM International Congress on Rock Mechanics, pp. 1927-1930, Oct., 2011.
- K. Zhang, Q. Yang and J.-C. Jiang: Experimental and numerical research on crack propagation in rock under uniaxial compression, Proceedings of the 12th ISRM International Congress on Rock Mechanics, pp. 915- 920, Oct., 2011.
- K. Onishi, J.-C. Jiang, T. Yamagami and S. Yamabe: Progressive failure analysis and design of nail-reinforced slopes. Proceedings of the 4th Sino-Japan Symposium on Geotechnical Engineering, pp. 325-330, Apr. 2010.
- T. Furuya and J.-C. Jiang: Strength parameters back analyzed from a failed cut slope, Proceedings of the 4th Sino-Japan Symposium on Geotechnical Engineering, pp. 162-167, Apr. 2010.
- J.-C. Jiang & T. Yamagami: Strength parameters from back analysis of slips in two-layer slopes, Proceedings of the 10th International Symposium on Landslides and Engineered Slopes, 747-753, Jul. 2008.
- J.-C. Jiang & T. Yamagami: Failure patterns of the ground surrounding rigid piles in sand subjected to lateral soil movements, Proceedings of the 3rd Sino-Japan Symposium on Geotechnical Engineering, 213-222, Nov. 2007.
- J.-C. Jiang, T. Yamagami & S. Yamabe: Simplified design method for reinforced slopes considering progressive failure, Proceedings of the 5th International Symposium on Earth Reinforcement, 551-557, Nov. 2007.
- J.-C. Jiang & T. Yamagami: Conventional and modified design methods for landslide stabilizing piles: a comparison of results, Proceedings of the 10th Australia New Zealand Conference on Geomechanics, 2, 638-643, Oct. 2007.
- J.-C. Jiang & T. Yamagami: Anchor forces needed to increase slope stability: a comparison of conventional and modified procedures, Proceedings of An International Conference on Geotechnical Engineering, 103-110, Dec. 2006.
- J.-C. Jiang & T. Yamagami: Regional seismic slope instability assessment using Newmark's method and geographical information system, Proceedings of the 4th Asian Joint Symposium on Geotechnical and Geo-Environmental Engineering, 247-252, Nov. 2006.