

updated on 4/23/2016 5:21 PM

CURRICULA VITAE

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Education: Bachelor of Engineering
Department of Civil Engineering, University of Tokyo, March, 1977
Master of Engineering
Department of Civil Engineering, University of Tokyo, March, 1979
Doctor of Engineering
Department of Civil Engineering, University of Tokyo, March, 1982

Academic Experiences

1982.4.1-1982.9.30 Research Associate, University of Tokyo.
1982.10.1-1983.10.31 Post Doctoral Fellow, University of British Columbia.
1983.11.16-1985.4.22 Lecturer, University of Tokyo.
1985.4.23-1987.4.22 Assistant Professor, Asian Institute of Technology, Bangkok.
1986 - Associated Faculty of Chulalongkorn University, Bangkok.
1987.4.23-1987.7.31 Lecturer, University of Tokyo.
1987.8.1-1994.7.15 Associate Professor, University of Tokyo.
1989 - Associated research fellow at the Public Works Research
Institute, Ministry of Construction.
1994.7.16-2015.3.31 Professor, University of Tokyo
2015.4.1-Present Visiting professor, Kanto Gakuin University, Yokohama, Japan
Technical advisors for three private sectors: Tohata and Associates (architectural office), Seirin-sha
Company (real estate management) and Chuo Kaihatsu (geotechnical consultant)

Affiliations:

Member of the Japanese Geotechnical Society
Member of the Southeast Asian Geotechnical Society
Member of the International Society of Soil Mechanics and Geotechnical Engineering
Fellow member of the Japan Society of Civil Engineers
Member of the Japan Association for Earthquake Engineering
Member of the Japan Landslide Society
Member of the Architectural Institute of Japan
Honorary member of the Nepal Geotechnical Society
Associate Member of Science Council Japan (2014-2020)

Member of a board of directors for

1. the Japanese Society of Geotechnical Engineering: 1999-2002 2005-2008
2. the Japan Association for Earthquake Engineering: 2004-2006
3. the Japan Landslide Society: 2004-2008

Board member of Japanese Geotechnical Society (two terms)
 Board member of Japan Association for Earthquake Engineering (one term)
 Board member of Japan Landslide Society (two terms)
 Vice Chairman of Editing Committee of Soils and Foundations Journal, the Japanese Geotechnical Society (1999-2004)
 International Reviewer of the Journal of Korean Geotechnical Society
 Member of Editorial Board for International Journal of Civil Engineering (Iranian Society of Civil Engineers)
 Chairman of Editing Committee of Soils and Foundations Journal, the Japanese Geotechnical Society (2005-2008)
 Secretary of Kanto Chapter, Japanese Geotechnical Society (2006-)
 Chairman of Geotechnical Committee, Japan Society for Civil Engineers (2007-)
 Editorial Board Member, Journal of Acta Geotechnica
 Vice President, Japan Association for Earthquake Engineering (June 1 2009-May 31 2011)
 2009-2013 Appointed Board Member, International Society for Soil Mechanics and Geotechnical Engineering
 2013-2017 Vice President for Asia, International Society for Soil Mechanics and Geotechnical Engineering
 2014-2016 President, Japanese Geotechnical Society

Awards

1985 Japanese Society of Soil Mechanics and Foundation Engineering, Award for the Best Paper by Young Authors 論文奨励賞.
 1985 Awarded by the Minister of Education for the best performance in education by correspondence (in the field of electric engineering).
 1997 Japanese Geotechnical Society, Award for the Best Paper of the Year 1996 論文賞.
 1998-1999 Shamsher Prakash Research Award, USA, of Soil Dynamics.
 2000 Japanese Geotechnical Society, Award for Distinguished Research Products 研究業績賞.
 2000 One of the best twelve papers out of 600 at GeoEng2000 Conference at Melbourne; not included in best three.
 2004 Japanese Geotechnical Society, Award for the Best Paper of the Year 2003 論文賞.
 2004 地盤工学会功績賞 Contribution Award by Japanese Geotechnical Society
 2005 地盤工学会事業企画賞2件、土と基礎年間最優秀賞
 2006 玉掛技能講習、床上操作式クレーン運転技能講習 修了
 2009 May 29th Japan Society of Civil Engineers; Best book publication award 出版文化賞.
 2015 June Japanese Geotechnical Society; Technological development award 技術開発賞
 2016 Seelye Fellowship, University of Auckland, New Zealand

Fields of Major Interest:

1. Deformation characteristics of cohesionless soils.
2. Dynamic analysis of earth structures during earthquakes.
3. Permanent displacement of ground caused by seismic liquefaction.
4. Soil improvement by densification and grouting
5. Stability of seabed in static and dynamic manners.
6. Thermal effects on mechanical behavior of clays.
7. Microscopic Observation of Granular Behavior of Sand Subjected to Shear
8. Dynamics of landslide and debris flow.
9. Mechanical Properties of Municipal Waste Ground
10. Seismic performance-based design of geotechnical structures
11. Mitigation of rainfall-induced slope instability

Invited lectures

- * Liquefaction and associated phenomenon, Proc. IS-Tokyo '95 First International Conference on Earthquake Geotechnical Engineering, Theme Lecture, 1995.
 - * Effects of subsurface liquefaction on stability of embankment resting upon surface, 2nd International Conf. Earthquake Geotechnical Engineering, Lisbon, Theme Lecture, 1999.
 - * Use of underground walls for mitigation of liquefaction-induced lateral flow, GeoEng2000 Conf., Melbourne, Lecture of good papers, 2000.
 - * Flow failure of liquefied ground: its causative mechanism and prediction of flow displacement, 1st Japan-America Frontiers of Engineering Symposium, 奈良, 招待講演, 2000.
 - * Demand for new style of geotechnical engineering, Key note lecture, Proc. Young Geotechnical Engineers Conference of Asia, ソウル, 基調講演, 2001.
 - * Invited lecturer at Annual Convention of Colombia Society of Geotechnical Engineering, 2004.
 - * Heritage Lecture, 18th ICSMGE Osaka, 2005.
 - * 1st Bangladesh Earthquake Engineering Symposium, Dhaka, December 2005.
 - * 4th International Conference on Earthquake Geotechnical Engineering, Thessaloniki, 2007.
 - * 10th Int. Symp. Landslides and Engineered Slopes, Xi'an China, 2008.
 - * 19th International Offshore and Polar Engineering Conference & Exhibition (ISOPE-2009), Osaka.
 - * First International Seminar on Sustainable Infrastructure and Built Environment in Developing Countries, November 2nd and 3rd, 2009, Bandung, Indonesia.
 - * 3rd International Symposium on Earthquake Engineering, Bangladesh, 2010.
 - * 6th International Congress on Environmental Geotechnics, Delhi, India, 2010
 - * 4th International Conference on Geotechnical Engineering and Soil Mechanics, Keynote Lecture, Tehran.
 - : International Conference on Geotechnical Engineering, Keynote lecture, Lahore
 - * 5th International Conference on Earthquake Geotechnical Engineering, Santiago, 2011
 - * 7th Asian Young Geotechnical Engineer Conference
 - * 5th International Geotechnical Symposium-Incheon.
- No more recording.

Papers:

1. Ishihara, K. and I. Towhata (1980): "Effective Stress Method in One-Dimensional Soil Response Analysis", Proc. 7th World Conference on Earthquake Engineering, Istanbul, Turkey, Vol.3, pp.73-80.
2. Ishihara, K. and Towhata, I. (1980): "One-Dimensional Soil Response Analysis during Earthquakes Based on Effective Stress Method", Journal of the Faculty of Engineering, University of Tokyo(B), Vol.XXXV, No.4, pp.655-700.
3. Ishihara, K. and Towhata, I. (1982): "Dynamic response analysis of level ground based on the effective stress method", Soil Mechanics - Transient and Cyclic Loads, John Wiley and Sons, pp.133-172.
4. Towhata, I. (1982) 砂の繰り返しせん断変形特性に及ぼす主応力軸回転の影響 "Effects of Stress Axes Rotation on Deformation of Sand Undergoing Cyclic Shear," Thesis for Doctor of Engineering, University of Tokyo, March.
5. Ishihara, K. and Towhata, I. (1982): "Cyclic Behavior of Sand during Rotation of Principal Stress Axes", Mechanics of Granular Materials - New Models and Constitutive Relations, Ed. Jenkins and Satake, Elsevier, pp.53-73.
6. Ishihara, K. and Towhata, I. (1983): "Sand Response to Cyclic Rotation of Principal Stress Directions as Induced by Wave Loads", Soils and Foundations, Vol.23, No.4, pp.11-26. (AWARDED FROM JAPANESE SOCIETY OF SOIL MECHANICS AND FOUNDATION ENGINEERING).
7. Ishihara, K. and Towhata, I. (1983): "Response of Sand in Cyclic Torsional Loading Influenced

- by Rotation of Principal Stress Directions", *Advances in the Mechanics and Flow of Granular Materials*, Trans Tech Publications, pp.903-928.
8. Barton, Y.O., Finn, W.D.L., Parry, R.H., and Towhata, I. (1983): "Lateral Pile Response and P-Y Curves from Centrifuge Tests", *Offshore Technology Conference*, OTC 4502.
 9. Finn, W.D.L., Y.O. Barton, and Towhata, I. (1983): "Seismic Response of Off-Shore Pile Foundations: Centrifuge Data and Analysis", *Proc. 4th Canadian Conference on Earthquake Engineering*, Vancouver, CANADA, pp.424-434.
 10. Ishihara, K. and Towhata, I. (1984): "Effects of Rotation of Principal Stress Directions on Cyclic Response of Sand", *Mechanics of Engineering Materials*, John Wiley and Sons.
 11. Towhata, I. and Ishihara, K. (1985): "Modelling Soil Behaviour under Principal Stress Axes Rotation", *Proc. of 5th International Conference on Numerical Methods in Geomechanics*, Nagoya, Japan, Vol.1, pp.523-530.
 12. Yamazaki, F., Ishihara, K. and Towhata, I. (1985): "Numerical Model for Liquefaction Problem under Multi-Directional Shearing on Horizontal Plane", *Proc. of 5th International Conference on Numerical Methods in Geomechanics*, Nagoya, Japan, Vol.1, pp.399-406.
 13. Towhata, I. and Ishihara, K. (1985): "Undrained Strength of Sand Undergoing Cyclic Rotation of Principal Stress Axes", *Soils and Foundations*, Vol.25, No.2, pp.135-147.
 14. Ishihara, K., Yamazaki, A., and Towhata, I. (1985): "Sand Liquefaction under Rotation of Principal Stress Axes", *Proc. 11th International Conference on Soil Mechanics and Foundation Engineering*, San Francisco, USA, Vol.2, pp.1015-1018.
 15. Towhata, I. and Ishihara, K. (1985): "Shear work and pore water pressure in undrained shear", *Soils and Foundations*, Vol.25, No.3, pp.73-84.
 16. Bergado, D.T., Sataporn Kuvijitjaru, and Towhata, I. (1985): "The Measurement of Traffic-Induced Vibrations at Phra Prang Sam Yod in Lopburi", Report Submitted to the Fine Arts Department of Thailand.
 17. Towhata, I. (1985): "Measurement of Traffic-Induced Vibrations on Lopburi Historical Monument, Thailand", *GEOTECH-BANGKOK Symposium on Environmental Geotechnics and Problematic Soils and Rocks*, Asian Institute of Technology, Bangkok, THAILAND, pp.382-398 (Also published as a part of *Environmental Geotechnics and Problematic Soils and Rocks*, Ed. A.S.Balasubramaniam et al., Balkema, 1988).
 18. Towhata, I. (1985): "Numerical Prediction of Permanent Displacement of Ground Induced by Liquefaction", *Proc. Indian Geotechnical Conference*, pp.371-376, Roorkey, INDIA.
 19. Towhata, I. (1986): "Finite Element Model to Predict Permanent Displacement of Ground Induced by Liquefaction", *Proc. 2nd International Conference on Numerical Models in Geomechanics*, pp.689-697, Ghent, BELGIUM.
 20. Towhata, I., Hayat, T.M. and Jarupan, K. (1986): "Anisotropic Stress-Strain Behaviour of Bangkok Sand and Its Application to Finite Element Analysis", *Proc. Symposium on Computer Aided Design and Monitoring in Geotechnical Engineering*, Geotech-Bangkok, pp.448-462, Bangkok.
 21. Towhata, I. and Islam, Md.S. (1987): "Prediction of Lateral Displacement of Anchored Bulkheads Induced by Seismic Liquefaction", *Soils and Foundations*, Vol.27, No.4, pp.137-147.
 22. Towhata, I. and Hayat, T.M. (1987): "Stress-Strain-Strength Behaviour of Bangkok Sand", *Proc. 8th Asian Regional Conference on Soil Mechanics and Foundation Engineering*, Kyoto, pp.117-120.
 23. Towhata, I., Hamada, M., Yasuda, S., and Isoyama, R. (1987): "Study on Permanent Ground Displacement Induced by Seismic Liquefaction", *Computers and Geotechnics Journal*, Vol.4, pp.197-220.
 24. Towhata, I. and Pradel, D.E. (1987): "Plasticity Approach to Sand Behaviour under Principal Stress Axes Rotation", submitted to *Mechanics of Granular Materials*, edited by M.Satake and J.T.Jenkins, Elsevier.
 25. Towhata, I. and Al-Hussaini, T.M. (1987): "Evaluation of Lateral Load Exerted by Submarine Mudflows on Offshore Piles", *Journal of the faculty of Engineering, the University of Tokyo*, A25, pp.8-9 (in Japanese).
 26. Bergado, D.T., Towhata, I., Kuvijitjaru, S., Bukkanasuta, A., and Lekhak, B.M. (1987):

- "Foundation Evaluations and Remedial Measures for Three Historical Sites in Lopburi Province, Thailand", Research Report of AIT Submitted to the Fine Art Department of Thailand.
27. Towhata, I. (1987): "Finite Element Analysis on Seismic Differential Movement of Ground during Liquefaction", Research Report on Seismic Response and Stress-Strain-Strength Characteristics of Buried Pipelines Undergoing Soil Liquefaction, Association for Developments of Earthquake Prediction, Tokyo, pp.93-115 (in Japanese).
 28. Towhata, I. and Al-Hussaini, T.M. (1988): "Lateral Loads on Offshore Structures Exerted by Submarine Mudflows", Soils and Foundations, Vol.28, No.3, pp.26-34.
 29. Bergado, D.T., Miura, N., and Towhata, I. (1988): "Geotechnical Aspects and Vibration Induced Problems of Ancient Monuments in Thailand", Symp. Reservation of Ancient Monuments, Athens, Greece, Sept.
 30. Towhata, I. (1988): "Evaluation of Soil Parameter for Wave Propagation Analysis on Soil Layer", Research Report on Zoning of Tokyo Metropolitan Area in Terms of Potential Seismic Damage to Buried Pipelines, Association for Developments of Earthquake Prediction, Tokyo, pp.71-104 (in Japanese).
 31. Towhata, I. and Ronteix, S. (1988): "Probabilistic Prediction of Shear Wave Velocity from SPT Blow Counts and Its Application to Seismic Microzonation", Proc. Symposium on Geotechnical Aspects of Restoration and Maintenance of Infra-Structures and Historical Monuments, Bangkok, pp.423-439.
 32. Towhata, I., Firoz Kabir Chowdhury and Namasivayam Vasantharajah (1988): "Cyclic Undrained Tests on Gravel-Like Material Using Cubic Triaxial Apparatus", Proc. 9th World Conference on Earthquake Engineering, Vol.III, pp.53-58.
 33. Towhata, I., Yasuda, S., Ohtomo, K., and Yamada, K. (1989): "Experimental Studies on Liquefaction-Induced Permanent Ground Displacement", Proc. 1st JAPAN-US Workshop on Liquefaction, Large Ground Deformation, and Their Effects on Lifeline Facilities.
 34. Towhata, I. (1989): "Models for Cyclic Loading", Reports of the Technical Committee on Granular Mechanics, International Society of Soil Mechanics and Foundation Engineering, Rio de Janeiro.
 35. Shi, L.P., Towhata, I. and Wieland, M. (1989): "Prediction of Seismically Induced Deformation of Liyutan Dam, Taiwan, by Means of Cyclic Triaxial Testing and Finite Element Analysis", Computers and Geotechnics, Vol.7, No.3, 205-222.
 36. Ishihara, K., Muroi, T., and Towhata, I. (1989): "In-Situ Pore Water Pressures and Ground Motions during the 1987 Chiba-Toho-Oki Earthquake", Soils and Foundations, Vol.29, No.4, pp.75-90.
 37. Al-Hunaidi, M.O., Towhata, I. and Ishihara, K. (1990): "Silent Boundary for Time Domain Wave Motion Analyses Based on Direct Energy Deletion", Soil Dynamics and Earthquake Engineering, Vol.9, No.2, pp.85-95.
 38. Towhata, I. and Kim Seung Ryull (1990): "Undrained Strength of Underconsolidated Clays and Its Application to Stability Analysis on Submarine Slopes under Rapid Sedimentation", Soils and Foundations, Vol.30, No.1, pp.100-114.
 39. Towhata, I., K. Yamada, H. Kubo, and M. Kikuta (1990) "Analytical Solution of Permanent Displacement of Ground Caused by Liquefaction", Proc. Second U.S.-Japan Workshop on Liquefaction, Large Ground Deformation and Their Effects on Lifelines, pp.131-144, Buffalo.
 40. Towhata, I. (1990) "On Mechanism of Pore Pressure Buildup in the Seabed Subjected to Cyclic Wave Loading", Memorial Book dedicated to the late Prof. S.Okusa, pp. 63-65.
 41. Towhata, I., Tokida, K., Tamari, Y., Matsumoto, H., and Yamada, K. (1990): "Prediction of Permanent Lateral Displacement of Liquefied Ground by Means of Variational Principle", Proc. Third U.S.-Japan Workshop on Liquefaction, Large Ground Deformation and Their Effects on Lifelines, San Francisco, pp.237-251.
 42. Towhata, I. and Islam, Md.S. (1991): "Pseudo-Three-Dimensional Analysis on Cyclic Deformation of Ground Subject to Seismic Liquefaction", Proc. 2nd International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, St. Louis, Vol.II, pp.1189-1196.
 43. Ishihara, K., Acacio, A.A., and Towhata, I. (1993): "Liquefaction-Induced Ground Damage in

- Dagupan in the July 16, 1990 Luzon Earthquake," *Soils and Foundations*, Vol.33, No.1, pp.133-154.
44. Towhata, I., Tokida, K., Tamari, Y., Matsumoto, H., and Yamada, K. (1991): "Shaking Table Tests and Analytical Prediction of Permanent Displacement Caused by Seismic Liquefaction", *Proc. IX Pan American Conference on Soil Mechanics and Foundation Engineering*, Vina del Mar, Chile, Vol.I, pp.527-540.
 45. Towhata, I., Tamari, Y., and Yamada, K. (1991): "Nature of Lateral Soil Movement Induced by Earthquake Liquefaction", *Proc. International Workshop on Remedial Treatment of Potentially Liquefiable Soils*, Tsukuba, Japan.
 46. Towhata, I., Sasaki, Y., Tokida, K., Matsumoto, H., and Tamari, Y. (1991): "Permanent Displacement of Liquefied Ground", *Proc. 9th Asian Regional Conference on Soil Mechanics and Foundation Engineering*, pp.437-440, Bangkok, Thailand, Vol.1, pp.437-440.
 47. Towhata, I., Pisit Kuntiwattanakul, Fukue, M. and Nagata, K. (1991): "Cyclic Loading of Confining Pressure on Partially Saturated Sand", *Proc. International Conference on Geotechnical Engineering for Coastal Development -Theory and Practice on Soft Ground-*, September.
 48. Pisit Kuntiwattanakul, Towhata, I., and Seko, I. (1991): "Temperature Effects on Mechanical Behavior of Clay", *Transactions of the 11th International Conference on Structural Mechanics in Reactor Technology*, Vol.SD1, pp.283-288.
 49. Sasaki, Y., Towhata, I., Tokida, K., Yamada, K., Matsumoto, H., Tamari, Y., and Saya, S. (1992): "Mechanism of permanent displacement of ground caused by seismic liquefaction", *Soils and Foundations*, Vol.32, No.3, pp.79-96.
 50. Towhata, I., Sasaki, Y., Tokida, K., Matsumoto, H., Tamari, Y. and Yamada, K. (1992): "Prediction of Permanent Displacement of Liquefied Ground by Means of Minimum Energy Principle", *Soils and Foundations*, Vol.32, No.3, pp.97-116.
 51. Towhata, I. and Matsumoto, H. (1992) "Analysis on Development of Permanent Displacement with Time in Liquefied Ground", *Proc. 4th Japan-US Workshop on Liquefaction Countermeasures and Earthquake Resistant Design of Lifelines*, Vol.1, pp.285-299, 1992, Hawaii.
 52. Orense, R. and Towhata, I. (1992): "Prediction of Liquefaction-Induced Permanent Ground Displacements: A Three-Dimensional Approach", *Proc. 4th Japan-US Workshop on Liquefaction Countermeasures and Earthquake Resistant Design of Lifelines*, Vol.1, pp.335-349, Hawaii.
 53. Towhata, I., K. Nagata, M. Fukue, K. Sato, K. Naoe, and J. Nagasaka (1992) "Wave-induced Pore Water Pressure in a Model Seabed Using Wind-Channel", *Memoir, Department of Marine Science and Technology, University of Tokai*, Vol.33, pp.27-35.
 54. Tokida, K., H. Matsumoto, I. Towhata, and Y. Sasaki (1992) "Study on Prediction of Lateral Ground Flow by Soil Liquefaction and Its Influence on Piles", *Proc. 24th UJNR*.
 55. Ishihara, K., Haeri, S.M., Moirfar, A.A., Towhata, I. and S. Tsujino (1992): "Geotechnical aspects of the June 20, 1990 Manjil Earthquake in Iran", *Soils and Foundations*, Vol.32, No.3, pp.61-78.
 56. Towhata, I., Pisit Kuntiwattanakul, Seko, I., and Ohishi, K. (1993): "Volume change of clays induced by heating as observed in consolidation tests", *Soils and Foundations*, Vol.33, No.4, pp.170-183.
 57. Towhata, I., Pisit Kuntiwattanakul and Kobayashi, H. (1993): "A Preliminary Study on Heating of Clays to Examine Possible Effects of Temperature on Soil-Mechanical Properties", *Soils and Foundations*, Vol.33, No.4, pp.184-190.
 58. Towhata, I. and Pisit Kuntiwattanakul (1994): "Behavior of Clays Undergoing Elevated Temperature," *Proc. ICSMFE*, Vol.1, pp.85-88, New Delhi.
 59. Towhata, I. and Fukue, M. (1993): "Soil-Mechanic Aspects of Seabed Instability," *Proc. 3rd International Offshore and Polar Engineering Conference (ISOPE-93)*, pp.556-566, Singapore.
 60. Towhata, I. and Fukue, M. (1993): "Model Tests in Wind Flume on Wave-Seabed Interaction," *UJNR Proc.*, at PHRI in Yokosuka.
 61. Towhata, I. (1993): "Numerical Prediction for Model No.2," *Verification of Numerical*

- Procedures for the Analysis of Soil Liquefaction Problems, Balkema, Vol.1, pp.413-422.
62. Towhata, I. (1993): "Numerical Prediction for Model No.11," Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, Balkema, Vol.1, pp.987-996.
 63. Towhata, I. and Orense, R.P. (1994): "A 3-D Model to Predict Permanent Displacements of Liquefied Ground," Performance of Ground and Soil Structures during Earthquakes, 13th Conf. Soil Mech. Found. Engg., Delhi, pp.179-188.
 64. Towhata, I. (1994): "Review of Prediction 'A' on Model 11," Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, Vol.2, p.1607-1612, Balkema.
 65. Towhata, I. (1995) "Reconnaissance Report of the 1993 Guam Earthquake," Proc. JSCE, No.507/I-30, pp.291-303, 1995 (with T.Sato, F.Yamazaki, and H.Mutsuyoshi) (in Japanese) (日本語では 1993 年グアム島地震震害調査報告).
 66. Towhata, I., Park, J.K., Orense, R.P., and Kano, H. (1996): "Use of spectrum intensity in immediate detection of subsoil liquefaction," Soils and Foundations, Vol.36, No.2, pp.29-44.
 67. Towhata, I., Toyota, H. and Vargas-Monge, W. (1995): "Dynamics in Lateral Flow of Liquefied Ground," Proc. 10th Asian Regional Conf. Soil Mech. Found. Engg., Beijing, Vol.1, pp.497-500.
 68. Towhata, I. and Toyota, H. (1995): "Shaking Table Tests on Transient Flow of Liquefied Ground," submitted to 3rd International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, Missouri-Rolla, Vol.1, pp.243-248.
 69. Towhata, I. and Toyota, H. (1994) "Post-liquefaction Ground Flow in Shaking Table Tests", Proc. 5th Japan-US Workshop on Liquefaction Countermeasures and Earthquake Resistant Design of Lifelines, Snow Bird, Utah, pp.315-330.
 70. Nagase, H., Towhata, I. and Yanagihata, T. (1995) "Model Tests on Accelerated Consolidation Method Using Cyclic Horizontal Pressure", Proc. IS-Hiroshima, Hiroshima.
 71. Towhata, I. and Toyota, H. (1994) "Dynamic Analysis of Lateral Flow of Liquefied Ground," Proc. 5th Japan-US Workshop on Liquefaction Countermeasures and Earthquake Resistant Design of Lifelines, Snow Bird, Utah, pp.377-387.
 72. Towhata, I. (1994) "Study on Earthquake Response Analysis of Ground," Proc. Symposium on Amplification of Earthquake Motion in Soft Alluvium, JSSMFE, pp.2-13.
 73. Towhata, I. (1996): "Seismic Wave Propagation in Elastic Soil with Continuous Variation of Shear Modulus in the Vertical Direction," Soils and Foundations, Vol.36, No.1, pp.61-72.
 74. Towhata, I., N. Harada, Sunaga, M., and Kawasaki, Y. (1994) "Contraction of Soil Subjected to Traffic-Type Stress Application," Proc. International Symposium on Pre-Failure Deformation Characteristics of Geomaterials (IS Hokkaido), Sapporo, Vol.1, pp.305-310.
 75. Towhata, I. (1995) "Dynamic Response Analysis of Ground with Continuous Variation of Shear Modulus in Vertical Direction," Proc. Int. Workshop on Wind and Earthquake Engineering for Offshore and Coastal Facilities, Berkeley, pp.63-77.
 76. Toyota, H., Towhata, I. and A. Ghalandarzadeh (1995): "Lateral Flow of Liquefied Ground - Model Tests and Prediction," Proc. IS Tokyo '95, pp.875-880.
 77. Kazama, M., Towhata, I., Toyota, H., and Yanagisawa, E. (1995): "Stress Strain Relationship of Sandy Soils Directly Obtained from 1-D Centrifuge Shaking Table Tests," Proc. IS Tokyo '95, pp.711-716.
 78. Pisit Kuntiwattanakul, Towhata, I., Ohishi, K. and Seko, I. (1995): "Temperature Effects on Undrained Shear Characteristics of Clay," Soils and Foundations, Vol.35, No.1, pp.147-162.
 79. Towhata, I., Ghalandarzadeh, A., Sundarraj, K.P., and Vargas-Monge, William (1996): "Dynamic Failures of Subsoils Observed in Water-Front Areas," Special Issue on Geotechnical Aspects of the January 17 1995 Hyogoken-Nambu Earthquake, No.1, Soils and Foundations, pp.149-160.
 80. Towhata, I., Toyota, H., and Vargas-Monge, W. (1996): "A Transient Study on Lateral Flow of Liquefied Ground," Proc. 7th International Symposium on Landslides, Trondheim, Balkema, Vol.2, pp.1047-1054.
 81. Towhata, I., Kogai, Y., Amimoto, K. and Hendri, G.P. (1996): "Mitigation of Lateral Flow of Liquefied Ground," 28th Joint Meeting, Panels for Earthquake Engineering and Wind Engineering, UJNR, Gaithersburg, Maryland, U.S.A., pp.39-51.

82. Towhata, I. and Matsuo, O. (1996): "Seismic Damage Found in Waterfront Dikes and Walls," Report on Damage Caused by the 1995 Great Hanshin Earthquake, JSCE Committee on Earthquake Engineering, pp.125-133.
83. Towhata, I., Orense, R.P. and Toyota, H. (1999): "Mathematical principles in prediction of lateral ground displacement induced by seismic liquefaction," *Soils and Foundations*, Vol.39, No.2, pp.1-19.
84. Vargas-Monge, W. and Towhata, I. (1995): "Measurement of Drag Exerted by Liquefied on Buried Pipe," Proc. IS-Tokyo '95 First International Conference on Earthquake Geotechnical Engineering, Vol.2, pp.975-980, publ. Balkema.
85. Orense, R.P., Okada, S., Towhata, I., and Shimizu, K. (1995): "Evaluation of seismic deformations in waterfronts using minimum energy principle," Proc. First Int. Conf. Earthquake Geotechnical Engineering, Tokyo, Vol.2, pp.887-892.
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