Biographical Data

Name, Title, Office Address/ Telephone

Kenji ISHIHARA
Professor of Research and Development Initiative, Chuo University
1-13-27, Kasuga, Bunkyo-ku, Tokyo 112-8551, Japan
Tel: +81-3-6861-8808

Birth Date, Birth Place:

16 April, 1934, Japan

Education:

1957: Bachelor of Science (B.S.), Civil Engineering, University of Tokyo, Japan
1959: Master of Science (M.S.), Civil Engineering, University of Tokyo, Japan
1963: Doctor of Engineering (Ph.D), Civil Engineering, University of Tokyo, Japan

Employment:

1961 – 1963: Research Associate in Civil Engineering, University of Tokyo
1963 – 1966: Lecturer in Civil Engineering, University of Tokyo
1966 – 1967: Visiting Research Associate, University of Illinois, Urbana, Illinois, U.S.A.
1966 – 1977: Associate Professor, University of Tokyo
1977 – 1995: Professor of Civil Engineering, University of Tokyo
1980 – 1982: Chairman of the Department of Civil Engineering, University of Tokyo
1995 : Professor Emeritus, University of Tokyo
1995 – 2001: Professor of Civil Engineering, Tokyo University of Science
2001 – 2005: Professor of Civil Engineering, Chuo University, Tokyo
2005 – Present: Professor of Research and Development Initiative, Chuo University, Tokyo
2008 – Present: Visiting Chair Professor of National Taiwan University of Science and Technology, Taiwan

Professional Affiliations:

2004 – Present: Chairman of the Technical Committee on the extension of the Tokyo Haneda Airport, Japanese Government
2009 – Present: A member of the Panel of Experts for the Padma Bridge construction in Bangladesh, Bangladesh Government

Professional Association/Society Memberships

1989 – 1993: Vice President of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)

1995: Honorary Member of the Chinese Society of Soil Dynamics (CSSD)
1996 – 1998: President of the Japanese Geotechnical Society (JGS)
1997 – 2001: President of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)
2003: Honorary Member of the Japanese Geotechnical Society (JGS)
2003 – 2004: President of the Japan Association of Earthquake Engineering (JAEE)
2006: Honorary Member of the Japan Society of Civil Engineers (JSCE) 2008: Honorary Member of the Japan Association of Earthquake Engineering (JAEE)

Awards and Honors

1965: Incentive Research Paper Award: Japan Society of Civil Engineers
1972: Research Paper Award: Japanese Geotechnical Society
1978: Research Paper Award: Japan Society of Civil Engineers
1993: The 33rd Rankine Lecture, British Geotechnical Association and Institution of Civil Engineers
1995: Honorary Doctorate, Technical University of Bucharest
1997: The 4th Terzaghi Oration, International Society for Soil Mechanics and Geotechnical Engineering
1997: Achievement Award for Disaster Prevention, Land Agency of Japanese Government
1998: H. B. Seed Medal, American Society of Civil Engineers
1999: Honorary Doctorate, Istanbul Technical University
2000: The Japan Academy Prize
2002: The 2nd Peter Lumb Lecture, Hong Kong Institution of Engineers
2004: The 2nd C. W. Lovell Distinguished Lecture, Purdue University, West Lafayette, Indiana, U.S.A.
2004: D.M. Burmister Lecture, Department of Civil and Mechanical Engineering, Colombia University, N.Y., U.S.A.
2005: Distinguished Accomplishment Award, Japan Society of Civil Engineers
2008: The 7th J. H. Qian Lecture, Hohai University, Nanjing, China
2009: The Order of the Sacred Treasure, Gold Rays with Neck Ribbon, The Emperor of Japan
2010: Foreign Associate of the U.S. National Academy of Engineering

Patents and Publications

Books

"Fundamentals of Soil Dynamics", (in Japanese), by Kenji Ishihara, Kajima Publisher, 303pages, 1976 (first edition) to 1998 (8th edition).

"Soil Mechanics – Series 8 in Civil Engineering", (in Japanese), by Kenji Ishihara and Tsutomu Kimura, Shokoku-sha Publisher, 317pages, 1977.
"Soil Mechanics" (in Japanese), by Kenji Ishihara, Maruzen Publisher, 297 pages, 1988.
"Soil Behaviour in Earthquake Geotechnics", (in English) Oxford University Press, 350 pages, 1996.
"Soil Mechanics", by Kenji Ishihara, UNESCO-ELOSS (Encyclopedia of Life Support systems), electronic format, 2001.
"Geotechnical Engineering", by Kenji Ishihara, UNESCO-ELOSS(Encyclopedia of Life Support systems), electronic format, 2003.
"Soil Behaviour in Earthquake Geotechnics," (in Russian), 496 pages, 2006.

Recent Keynote and Plenary Lectures

2008: Keynote Lecture, "Forensic Diagnosis for Site Specific Ground Condition in Deep Excavation of Subway Constructions," The 3rd International Conference on Site Characterization, Taipei, Taiwan.
2008: Invited Lecture: "Challenges in Perspectives in Geotechnics for Intense Earthquake Shaking", International Conference on the 1908 Messina and Reggio Calabria Earthquake, Reggio Calabria, Italy
2009: Keynote Lecture, "New Challenges in Geotechnique for Ground Hazards due to Intensely Strong Earthquake Shaking", Joint Conference on Tsunami and Earthquake, World Council of Civil Engineers (WCCE), European Council of Civil Engineers (ECCE), and Turkish Chamber of Civil Engineers (TCCE), Istanbul, Turkey

Expertise

Major area of my endeavors is advancement of understanding of liquefaction phenomenon in sand deposits during earthquakes and its application to practice. The constitutive laws governing deformation characteristics of sands were made up based on the laboratory test and field performance data. These deformation laws were applied to elucidate the response of soft soil grounds during earthquakes which are necessary for the seismic-resistant design of infra-structures such as building, bridges, harbour structures, tunnels etc.

Seismic performances of rockfill dams, tailing dams, embankments of rivers, railways, highways and coastal protection are all associated with the behaviour of soils under dynamic loading conditions. To evaluate stability or instability of earth-structures as above, the laboratory tests have been done to determine the soil strength in dynamic loading. The results of the studies are applied for practical problems.