

Dr. Kenji Satake

postal address: Site C7 AIST, 1-1-1 Higashi, Tsukuba 305-8567 Japan

e-mail address: kenji.satake@aist.go.jp

phone: +81-29-861-3640; fax: +81-29-852-3461

Narrative

Dr. Satake is one of the world leaders in tsunami research. He is interested in earthquake source process, tsunami generation process, studies of earthquakes and tsunamis from historical and geological data. After the 2004 tsunami in Indian Ocean, he immediately carried out numerical simulation of the tsunami and his animation was broadcasted all over the world. He also visited the affected coasts for tsunami survey to measure the tsunami heights, and also estimated the tsunami source from instrumental records of tsunamis. He was educated in geophysics at Hokkaido University and University of Tokyo, and has had research and teaching experience in Tokyo Institute of Technology, California Institute of Technology, University of Michigan, and Geological Survey of Japan. Currently he is a deputy director of Active Fault Research Center, National Institute of Advanced Industrial Science and Technology (AIST), and serves as a chair of Tsunami Commission of International Union of Geodesy and Geophysics, and secretary general of Asia Oceanic Geosciences Society.

Current Position

Deputy Director of Active Fault Research Center, National Institute of Advanced Industrial Science and Technology (AIST)

Academic Service

International Union of Geodesy and Geophysics, Tsunami Commission, Chair, 2003-
Asia Oceanic Geosciences Society, Secretary General, 2004-

Educational Background

Bachelor of Science and Master of Science, Hokkaido University, 1982, 1984

Doctor of Science, University of Tokyo, 1987

Professional Carrier

Tokyo Institute of Technology, Research Assistant, 1985-1990

California Institute of Technology, Visiting Research Associate, 1988-1990

University of Michigan, Assistant Professor, 1990-1995

Geological Survey of Japan, Senior Researcher, 1995-2001

National Institute of Advanced Industrial Science and Technology (AIST), AFRC, Team

Leader 2001-2003, Deputy Director of AFRC 2003-

Research Interests

Seismology, tsunamis, paleoseismology

Selected Publications

- Satake, K., F. Nanayama, S. Yamaki, Y. Tanioka, and K. Hirata, Variability among tsunami sources in the 17th-21st centuries along the southern Kuril trench, in K. Satake (ed.), *Tsunamis: Case Studies and Recent Developments*, Springer, 157-170, 2005.
- Sawai, Y., K. Satake, T. Kamataki, H. Nasu, M. Shishikura, B.F. Atwater, B.P. Horton, H. Kelsey, T. Nagumo and M. Yamaguchi, Transient uplift after a 17th-century earthquake along the Kuril subduction zone, *Science*, 306, 1918-1920, 2004.
- Satake, K., K. Wang, and B.F. Atwater, Fault Slip and Seismic Moment of the 1700 Cascadia Earthquake Inferred from Japanese Tsunami Descriptions, *J. Geophys. Res.*, 108 (B4), 2196, doi: *J. Geophys. Res.*, 108 (B11), 2535, doi:10.129/2003JB00252, 2003.
- Satake, K. and Y. Tanioka, The July 1998 Papua New Guinea Earthquake: Mechanism and Quantification of Unusual Tsunami Generation, *Pure Applied Geophys.*, 160, 2087-2118, 2003.
- Nanayama F, K. Satake, R. Furukawa, K. Shimokawa, B.F. Atwater, K. Shigeno, and S. Yamaki, Unusually large earthquakes inferred from tsunami deposits along the Kuril trench, *Nature*, 424 (6949): 660-663, 2003.
- Satake, K., Tsunamis, in W.H. K. Lee, H. Kanamori, P. C. Jennings, and C. Kisslinger (eds.) *International Handbook of Earthquake and Engineering Seismology*, 81A, 437-451, 2002.
- Satake, K., K. Shimazaki, Y. Tsuji and K. Ueda, Time and size of a giant earthquake in Cascadia inferred from Japanese tsunami records of January 1700, *Nature*, 379, 246-249, 1996.