CURRICULUM VITAE

HARRY H. YEH

School of Civil & Construction Engineering
220 Owen Hall
Oregon State University
Corvallis, OR 97331-3212
Born: February 11, 1950
Citizenship: U.S.A.

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ACADEMIC RANK:

The Miles Lowell and Margaret Watt Edwards Distinguished Chair in Engineering

DEGREES

A.B., Economics, Keio Gijuku University, Japan, 1972
B.S., Agricultural Engineering, Washington State University, 1975
M.S., Engineering, Washington State University, 1977
Ph.D., Civil Engineering, University of California, Berkeley, 1983

ACADEMIC POSITIONS

Assistant Professor, Department of Civil Engineering, University of Washington, Seattle, WA, 1983-1989

Adjunct Assistant Professor, Department of Applied Mathematics, University of Washington, Seattle, WA, 1988-1989

Visiting Associate Professor, Department of Civil Engineering, Stanford University, Stanford, CA, 1990-1991

Visiting Associate Professor, Department of Civil Engineering, Cornell University, Ithaca, NY, 1991

Adjunct Associate Professor, Department of Applied Mathematics, University of Washington, Seattle, WA, 1989-1994

Associate Professor, Department of Civil Engineering, University of Washington, Seattle, WA, 1989-1994

Visiting Professor, Disaster Prevention Research Institute, Kyoto University, Kyoto, Japan, 1997

Visiting Professor, Department of Civil Engineering, University of Tokyo, Tokyo, Japan, 1999

Adjunct Professor, Department of Applied Mathematics, University of Washington, Seattle, WA, 1995-2002

Professor, Department of Civil & Environmental Engineering, University of Washington, Seattle, WA, 1995-2002

Professor, Department of Civil, Construction, and Environmental Engineering, Oregon State University, Corvallis, OR, 2003-2007.

Affiliate Professor, Department of Civil & Environmental Engineering, University of Washington, Seattle, WA, 2003-present.

Professor, School of Civil & Construction Engineering, Oregon State University, Corvallis, OR, 2007-present.

Adjunct Professor, College of Oceanic and Atmospheric Sciences, Oregon State University, OR, 2007-present.

NON-ACADEMIC POSITIONS

Hydraulic Engineer, Bechtel Inc., San Francisco, CA, 1977-1983

Research Specialist, Public Works Research Institute, The Japan Ministry of Construction, Tsukuba, Japan, 1998

Consultant:
Leonardo da Vinci CD-ROM, Corbis, 1996
Sequoia Scientific, 1999-2001
Applied Technology Counsil. 2005 – 2008
Humboldt County, California. 2006 – 2007
Cali & LaPlace Engineers, LLC. 2008.

FIELDS OF SPECIALIZATION

Natural Hazards – Tsunamis
Environmental Fluid Mechanics
Water-Wave Hydrodynamics

PROFESSIONAL ACTIVITIES

Registration

Registered Professional Civil Engineer, State of California, #C031030

Professional Societies

American Geophysical Union
American Society of Civil Engineers
Coasts, Oceans, Ports, and Rivers Institute
Earthquake Engineering Research Institute
Japan Association for Wind Engineering

Professional Recognition

Organizer
- Second International Workshop on Long-Wave Runup Models, Friday Harbor, San Juan Island, WA, September 1995
- Regional Workshop on Bathymetry and Coastal-Topography Data at the Japan Oceanographic Data Center, September 1997
- International Workshop on Bathymetry and Coastal Topography Data Management, Seattle, WA, March 1998
- International Workshop on Bathymetry and Coastal-Topography Data Management II, Birmingham, UK, July 1999
- Workshop on Research with NEES Tsunami Facility, Corvallis, OR, March 2001
- Workshop on the Development of a Tsunami Scenario Simulation Program, Seattle, WA, September 2002
- First Workshop for an Integrated Tsunami Scenario Simulation, Corvallis, OR, August 2003
- Second Workshop for an Integrated Tsunami Scenario Simulation, San Francisco, CA, October 2004
- The First Edwards Lecture: given by Michael Longuet-Higgins (UC San Diego), February 2005.
- Tsunami Reconnaissance Data Preservation Workshop, San Diego Supercomputer Center, San Diego, CA, September 2005.
- The Second Edwards Lecture: given by Colin Brown (U. Washington), February 2006.
- The International Workshop on Fundamentals of Coastal Effects of Tsunamis, Hilo, Hawaii, December 2006
- The Third Edwards Lecture: given by Chiang C. Mei (MIT), April 2007.
- The Fourth Edwards Lecture: given by Jim Smith (U. Colorado), January 2008.
- The Fifth Edwards Lecture: given by Robert Guza (Scripps Institute of Oceanography), January 2009.
- The Sixth Edwards Lecture: given by Gary Parker (University of Illinois Urbana Champaign), February 2010.

Co-Organizer

- International Workshop on Long-Wave Run-up, Catalina Island, CA, August 1990
- Tsunami Measurement Workshop, Estes Park, CO, June 1995
- Workshop on Seafloor Deformation Models, Santa Monica, CA, May 1997
- Planning Meeting for International Tsunami Information Database, Seattle, WA, March 1998
- Workshop for Tsunami Research Facilities, Baltimore, May 1998
- NEES Awardees Meeting, Corvallis, OR, September 2003
- Planning Meeting for NEESR: Grand Challenge, Seattle, WA, September 2003
- The Third International Workshop on Long-Wave Runup Models, Catalina Island, CA, June 2004.
- Tsunami Deposits and their Role in Hazard Mitigation, Seattle, WA, June 2005.
- Tsunami Reconnaissance Data Workshop, San Diego, CA, September 2005
- Tsunami Sedimentology Workshop, Friday Harbor, WA, April 2007.

Session Organizer,

- International Symposium on Waves – Physical and Numerical Modelling, Vancouver, Canada, August 1994
- HAZARD-2000, Tokushima, Japan, May 2000
- NATO-Advanced Research Workshop, Istanbul, Turkey, May, 2001
- European Geophysical Society – XXVII General Assembly, Nice, France, March, 2002
- HAZARD-2002, Antalya, Turkey, September 2002
- Long Waves Symposium, Thessaloniki, Greece, August 2003
- HAZARD-2004, Hyderabad, India, December 2004
- DFG-Round Table Discussion in Hannover, Germany, April 2007.
- PACON 2007, Honolulu, June 2007.

Member

- International Team for Survey of Nicaragua Earthquake and Tsunami, September 1992
- International Team for Survey of Flores-Island (Indonesia) Earthquake and Tsunami, December 1992
- Okushiri-Island (Japan) Tsunami Reconnaissance, August 1993
- International Team for Survey of South-Kuril-Island (Russia/Japan) Earthquake and Tsunami, October 1994
- Ad-Hoc Planning Working Group for the NSF Major Research Equipment Program: National Earthquake Engineering Simulations, 1997-1999
- JAMSTEC-SOPAC-NSF Research Cruise for the 1998 Papua New Guinea Tsunami, 1999.
- Working Group on Coastal Engineering within NSF, 2001-2002
- Site Visit Team for the NSF NEES System Integration Project Review at the University of Illinois at Urbana-Champaign, 2002.
- Executive Advisory Board for the NSF NEESGrid System Integration, 2002-2004
- International Team for Survey of the 26 December 2004 Great Indian Ocean Tsunami in India, January 2005.
- EERI delegate for International Conference on Urban Disaster Reduction in Kobe, Japan, January 2005.
- Study Team for Tsunami Evacuation Building in Cannon Beach, Oregon.

Invited Panel Member

- EERI-NEES Meeting in San Francisco, January 2001
- Puget Sound Earthquake Hazards Workshop, Pacific Marine Environmental Laboratory, NOAA, January 2001
- Federation of Indian Chambers of Commerce and Industry, International Conference on Marine-Hazards & Opportunities, Chennai, India, July 2006.

Editor, *Journal of Waterway, Port, Coastal, and Ocean Engineering*, American Society of Civil Engineers, 1994-1996
Honorary Theme Editor, *Encyclopedia of Life Support Systems* (EOLSS), UNESCO, 1999-2001
US Delegate Leader, 1996 Tsunami Workshop, Petropavlovsk-Kamchatka, Russia, August 1996
Leader, International Team for Survey of Chimbote (Peru) Earthquake and Tsunami, March 1996
Head of the U.S. delegates, European Geophysical Society – XXVI General Assembly, Nice, France, March 2001
Vice President of Natural Hazards Society, 2000–2004
Head of the U.S. delegates, European Geophysical Society – XXVII General Assembly, Nice, France, April 2001
Head of the U.S. delegates, HAZARDS 2002, Antalya, Turkey, September 2002
Head of the U.S. delegates, HAZARDS 2004, Hyderabad, India, December 2004
Consultant for the NSF NEES Tsunami-Basin Equipment Site at Oregon State University, 2001–2002
Leader, EERI Tsunami Survey Team (India) of the Great 2004 Indian Ocean Tsunami, January 2005.
ATC-64 Project Management Committee for Development of Design and Construction Guidance for Special Facilities for Vertical Evacuation from Tsunami, 2005-2008.
Editor, *Journal of Disaster Research*, Fuji Technology Press Ltd., 2006 – present.
NRC Committee for Review of NOAA's Tsunami Warning and Forecast System and the Nation's Tsunami Preparedness, The National Academies, Ocean Studies Board, June 2008 – present.
Review Committee for Ocean Environment and Technology Research Center at National Cheng Kung University, Taiwan, September 2008.
NEESComm User Forum Committee, January 2010 – present.

Reviewer
Journal of Fluid Mechanics, Cambridge University Press
Journal of Geophysical Research, American Geophysical Union
Journal of Disaster Research
Geophysical Review Letters, American Geophysical Union
EOS, American Geophysical Union
Water Resources Research, American Geophysical Union
Natural Hazards, Kluwer Academic Publisher
Journal of Waterway, Port, Coastal, and Ocean Engineering, American Society of Civil Engineers
Journal of Offshore Mechanics and Arctic Engineering, American Society of Mechanical Engineers
Wave Motions, North-Holland Publishing Company
Estuaries, Estuarine Research Federation
Journal of Atmospheric and Ocean Technology, American Meteorological Society
Pure and Applied Geophysics, Birkhäuser Verlag
Journal of Earthquake Technology, ISET
Research Proposal Referee for NSF, Sea Grant, and USGS NEHR Program
Book Reviewer, ***Fluid Vortices,*** Kluwer Academic Publishers
Book Reviewer, ***Research Perspectives in Civil Engineering***, World Scientific Publishing Co Pte Ltd
Book Reviewer, ***Before Tragedy Strikes: The Quest to Predict Megadisasters***, by Florin Diacu, Princeton University Press, 2007.
Book Reviewer, ***Oregon's Greatest Natural Disasters***, by William L. Sullivan, Navillus Press, 2008

Committees, Commissions, and Boards

University of Washington

University

Ad hoc Committee for the Applied Ocean Physics and Engineering Program at APL
Appeal Review Panel (Faculty Senate), 1987-1988
University Disciplinary Committee, 1999

College of Engineering

Committee for Engineering Cooperative Education, 1987
Research Policy Committee, 1997-1999

Department of Civil Engineering

Space-Planning Committee, 1987
Curriculum Committee, 1987-1989
Computer Committee; Chair, 1987-1998; Member, 1999-2000
Sub-Committee for Faculty Search, 1995
Lab Position Committee, 1999-2001

Oregon State University

University

College of Engineering

Department Head Search Committee, 2004 – 07
Promotion and Tenure Committee, 2008 – 2010

School of Civil and Construction Engineering

Faculty Search Committee, 2003 – 04
Faculty Status Committee, 2003 – present. (Chair 2008 – 2010)

Publication Committee Member of Waterway, Port, Coastal, and Ocean Division, American Society of Civil Engineers, 1988-2001

Member, Organizing Committee for ITS 2001 (International Tsunami Society), 1999-2001

Member, CUREe Committee on NEES for the NSF Consortium solicitation, 2000-2002

NEES IT Transition Committee, 2004

The Geotechnical Engineering Earthquake Reconnaissance (GEER) Advisory Panel, 2004 - present

The Data Summit for San Diego Supercomputer Center, 2005

Member, Editorial Board, *Journal of Disaster Research,* 2006 – present.

Honors and Awards

Irving and Lucille Smith Scholarship, 1979

Award of Merit, Bechtel Inc., 1979

DPRI Visiting Senior Professor Fellowship, 1997

Japanese Government Research Award for Foreign Specialist, Science and Technology Agency, Prime Minister's Office, 1998

The JSPS Short-Term Invitation Fellowship for Research in Japan, 1999

OSU Engineering College Research Award, 2008

The JSPS Short-Term Invitation Fellowship for Research in Japan, 2008.

The JSPS Long-Term Invitation Fellowship for Research in Japan, 2011.

PUBLICATIONS

Books and/or Book Chapters

H. Yeh, "Free-Surface Dynamics," in *Advances in Coastal and Ocean Engineering*, (P. L.-F. Liu, Ed.), Vol. 1, World Scientific Publishing Co., Singapore, 1994, pp. 1-75.

H. Yeh, P. Liu, and C. Synolakis, (Eds.), *Long-Wave Runup Models*, World Scientific Publishing Co., Singapore, 1996, 403 pp.

H. Yeh and K. Wada, "Descriptive Hydrodynamics of Lock-Exchange Flows," in *Advances in Coastal and Ocean Engineering*, (P. L.-F. Liu, Ed.), Vol. 6, World Scientific Publishing Co., 2001, pp. 203-240.

P. Liu, H. Yeh, and C. Synolakis (Eds.) *Advanced Numerical Models for Simulating Tsunami Waves and Runup*, Advances in Coastal and Ocean Engineering, Vol. 10, World Scientific Publishing Co., Singapore, 2008, 344 pp.

H. Yeh, "Tsunami Impacts on Coastlines," in *The Sea, Vol. 15*, (E.N. Bernard and A.R. Robinson, Ed), Harvard University Press, 2009, 333-369.

W. Li, W., H. Yeh, K. Hirata, and T. Baba, "Ocean-bottom pressure variations during the 2003 Tokachi-Oki Earthquake," in *Nonlinear Wave Dynamics* (P. Lynett Ed.), World Scientific Publishing Co., Singapore, 2009, pp. 109-126.

M.J. Briggs, H. Yeh, and D.T. Cox "Physical Modeling of Tsunami Waves," in *Handbook of Coastal and Ocean Engineering*, (Y.C. Kim, Ed), World Scientific Publishing Co., Singapore, 2010, pp. 1073-1105.

Carrier, G.F. and H. Yeh "Tsunami Propagation, Directivity, and Pulse Persistence from a Finite Source," In: WATER WAVES: Theory and Experiment (Mahmood, M.F., Henderson, D., Segur, H., Ed.), World Science Publishing Co., Singapore, 2010, 120 – 139.

Technical Journals

D.C. Davis, J.S. Romberger, C.A. Pettibone, S.C. Andales, and H. Yeh, "Mathematical Model for Air Flow from Perforated Circular Ducts with Annular Corrugations," *Transactions of the ASAE*, Vol. 23, pp. 661-666, 1980.

H. Yeh, "Nonlinear Progressive Edge Waves: Their Instability and Evolution," *Journal of Fluid Mechanics*, Vol. 152, pp. 479-499, 1985.

H. Yeh, "Experimental Study of Standing Edge Waves," *Journal of Fluid Mechanics*, Vol. 168, pp. 291-304, 1986.

H. Yeh, "Discussion of Viscous Effects on Evolution of Stokes Waves, by P. L-F. Liu," *Journal of the Waterway, Port, Coastal, and Ocean Engineering, ASCE*, Vol. 113, pp. 553-554, 1987.

H. Yeh and A. Ghazali, "On Bore Collapse," *Journal of Geophysical Research*, Vol. 93, pp. 6930-6936, 1988.

H. Yeh, W.S. Chu, and O. Dalhberg, "A Note on Numerical Modelling of Separation Eddies," *Water Resources Research*, Vol. 24, pp. 607-614, 1988.

H. Yeh, A. Ghazali, and I. Marton, "Experimental Study of Bore Runup," *Journal of Fluid Mechanics*, Vol. 206, pp. 563-578, 1989.

H. Yeh and M. Shrestha, "Free-Surface Flow through a Screen," *Journal of Hydraulic Engineering*, Vol. 115, pp. 1371-1385, 1989.

H. Yeh and K.-M. Mok, "On Turbulence in Bores," *Physics of Fluids*, Vol. 2, pp. 821-828, 1990.

P.L.-F. Liu, C. Synolakis, and H. Yeh, "Report on the International Workshop on Long-Wave Runup," *Journal of Fluid Mechanics*, Vol. 229, pp. 675-688, 1991.

H. Yeh, "Vorticity-Generation Mechanisms in Bores," *Proceedings of the Royal Society, London, Series A* 432, pp. 215-231, 1991.

H. Yeh, "Tsunami Bore Run-Up," *Natural Hazards*, Vol. 4, pp. 209-220, 1991.

H. Yeh, "Shoreline Profile of the Stokes-Mode Edge Waves," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, Vol. 118, pp. 112-116, 1992.

H. Yeh, "Disaster on Flores Island," *Nature*, Vol. 361, pp. 686, 1993.

H. Yeh, "Education and Research in the United States," *Transactions of Japan Society of Civil Engineers*, pp. 40-43, January 1993 (in Japanese).

H. Yeh, F. Imamura, C. Synolakis, Y. Tsuji, P. Liu, and S. Shi, "The Flores Island Tsunamis," *EOS, Trans. Amer. Geophys. Union*, Vol. 74, pp. 369-373, 1993.

H. Yeh, P. Liu, M. Briggs, and C. Synolakis, "Propagation and Amplification of Tsunamis at Coastal Boundaries," *Nature*, Vol. 372, pp. 353-355, 1994.

H. Yeh, V. Titov, V. Gusiakov, E. Pelinovsky, V. Khramushin, and V. Kaistrenko, "The 1994 Shikotan Earthquake Tsunamis," *Pure Appl. Geophys.*, Vol. 144, pp. 855-874, 1995.

P. Liu and H. Yeh, "The Generation of Edge Waves by a Wave-Maker," *Physics of Fluids*, Vol. 8, pp. 2060-2065, 1996.

K.-T. Chang and H. Yeh, "Laser-Induced Image for Wave Measurement," *Journal of Flow Visualization and Image Processing*, Vol. 4, pp. 59-68, pp. 1997.

A.T. Jessup, C.J. Zappa, and H. Yeh, "Defining and Quantifying Microscale Wave Breaking with Infrared Imagery," *Journal of Geophysical Research*, Vol. 102, pp. 23145-23153, 1997.

C. Synolakis, P. Liu, G. Carrier, and H. Yeh, "Tsunamigenic Sea-Floor Deformations," *Science*, Vol. 278, pp. 598-600, 1997.

C. Zappa, A. Jessup, and H. Yeh, "Skin-Layer Recovery of Free-Surface Wakes: Relationship to Surface Renewal and Dependence on Heat Flux and Background Turbulence," *Journal of Geophysical Research*, Vol. 103, No. 21, pp. 711-722, 1998.

D.A. Reed, H. Yeh, J. Yu, and S. Gardarsson, "Tuned Liquid Dampers under Large Amplitude Excitation," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 74-76, pp. 923-930, 1998.

H. Yeh, "Tsunami Researchers Outline Steps for Better Data," *EOS, Trans. Amer. Geophys. Union*, Vol. 79, pp. 480 & 484, 1998.

P. Liu, H. Yeh, P. Lin, K.-T. Chang, and Y.-S. Cho, "Generation and Evolution of Edge-Wave Packets," *Physics of Fluids*, Vol. 10, pp. 1635-1657, 1998.

D.A. Reed, J.K. Yu, H. Yeh, and S. Gardarsson, "An Investigation of Tuned Liquid Dampers under Large Amplitude Excitation," *Journal of Engineering Mechanics*, Vol. 124, pp. 405-413, 1998.

T. Wakahara and H. Yeh, "Spectral Characteristics of Wind-Induced Forces on a Rectangular Column Structure in a Higher Frequency Range," *Journal of Wind Engineering*, Vol. 80, pp. 65-73, 1999.

J. Bourgeois, C. Petroff, H. Yeh, V. Titov, C. Synolakis, B. Benson, J. Kuroiwa, J. Lander, and E. Norabuena, "Geologic Setting, Field Survey and Modeling of the Chimbote, Northern Peru, Tsunami of 21 February 1996," *Pure Appl. Geophys*, Vol. 154, pp. 513-540, 1999.

K.M. Mok and H. Yeh, "On Mass Transport of Progressive Edge Waves," *Physics of Fluids*, Vol. 11, pp. 2906-2924, 1999.

D.R. Tappin, T. Matsumoto, P. Watts, K. Satake, G.M. McMurty, M. Matsuyama, Y. Lafoy, Y. Tsuji, T. Kanamatsu, W. Lus, Y. Iwabuchi, H. Yeh, Y. Matsumoto, M. Nakamura, M. Mahoi, P. Hill, K. Crook, L. Anton, and J.P. Walsh, "Sediment Slump Likely Caused 1998 Papua New Guinea Tsunami, *EOS, Trans. Amer. Geophys. Union*, Vol. 80, pp. 329-334-340, 1999.

M. Matsuyama, J.P. Walsh, and H. Yeh, "The Effect of Bathymetry on Tsunami Characteristics at Sissano Lagoon, Papua New Guinea," *Geophysical Research Letters*, Vol. 26, pp. 3513-3516, 1999.

F. Kato, S. Sato, and H. Yeh, "Large-Scale Experiment on Dynamic Response of Sand Bed around a Cylinder due to Tsunami," *Proceedings of Coastal Engineering, JSCE*, Vol. 46, pp. 956-960, 1999. (in Japanese).

佐藤慎司, Yeh, H., and 加藤史訓. "利根川河口周辺沿岸域における浮遊懸濁物質の挙動に関する現地観測." *Proc. Coastal Engineering, JSCE*, Vol. 48, 626-630, 2001.

S. Gardarsson, H. Yeh, and D.A. Reed, "The Behavior of Sloped-Bottom Tuned Liquid Dampers," *Journal of Engineering Mechanics*, Vol. 127, pp. 266-271, 2001.

G.F. Carrier, T.T. Wu, and H. Yeh, "Tsunami Runup and Drawdown on a Plane Beach," *Journal of Fluid Mechanics, 475*, pp. 79-99, 2003.

S. Tonkin, H. Yeh, S. Kato, and S. Sato, "Tsunami Scour around a Cylinder: an Effective Stress Approach," *Journal of Fluid Mechanics, 496*, 165-192, 2003.

R.K. Chadha, G. Latha, H. Yeh, C. Peterson, and T. Katada. "The tsunami of the great Sumatra earthquake of M 9.0 on 26 December 2004 – Impact on the east coast of India," *Current Science*, Vol. 88, 1-4, 2005

B. Atwater, J. Bourgeois, H. Yeh, D. Abbott, M. Cisternas, U. Glawe, B. Higman, B. Horton, R. Peters, K. Rajendran, and M. Tuttle, "Tsunami geology and its role in hazard mitigation," *EOS, Trans. Amer. Geophys. Union*, Vol. 86, pp. 400, 2005.

C. Peterson, H. Yeh, R.K. Chadha, G. Latha, T. Katada. "Flood elevation, inundation distance and flow competence of the 2004 Sumatra-Andaman Tsunami, as recorded by tsunami deposits in thirteen shore-normal profiles from the Tamil-Nadu coastline, India." *ISET Journal of Earthquake Technology*, Vol. 42, No. 4, 95-110, 2005.

G.F. Carrier, and H. Yeh, "Tsunami propagation from a finite source," *Computer Modeling in Engineering & Sciences*, Vol. 10, No. 2, 113-122, 2005.

H. Yeh and S.C. Yim. "Tsunami research at Oregon State University," *The Structural Engineer*, Vol. 84, No. 13, 16-17, 2006.

H. Yeh, R.K. Chadha, M. Francis, T. Katada, G. Latha, C. Peterson, G. Raghuraman, and Singh, J.P. "Tsunami runup survey along the Southeast Indian Coast," *Earthquake Spectra*, Vol. 22, No. S3, 173–186, 2006.

H. Yeh. "Maximum fluid forces in the tsunami runup zone," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, Vol. 132, No. 6, 496-500, 2006..

T. Katada, and H. Yeh, "Tsunami survey along the southeast Indian coast," *Chikyu Monthly*, No. 56, 187-194, 2006.

S. Gardarsson. and H. Yeh, "Hysteresis in shallow water sloshing," *Journal of Engineering Mechanics*, Vol. 133, No. 10, 1093-1100, 2007

H. Yeh, M. Francis, C. Peterson, T. Katada, G. Latha, R.K. Chadha,, J.P. Singh, and G. Raghuraman. "Effects of the 2004 Great Sumatra Tsunami: Southeast Indian Coast," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, Vol. 133, No. 6, 382-400, 2007.

H. Yeh. "Design tsunami forces for onshore structures," *J. Disaster Research*, Vol 2, No. 6, 531-536, 2007.

K. Huntington, J. Bourgeois, G. Gelfenbaum, P. Lynett, H. Yeh, and R. Weiss. Sandy signs of tsunami onshore depth and speed, *EOS, Trans. Amer. Geophys. Union*, Vol. 88, No. 52, 577-584, 2007.

H. Yeh. "Closure to "Maximum fluid forces in the tsunami runup zone" by Harry Yeh," *Journal of Waterway, Port, Coastal, and Ocean Engineering*, Vol. 134, No. 3. 200-201, 2008.

K.H. Lee, D.S. Kim, and H. Yeh. "Characteristics of water level and velocity changes due to the propagation of bore," *Journal of the Korean Society of Civil Engineers*, Vol. 28, No 5B, 575-589, 2008. (in Korean)

E. Zhang, H. Yeh, Z. Lin, and R.S. Laramee, "Asymmetric tensor analysis for flow visualization," *IEEE Transactions on Visualization and Computer Graphics*, Vol. 15, No. 1, 106-122, 2008.

K.H. Lee, C.H. Kim, D.S. Kim, H. Yeh, and Y.T. Hwang. "Numerical analysis of runup and wave force acting on coastal revetment and onshore structure due to tsunami," *Journal of the Korean Society of Civil Engineers*, Vol. 29, No 3B, 289-301, 2009. (in Korean)

P. Lukkunaprasit, N. Thanasisathit, and H. Yeh. "Experimental verification of FEMA P646 tsunami loading." *J. Disaster Research*, Vol. 4 No. 6, 410-418, 2009.

H. Arnason, C. Petroff, and H. Yeh. 2009. "Tsunami bore impingement onto a vertical column." *J. Disaster Research*, Vol. 4, No 6, 391-403, 2009.

H. Yeh. "Gender and age factors in tsunami casualties," *Natural Hazards Review*, ASCE, Vol. 11, No. 1, 29-34, 2010.

H. Yeh, W. Li, and Y. Kodama. "Mach reflection and KP solitons in shallow water." *European Physical Journal*, 185, 97-111, 2010.

W. Li, H. Yeh, and Y. Kodama. "On the Mach reflection of a solitary wave – revisited." J. *Fluid Mech*. DOI:10.1017/S0022112010006014, 2011.

I.M. Sou, and H. Yeh, "Laboratory study of the cross-shore flow structure in the surf and swash zones," J. Geophys. Res., 116, C03002, doi:10.1029/2010JC006700, 2011.

Refereed Conference Proceedings

H. Yeh and L.G. King, "Transient Subsurface Drainage on Sloping Irrigation Land," *ASAE Paper No. 78-2037*, ASAE, 1978.

R.E. Nece, M.R. McCaslin, D.R. Christensen, and H. Yeh, "Ferry Wave Measurements in Deep Water," *Proceedings 20th International Conference on Coastal Engineering*, 1986.

H. Yeh, Tsunami Disaster Mitigation," in NSF Workshop Report on Siting and Geotechnical Program: Focus and Direction, The Illinois Institute of Technology, Chicago, 1986.

H. Yeh and A. Ghazali, "A Bore on a Uniformly Sloping Beach," *Proceedings 20th International Conference on Coastal Engineering*, 1986.

H. Yeh, "A Note on Edge Waves," *Coastal Hydrodynamics*, (R.A. Dalrymple, Ed.), ASCE, 1987.

H. Yeh, "Tsunami Actions on a Beach," *Proceedings International Tsunami Symposium*, Vancouver, Canada, 1987.

K.-M. Mok and H. Yeh, "Turbulence in Bores and Hydraulic Jumps," *The Fourth Asian Congress of Fluid Mechanics*, 1989.

H. Yeh, "Turbulence Generation in a Bore," *Water Wave Kinematics*, (A. Torum, Ed.), Kluwer Academic Publisher, 1990.

H. Yeh and K.-M. Mok, "Experimental Facility for Progressive Edge Waves," *Water Wave Kinematics*, (A. Torum, Ed.), Kluwer Academic Publisher, 1990.

H. Yeh, "On Momentum Exchange of a Tsunami Bore at a Shoreline," *Proceedings of the 2nd UJNR Workshop on Tsunamis*, National Geophysical Data Center, Boulder, 1991.

H. Yeh, "Vorticity Generation at a Fluid Interface," *Breaking Waves*, (M.L. Banner and R.H.J. Grimshaw, Eds.), Springer-Verlag, 1992.

H. Yeh, "The Leading Wave of a Uniform Bore," *Tsunami '93: Proceedings of the International Tsunami Symposium*, 1993.

S. Gardarsson and H. Yeh, "Numerical Simulations of Bores using the Random-Choice Method," *Proceedings the 3rd UJNR Workshop on Tsunamis*, 1994.

S. Mausshardt, H. Yeh, and C. Grandinetti, "Laboratory Observations of Gravity Currents and Internal Bores," *Proceedings of the 4th International Symposium on Stratified Flows*, Grenoble, France, 1994.

K. Wada and H. Yeh, "Three-Dimensional Mixing Mechanisms of Gravity Currents and Internal Bores around a Lock Model," *Proceedings the 41st Coastal Engineering*, Japan, 1994.

H. Yeh and K.-T. Chang, "On Propagation of Edge-Wave Packets," *Proceedings of Waves-Physical and Numerical Modelling*, (M. Isaacson and M. Quick, Eds.), University of British Columbia, Vancouver, Canada, 1994.

H. Yeh, "Tsunami Reconnaissance Procedures," *Proceedings of the 27th Joint Meeting of US-Japan Panel on Wind and Seismic Effects*, Tsukuba, Japan, 1995.

H. Yeh and K.-T. Chang, "Tsunami Propagation Caused by Coastal Landslide," *Proceedings of the International Workshop on Wind and Earthquake Engineering for Offshore and Coastal Facilities*, Berkeley, CA, 1995.

D. Reed, H. Yeh, J. Yu, and S. Gardarsson, "Performance of Tuned Liquid Dampers Under Large Amplitude Excitation," *2nd International Workshop on Structural Control*, Hong Kong, 1996. Also in *Proceedings of Natural Disaster Reduction*, Washington, DC, 1996.

K.-T. Chang and H. Yeh, "Laser Induced Image for Wave Measurement," *The First Pacific Symposium on Flow Visualization and Image Processing*, Honolulu, HI, 1997.

D.A. Reed, H. Yeh, J.K. Yu, and S. Gardarsson, "Tuned Liquid Dampers under Large Amplitude Excitation." *Proceedings of 2nd European & African Conference on Wind Engineering*, Genova, Italy, 1997.

K. Wada and H. Yeh, "Experimental Study on the Reflection and Runup of Obliquely Incident Solitary Wave," *Proceedings the 44th Coastal Engineering*, Japan, 1997.

H. Yeh and T. Wakahara, "Wind-Induced Forces on a Slender Rectangular-Column Structure," *Proceedings of the 2nd European & African Conference on Wind Engineering*, Genova, Italy, 1997.

K.M. Mok and H. Yeh, "Classification of Tsunami Wave to Runup Transition using Laser-Induced Fluorescence Technique," *Ninth International Symposium on Applications of Laser Techniques to Fluid Mechanics*, Lisbon, Portugal, Vol. II, pp. 39.3.1-39.3.5., 1998.

K.M. Mok and H. Yeh, "Mass Transport of Progressive Edge Waves: A Comparison between the Full and Shallow-Water Wave Theories," *Coastal Engineering 1998*, Amer. Soc. Civil Engr., PP. 443-456, 1998.

H. Yeh and T. Wakahara, "Spectral Characteristics of Wind-Induced Forces on Rectangular Column Structures," *International Workshop on "CFD for Wind Climate in Cities,"* Hayama, Japan, 1998.

S. Gardarsson, H. Yeh, and D. Reed, "An Investigation of Sloped-Bottom Tuned Liquid Dampers," *Proceedings of the Second World Conference on Structural Control*, Kyoto, Japan, pp. 155-164, 1999.

F. Kato, S. Sato, and H. Yeh, "Large-Scale Experiment on Dynamic Response of Sand Bed around a Cylinder due to Tsunami," *Coastal Engineering 2000, ASCE*, pp. 1848-1859, 2000.

H. Yeh, F. Kato, and S. Sato, "Tsunami Scour Mechanisms around a Cylinder," in *Tsunami Research at the End of a Critical Decade*, (G.T. Hebenstreit, Ed.), Kluwer Academic Publisher, 2001, pp. 33-46.

K.M. Mok, K.K. Ieong, and H. Yeh. "Experimental observations of the flow structures at gravity current fronts." *Proceedings of the International Conference on Estuaries and Coasts*, Hangzhou, China, Vol. ll, 984-990, 2003.

S. Yim, H. Yeh, C. Sollitt, C. Pancake, and D. Cox. "A large-scale laboratory facility for collaborative tsunami research," Proceedings, Long Waves Symposium 2003, Thessaloniki, Greece, August 2003, 181-190, 2003.

M. Matsuyama, and H. Yeh, "Effects of tsunami at Sissano Lagoon, Papua New Guinea, due to submarine-landslide and tectonics origins," in *Submarine Landslides and Tsunamis*, (A.C. Yalçiner, E. Pelinovsky, E. Okal, C.E. Synolakis, Eds.), Kluwer Academic Publishers, 2003, pp.151-162.

K.M. Mok, and H. Yeh. "The interaction of gravity current with a submerged circular cylinder," *Proceedings of 6th International Conference of Hydrodynamics*, Perth, Australia, 2004.

H. Yeh, S. Tonkin, E. Heller, P. Arduino, F. Kato, and S. Sato. "Mechanisms of scour induced by tsunami runup," Proceedings of Seccond International Conference on SCOUR and EROSION, Singapore. Vol. 2, 464-471, 2004.

K.M. Mok, K.K. Ieong, and H. Yeh. "The interaction of gravity current with a submerged circular cylinder," *Hydrodynamics VI – Theory and Applications* (Cheng & Yeow, Eds.), Taylor & Francis Group, London, 2005, pp 619-625.

H. Yeh. "Tsunami forces in the runup zone," *Caribbean Tsunami Hazard: Proceedings of the NSF Caribbean Tsunami Workshop* (Ed: A. Mercado-Irizarry and P. Liu). World Scientific Publishing Co., 275-287, 2006.

L. Van Den Einde, V. Veytser, H. Yeh, A. Kamrath, and T. Warnock. "Tsunami reconnaissance repository," The 8th National Conference on Earthquake Engineering, San Francisco, 2006.

C.D. Peterson, R.K. Chadha, K.M. Cruikshank, M. Francis, G. Latha, T. Katada, and H. Yeh. "Preliminary comparison of December 26, 2004 tsunami records from SDE India and SW Thailand to paleotsunami records of overtopping height and inundation distance from the central Cascadia margin, USA," The 8th National Conference on Earthquake Engineering, San Francisco, 2006.

T. Katada, N. Kuwasawa, H. Yeh, and C. Pancake. "Integrated Simulation of Tsunami Hazards," The 8th National Conference on Earthquake Engineering, San Francisco, 2006.

K.K. Ieong, K.M. Mok and H. Yeh. "Fluctuation of the Front Propagation Speed of Developed Gravity Current," Proceedings of the Conference of Global Chinese Scholars on Hydrodynamics, (Ed. By Zhu, D. X., Zhou and, Yang, X. C.), Shanghai University Press, Shanghai, 351-355, 2006.

H. Yeh and W. Li. "Tsunami Scour and Sedimentation," Proceedings of the 4th International Conference on Scour and Erosion (ICSE-4 Tokyo). 95- 106, 2008.

K.M. Mok, C.S. Ieong, K.I. Hoi, and H. Yeh, "The impact of a gravity current with a vertically mounted circular cylinder." IEEE Proceedings of 2011 International Conference on Fluid Dynamics and Thermodynamics Technologies, Bali, Indonesia. 2011.

K.M. Mok,, H. Yeh, K.K. Ieong, and K.I. Hoi, "Flow entrainment of gravity currents." Proceedings of ASME-JSME-KSME Joint Fluids Engineering Conference, Shizuoka, Japan. 2011.

H. Yeh, B. Seiffert, and E. Zhang. "Tensor-field visualization for wake under single pulse flow." The 2011 IAHR Conference, Brisbane, Australia. 2011.

H. Yeh, and W.W. Li. "Tsunami amplification and breaking along a vertical wall," The 2011 IAHR Conference, Brisbane, Australia. 2011.

Non-Refereed Conference Proceedings, and Others

H. Yeh, "Transient Interceptor Tile Drainage on Irrigated Sloping Land," M.S. Thesis, Washington State University, 1977, 174 pages.

H. Yeh, "Nonlinear Edge Waves," *Report No. UCB/HEL-83/04*, University of California, Berkeley, 1983, 178 pages. (Ph.D. Thesis).

H. Yeh, "Vorticity Conditions at a Fluid-Fluid Interface," Paper presented at 1993 Free-Surface Turbulence Workshop, at California Institute of Technology, Pasadena, CA, 1993.

J.F. Lander and H. Yeh, "Report of the International Tsunami Measurements Workshop," Estes Park, CO, 1995.

H. Yeh, "Kuril Islands Earthquake of October 4, 1994," *EERI Special Earthquake Report*, Earthquake Engineering Research Institute Newsletter, January 1995.

C.M. Petroff, J. Bourgeois, and H. Yeh, "The February 21, 1996 Chimbote Tsunamis in Peru," *EERI Special Earthquake Report*, Earthquake Engineering Research Institute Newsletter, May 1996.

H. Yeh, S. Sato, and F. Kato, "Tsunami Scour Mechanisms around a Cylinder, " *IUGG99*, Birmingham, UK, 1999.

F. Kato, S. Sato, and H. Yeh, "Large-Scale Experiment on Dynamic Response of Sand Bed around a Cylinder due to Tsunami," *Proceedings of the 31st Joint Meeting of U.S. - Japan Panel on Wind and Seismic Effects*, 1999.

KR98-13 Cruise Report – Papua New Guinea, JAMSTEC, SOPAC, and NSF, 1999

F. Kato, S. Sato, and H. Yeh, "Large-Scale Experiments on Dynamic Response of Sand Bed around a Cylinder due to Tsunami," *International Conference on Coastal Engineering*, July 2000.

H. Yeh, "Tsunami Scour Mechanisms around a Cylinder," *Hazards 2000*, Tokushima, Japan, May 2000.

M. Matsuyama and H. Yeh, "Numerical Simulations of the 1998 PNG Tsunami," *Western Pacific Geophysics Meeting*, Tokyo, Japan, 2000.

S. Tonkin, H. Yeh, F. Kato, and S. Sato, "Scour Mechanisms around a Vertical Cylinder due to Tsunami Runup Action," *Western Pacific Geophysics Meeting*, June, 2000.

H. Yeh. "The tsunami perspective." In: Improved Global Bathymetry: Final Report of SCOR Working Group 107, IOC/UNESCO 2001, 37-39.

G.F. Carrier and H. Yeh, "Tsunami Runup and Drawdown on a Plane Beach," PACON 2002, Makuhari, Japan, July 2002.

K.M. Mok, K.K. Ieong, and H. Yeh, "Development of Experimental Facility at University of Macau for Gravity Current Researches," Rep. No. CE-2002-03, University of Macau, October 2002.

S. Yim, H. Yeh, C. Sollitt, C. Pancake, and D. Cox, "A Large-Scale Laboratory Facility for Collaborative Tsunami Research," Proceedings, Long Waves Symposium 2003, Thessaloniki, Greece, 181-190, August 2003.

H. Yeh and G.F. Carrier, "Tsunami on a Plane Beach," Proceedings, Long Waves Symposium 2003, Thessaloniki, Greece, August 2003.

H. Yeh, H., C. Peterson, R.K. Chadha, G. Latha, and T. Katada. "The Great Sumatra Earthquake and Indian Ocean Tsunami of December 26, 2004: Rep. #2. Tsunami Survey along the Southeast Indian Coast." EERI Special Earthquake Report, 5-8, March 2005.

Yeh, H., Peterson, C., Chadha, R.K., Latha,G., Katada, T., Francis, M., Singh, J.P. "The December 26, 2004, Indian Ocean tsunamis: A reconnaissance survey report for the South-East Indian coast." Proceedings of the Fifth International Symposium WAVES 2005, Madrid Spain, Paper # 218, July 2005

H. Yeh, I. Robertson, and J. Preuss. "Development of Design Guidelines for Structures that Serve as Tsunami Vertical Evacuation Sites," Washington State Department of Natural Resources, Report 2005-4, 34 pp., November 2005.

H. Yeh, C. Pancake, D. Keon, M. Lindell, C. Prater, and T. Katada. "Community Risk Management of Hurricane and Tsunami Surge Hazards," Human and Social Dynamics Meeting, Washington DC, September 2006.

H. Yeh. "Tsunami load determination for on-shore structures," Fourth International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo 415-422, March 2007.

H. Yeh. "Integrated Simulation of Tsunami Hazards," Federation of Indian Chambers of Commerce and Industry, International Conference on Marine-Hazards & Opportunities, Chennai, India, July 2006.

H. Yeh. "Tsunami Reconnaissance Data Repository," Federation of Indian Chambers of Commerce and Industry, International Conference on Marine-Hazards & Opportunities, Chennai, India, July 2006.

H. Yeh. "Free Surface Dynamics," Philip Liu Symposium, Cornell University, September 2006.

H. Yeh. "Tsunami Load Determination for On-Shore Structures," DFG – Round Table Discussion: Near- and Onshore Tsunami Effects, Forschungszentrum Küste (FZK), Hannover, Germany, April 2007.

C. Janik, M. Bailey, D. Keon, C. Pancake, and H. Yeh, "Web-based Tsunami Visualization", Proceedings of Flucome 2007: The 9th International Symposium on Fluid Control, Measurement, and Visualization, Tallahassee, FL, September 16-19, 2007.

C.M. Pancake, R.A. Dalrymple, P.J. Lynett, F.L. Williams, and H.H. Yeh. "A virtual organization to develop complex, multi-scale models addressing the impact of inundation on natural and man-made environments." Proceedings of 2009 NSF Engineering Research and Innovation Conference, Honolulu, Hawaii, 2009

H. Yeh, T. Fiez, and J. Karon. "A Comprehensive Tsunami Simulator for Long Beach Peninsula. Phase-1: Framework Development." Washington State Military Department, 27 pp., July 2009.

INVITED LECTURES AND SEMINARS

"Nonlinear Progressive Edge Waves," 1st Annual Ocean Engineering Seminar, Pacific Northwest University, Seattle, 1985.

"On Standing Edge Waves," Coastal Engineering Research Center, Vicksburg, Spring 1986.

"On Progressive Edge Waves," Aeronautic/Astronautics Graduate Seminar, University of Washington, 1985; Fluid Mechanics Seminar, University of Southern California, 1986; Special Seminar, Northwestern University, 1986; Special Seminar, University of Tokyo, Japan, 1986; Ocean Engineering Seminar - Oregon State University, 1987

"On Bores on Beaches," Special Seminar, University of Tokyo, Japan, 1986; Special Seminar, Tohoku University, Japan, 1986; Special Lectures for Surf Zone Dynamics, Kyoto University, Japan, 1986; Physical Oceanography Seminar, University of Washington, 1987

"The 1983 Japan Sea Earthquake Tsunami," University of British Columbia, Vancouver, Canada, 1991.

"Vorticity Generation Mechanisms at the Air-Water Interface," Department of Geophysics, Tohoku University, Japan, 1991; Fluid Mechanics Seminar, Mechanical and Aerospace Engineering, Cornell University, 1991; Dept. of Naval Architecture and Offshore Engineering, University of California, Berkeley, 1991; Ocean Engineering Seminar, University of California, Santa Barbara, 1991; Fluid Mechanics Seminar, Graduate Aeronautical Laboratory, California Institute of Technology, 1991.

"Vorticity Generation Mechanisms at the Air-Water Interface," Joint Seminar: Aerospace Engineering and Civil Engineering, University of Southern California, 1991; Fluid Mechanics Seminar, Mechanical Engineering, Stanford University, 1991; Battelle/Marine Sciences Laboratory, 4/27/90; Applied Mathematics Seminar, University of Washington, 1990.

"Hydrodynamics of Bores" Tsunami Engineering Seminar, Tohoku University, Japan, 1991; Environmental Dynamics Seminar, University of Western Australia, Perth, 1991; Dept. of Mechanical and Environmental Engineering, University of California, Santa Barbara, 1991; Dept. of Oceanography, Naval Postgraduate School, Monterey, 2/22/91; Environmental Fluid Mechanics Seminar, Stanford University, 1991.

"Salt-Water Intrusion," University of Washington/University of British Columbia Fluid Workshop, UW, Seattle, 1992.

"Numerical Simulations of Bores using the Random-Choice Method," Mechanics and Structures Seminar, University of Tokyo, 1993.

"Free-Surface Dynamics," Aeronautics & Astronautics Seminar, University of Washington, Seattle, 1993.

"The Flores-Island Tsunamis," Civil Engineering Seminar, University of British Columbia, Canada; Seismology Seminar, California Institute of Technology, Pasadena; Civil Engineering Seminar, University of Southern California, Los Angeles, 1993.

"SEGM Seminar," Department of Civil Engineering, University of Washington, Seattle, 1993.

"Landslide Generated Waves," US Army Corps of Engineers, Vicksburg, MS, 1994.

"Free-Surface Dynamics," Northwest Research, Bellevue, Washington, 1994.

"Evolution of Landslide Generated Waves"; University of California, Berkeley; Chuo University, Tokyo, Japan; Centro de Investigacion Cientifica y Educacion Superior de Ensenada, Mexico; 1995.

"Shikotan Island Tsunamis," Pacific Marine Environmental Laboratory, NOAA, Seattle, Washington, 1995.

"Wind-induced Forces on Slender Structures," Department of Civil Engineering, University of Washington, 1997.

"Defining and Quantifying Microscale Wave Breaking with Infrared Imagery," DRS/DRPI seminar, Kyoto University, Japan, 1997.

"Scaling Effects on the Mixing Process of Lock-Exchange Gravity Currents," DRS/DRPI seminar, Kyoto University, Japan, 1997.

"Defining and Quantifying Microscale Wave Breaking with Infrared Imagery," Gifu University, Japan, 1997.

"Landslide Generated Tsuanmis," Japan Society of Civil Engineering, Chubu Section, Nagoya, Japan, 1997.

"Tsunami Threat in Pacific Northwest," DRS/DPRI seminar, Kyoto University, Japan, 1997.

"Evolution of Landslide Generated Waves," DRS/DPRI seminar, Kyoto University, Japan, 1997.

"Defining and Quantifying Microscale Wave Breaking with Infrared Imagery," The University of Tokyo, Japan, 1997.

"Tsunamis: Their Unexpected Coastal Effects," National Defense Academy, Japan, 1997.

"Lessons Learned from Tsunami Survey," DRS/DPRI seminar, Kyoto University, Japan, 1997.

"Wind-Induced Vibration of Slender Rectangular-Column Structure," Shimiz Research Institute, Shimiz Corporation, Tokyo, Japan, 1997.

"Wave Breaking Observed by Infrared Imagery," Public Work Research Institute, the Ministry of Construction, Tsukuba, Japan, 1997.

"Spectral Characteristics of Wind-Induced Forces on Rectangular Column Structures," the University of Tokyo, Tokyo, Japan, 1998.
"Fluid-Structure Interactions," Tokyo Institute of Polytechnics, Atsugi, Japan, 1998.
"Papua New Guinea Tsunami," School of Oceanography, University of Washington, 1999.
"Field Observations and Large Scale Laboratory Experiments for Two-Phase (Sediment-Water) Flows," Department of Civil & Environmental Engineering, University of Washington, 1999.
"Scour Mechanisms around a Vertical Cylinder Due to Tsunami Runup Action," DRRI seminar, Kyoto University, Japan, 1999.
"Major Simulation Effort for Earthquake Engineering in the United States," and "Global Considerations for Natural Environmental Hazards," *Hazards 2000*, Tokushima, Japan, 2000.
"Numerical Simulations of the 1998 PNG Tsunami," the joint PMEL/UW/JAMSTEC Seminar, PMEL, NOAA, August, 2000.
"Simulations of the 1998 PNG Tsunamis: Submarine-Landslide vs. Tectonics Origin," NATO-Advanced Research Workshop, Istanbul, Turkey, May 2001.
A Distinguished Lecture "Gravity Currents and Internal Bores," University of Macau, December 2001.
"Recent Advancement in Coastal Engineering for Tsunamis," Joint CSPBA/ACE Joint Annual Conference, San Francisco, November 2002.
"Tsunami Scour around a Cylinder," the University of Tokyo, Tokyo, Japan, January 2003.
"Tsunamis," COAS, Oregon State University, March, 2003.
"A Shared-Use Large-Scale Multidirectional Wave Basin for Tsunami Research," IUGG 2003, Sapporo, Japan, July 2003.
"On George Carrier," Long Waves Symposium 2003, Thessaloniki, Greece, August 2003.
"Recent and Future Tsunami Research in the United States: NEES, NTHMP and OSU," the Japan-U.S. Joint Seminar on Tsunami Disaster Prevention Studies, at the Port and Airport Research Institute, Yokosuka, Japan. October 2003.
"Tsunami Scour and the Effect of Pore-Pressure Gradient," the University of Tokyo, Tokyo, Japan, December 2003.
"Recent and Future Tsunami Research," Gunma University, Gunma, Japan, December 2003.
"Integrated Tsunami Scenario Simulation," NSF Caribbean Tsunami Workshop, San Juan, P.R., March 2004.
"Tsunami Forces in the Runup Zone," NSF Caribbean Tsunami Workshop, San Juan, P.R., March 2004.
"Exact Runup Solution of Fully Nonlinear Long-Waves for Arbitrary Offshore Disturbance," Thematic Program in Partial Differential Equations; Fields Institute for Research in Mathematical Sciences, Toronto, Canada, June 2004.
"Long-wave propagation: Analytic-numeric hybrid approach," The Third International Workshop on Long-Wave Runup Models, Catalina Island, CA, June 2004.
"Maximum Force Distribution in Tsunami Runup Zone," *Hazards 2004*, Hyderabad, India, December 2004.
"Envelope curves of maximum flow speed and momentum flux in the tsunami runup zone," International Symposium on Future Tsunami Disaster Mitigation in Kobe, January 2005.
"Development of Design Guideline for Tsunami Shelters," First International Conference on Urban Disaster Reduction, Kobe, January 2005.
"Preliminary field survey of the earthquake and tsunami of 26 December 2004," The Ozkan-Haller COAS Seminar, Oregon State University, Oregon, February 2005.
"Reconnaissance survey for the 26 December Great Indian Ocean Tsunamis," The 2005 EERI Annual Meeting, Ixtapa, Mexico, February 2005.
"On the 26 December 2004 Great Indian Ocean Tsunami," presented at Palm Springs, March, 2005.
"Preliminary field survey of the earthquake and tsunami of 26 December, 2004," EERI Tsunami Briefings, Vancouver, Canada, April 2005.
"Tsunami Field Survey," EERI Tsunami Briefings, Porland, Oregon, April 2005.

"Infrastructure Impacts of Indian Ocean Tsunami, December, 2004," Kick-off Seminar, Department of Civil Engineering, Oregon State University, September 2005.

"Initial-Value Problems for Axisymmetric Waves and the Applications to Tsunamis," Applied Mathematics and Computation Seminar, Oregon State University, October 2005.

"Tsunamis and Natural Hazards," at O.H. Hinsdale Wave Research Laboratory Coastal Symposium and Reunion, Oregon State University, November 2005.

"Tsunami Research at OSU and its Applications," Cascadia Region Earthquake Workgroup Meeting, Oregon State University, January 2006.

"Tsunami Reconnaissance Data Repository," 8th National Conference of Earthquake Engineering, San Francisco, April 2006.

"Tsunamis," CCEE Graduate Seminar, Oregon State University. May 2006

"Tsunamis," McMinnville City Club, McMinnville, Oregon, May 2006.

"Tsunamis & Potential Tsunami Loads," Tainan Hydraulic Laboratory, National Cheng Kung University, Taiwan, May 2006.

"Tsunami Scour and the Effect of Pore-Pressure Gradient," Tainan Hydraulic Laboratory, National Cheng Kung University, Taiwan, May 2006.

"Chapter 4: Tsunami Loading," ATC-64 Project Review Panel Meeting, Redwood City, CA, May 2006.

"Needs and Importance of Shallow-Water Bathymetry and the Development of Tsunami Computational Portal," GEBCO Sub-Committee on Digital Bathymetry Meeting, Bremerhaven, Germany, June 2006.

"Tsunami Reconnaissance Data Repository," 4th NEES Annual Meeting, Washington DC, June 2006.

"Tsunami Scour," Indian Institute of Technology, Madras, India, July 2006.

"Tsunamis," REU Students, Oregon State University. August 2006

"Initial-Value Problem for Axisymmetric Wave and the Applications to Tsunamis," Environmental Fluid Dynamics Seminar Series, Massachusetts Institute of Technology, November 2006

"Jump Condition and Free-Surface Dynamics," Applied Mathematics and Computation Seminar, Oregon State University, February 2007.

"On Tsunami Forces," Seminar for the Renaissance Project, University of Oklahoma, February 2007.

"Tsunami load determination for on-shore structures," Tokyo Institute of Technology, March 2007

"Tsunami Scour and the Effect of Pore-Pressure Gradient," DPRI Seminar, Kyoto University, March 2007.

"Tsunami load determination for on-shore structures," DFG – Round Table Discussion: Near- and Onshore Tsunami Effects, Forschungszentrum Küste (FZK), Hannover, Germany, April 2007.

"Tsunami Research in the NSF," on behalf of Richard Fragaszy, DFG – Round Table Discussion: Near- and Onshore Tsunami Effects, Forschungszentrum Küste (FZK), Hannover, Germany, April 2007.

" Tsunami Shelters," Lecture to NEES REU students, Oregon State University, July 2007.

"Tsunami Characteristics: Myths & Facts," Oregon Public Broadcasting (OPB) Salon Series, Corvallis, Oregon, October 2007.

"Vertical Evacuation & Scenario Simulations," Oregon Public Broadcasting (OPB) Salon Series, Corvallis, Oregon, October 2007.

" On Hydrodynamics of Bores," Physics Colloquium, Oregon State University, November 2007.

" On Tsunamis." Coastal Hazards Class, Oregon State University, January 2008.

"Advances in Laboratory Study of Waves," International Symposium on Advances in Hydrological & Oceanic Sciences, National Central University, March 2008; also at Tainan Hydraulics Laboratory, National Cheng Kung University, March 2008; also at National Kaosiung Marine University, March 2008.

"Initial-Value Problem for Axisymmetric Wave and the Application to Tsunamis," Taiwan Oceanographic Research Institute, March 2008.

"Initial-Value Problem of Cylindrical-Wave Equation and the Application to Tsunamis," National Cheng Kung University, March 2008

"Effects of Nearshore Bathymetry on Tsunamis" Oregon Seafloor Mapping Workshop, Corvallis, Oregon, March 2008.
"Comprehensive Tsunami Simulator for Long Beach Peninsula," State/Local Tsunami Workgroup Meeting, Ocean Shore, Washington, April 2008.
"Initial-Value Problem of the Cylindrical-Wave Equation and the Applications to Tsunamis," NSF-CBMS Conference on Water Waves, Howard University, Washington DC, May 2008.
"Laboratory Study of Tsunamis," NSF-CBMS Conference on Water Waves, Howard University, Washington DC, May 2008.
"On Tsunami Scour," National Central University, Taiwan, September 2008.
"Design Tsunami Forces for Onshore Structures," ICDM2008: International Conference on Disaster Prevention Technology and Mitigation Education (keynote), National Yunlin University, Taiwan, September 2008.
"On Tsunami Forces," Port & Airport Research Institute, Yokosuka, Japan, October 2008.
"On Tsunami Scour & Sedimentation," Ujigawa Open Laboratory, Kyoto University, October 2008.
"Initial-Value Problem for Axisymmetric Wave and the Application to Tsunamis," University of Tokyo, November 2008.
"Tsunami Scour and Sedimentation," The 5th International Conference on Scour and erosion, (Keynote Speeker). Tokyo, Japan, November 2008.
"Comprehensive Tsunami Simulator: Long Beach Peninsula, WA," Tsunami Evacuation Building Workshop, Canon Beach, September 2009.
"Tsunami Evacuation Building Cannon Beach City Hall," Tsunami Evacuation Building Workshop, Seaside, September 2009.
"Vertical Evacuation & Scenario Simulations", Tsunami Evacuation Building Workshop, Portland, September 2009.
"Coastal Defense and Structural Design," DHS Tsunami Research Workshop, Chapel Hill, NC, October 2009.
"Tsunami Scour and Sedimentation," DHS Tsunami Research Workshop, Chapel Hill, NC, October 2009.
"Initial-Value Problem for Axisymmetric Wave and Applications to Tsunamis," Applied Mathematics Seminar, Ohio State University, October 2009.
"Mach Reflection of a Solitary Wave," American Mathematical Society Meeting, Penn State University, October 2009.
"Tsunami Evacuation Building Cannon Beach City Hall," Cannon Beach Town Meeting, December 2009.
"Tsunami Effects on Coastal Infrastructures and How to Evaluate Them," Northwest Transportation Conference, Oregon State University, February 2010.
"Mach Reflection of a Solitary Wave: Revisited," Applied Mathematics and Computation Seminar, Oregon State University, February 2010
"Sediment motion and scour due to transient long-wave forcing (tsunami)," American Geophysical Union, Ocean Sciences Meeting, Portland, Oregon, February 2010.
"Coastal Effects of Tsunamis," Oregon Sea Grant All-Hands Meeting, February 2010.
"Tsunami Effects on Coastal Infrastructures and How to Evaluate Them," RGI PhD Congress. Pattaya, Thailand, April 2010.
"Rogue Waves," Cold Water Safety Training- The Dalles, Oregon, June 10, 2010.
"On Mach Reflection," University of Tokyo, June 2010.
"KP Solitons: Part 1. Experiments," The Second International Conference Nonlinear Waves: Theory and Applications, Tsinghua University, Beijing, China, June 2010.
"Gravity Currents and Internal Bores," Ocean University of China, Qingdao, China, June 2010.
"Tsunami Effects on Coastal Infrastructures and How to Evaluate Them," Korea Maritime University, July 2010.
"Comprehensive Tsunami Simulator for Cannon Beach OR," Cannon Beach City Council Work Session, Cannon Beach, Oregon, August 2010.

"Estimation of Design Tsunami Forces," ASCE, COPRI Congress, Memphis, Tennessee, November 2010.

"Tsunamis: What they are. How they strike," ORWARN 4th Annual Conference, Ashland, Oregon, October 2010.

"Tsunami Damage to Infrastructure and the consequence for a small coastal community," ORWARN 4th Annual Conference, Ashland, Oregon, October 2010.

"Freak Waves in the Columbia River," Cold Water Safety Training- The Dalles, Oregon, February 22, 2011.

"Mach Reflection – Validation of Theory with Experiments," The Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory, The University of Georgia, Athens, Georgia, April 2011.

"On Coastal Propagation of Subaerial Landslide Generated Waves," Tsunami Generation by Subaerial/Submarine Landslides, Galveston Texas, April 2011.

"Obliquely Incident Solitary Wave onto a Vertical Wall," APAC 2011.

RESEARCH GRANTS

Prior Research

"Research Initiation: Mechanics of Tsunamis at a Shoreline," National Science Foundation, $69,970, 1985-1987

"Research Initiation: Mechanics of Tsunamis at a Shoreline Supplement," National Science Foundation, $4,916, 1985-1987

"Instability and Evolution of Nonlinear Edge Waves," Graduate School Research Fund, $3,534, 1985-1987

"Progressive Edge Waves," Office of Naval Research, $272,814, 1987-1990

"Coastal Effects of Tsunamis, National Science Foundation, $110,000, 1988-1990

"Coastal Effects of Tsunamis Supplement," National Science Foundation, $5,472, 1989-1990

"Coastal Effects of Tsunamis," National Science Foundation, $61,991, 1990-1992

"Gravity Currents," Graduate School Research Fund, $5,451, 1990-1991

"International Workshop on Long Wave Runup," (co-PI with C. Synolakis and P. Liu), National Science Foundation, $39,200, 1990-1991

"Progressive Edge Waves," Office of Naval Research, $25,000, 1990-1991

"Gravity Currents and Internal Bores," Washington Sea Grant, $168,518, 1991-1992

"Three-Dimensional Tsunami Run-Up," National Science Foundation, $377,811, 1992-1995

"IPA Program," US Army Corps of Engineers, $26,518, 1992-1993

"Salt-Water Intrusion, Washington Sea Grant, $191,936, 1993-1995

"Tuned-Liquid Dampers," (Co-PI with D. Reed), National Science Foundation, $281,107, 1993-1995

The Infrared Signature of Free-Surface Wakes, (Co-PI with A. Jessup), Office of Naval Research, $201,667, 1993-1995

"International Workshop on Tsunami Measurements," (Co-PI with J. Lander), National Science Foundation, $60,000, 1994-1996

"International Workshop on Long-Wave Runup Models," (PI with P. Liu and C. Synolakis), National Science Foundation, $62,125, 1994-1996

"Tuned-Liquid Dampers Supplement," (Co-PI with D. Reed), National Science Foundation, $19,373, 1995-1997

"Tsunami Survey for the February 21, 1996 Peruvian Earthquake," National Science Foundation, $12,603, 1996-1997

"International Travel Grant: 1996 Tsunami Workshop in Kamchatka," National Science Foundation, $10,000, 1996-1997

"Local Tsunami Effects and Their Mitigation Measures," (PI with C. Petroff), National Science Foundation, $330,600, 1996-1999

"Three Dimensional Effects of Tsunami Runup onto a Coastline," National Science Foundation, $249,002, 1996-1999

"Workshop on Seafloor Deformation Models," (Co-PI with P. Liu and C. Synolakis), National Science Foundation, $35,000, 1997-1998

"International Workshop on Bathymetry and Coastal Topography Data Management," National Science Foundation, $26,848, 1998-1999

"International Travel Grant to Support U.S. Involvement in the European Geophysical Society – XXVI General Assembly," National Science Foundation, $24,850, 2001-2002

"Workshop on Research with NEES Tsunami Facility," National Science Foundation, $34,141, 2001-2002

"Workshop on the development of a Tsunami Scenario Simulation Program," National Science Foundation, $10,000, 2002-2003.

"The Sammamish, Union, Washington Analysis and Modeling Project," King County, $446,502, 2001-2003

"Cooperative Research: Coastal Effects of Tsunamis," (PI with C. Petroff), National Science Foundation, $268,444, 2000-2004; RET Supplement, $10,000, 2001-2004

"International Travel Grant to Support U.S. Involvement in HAZARDS-2002," National Science Foundation, $15,250, 2002-2004

"Upgrading Oregon State's Multidirectional Wave Basin for Remote Tsunami Research," NSF, $5,407,653, NSF, Feb 2001- Sept 2004, co-PI.

"Development of Tsunami Digital Library: Incubation Activity," Oregon Sea Grant, $9,108, 2003-2004.

"WSMD Seismic/Tsunami Construction, Phase-1: Data Collection and RFP," (PI with I. Robertson), Washington State Military Department and National Oceanic & Atmospheric Administration (NOAA), $65,761, 2003-2004.

"Equipment Proposal: Directional Wavemeker System for the 3-D Tsunami Basin," (PI with J. Hammack), National Science Foundation, $183,857, 2003-2006.

"International Travel Grant to Support U.S. Involvement in HAZARDS-2004," National Science Foundation, $12,200, 2004-2005

"Computational Support for Tsunami Research," (Co-PI with C. Pancake), University of Alaska and NOAA, $230,000 plus $178,500, 2004-2006; approx. $150,000, 2006 – 2007.

"Tsunami Survey Data," (Co-PI with C. Pancake), National Science Foundation via San Diego Supercomputing Center, $134,997, 2005-2006; $ 115,135, 2006 – 2007.

"Workshop on Collaborative Research through an Integrated Tsunami Scenario Simulation," National Science Foundation, $181,615, 2003-2008

"Tsunamis in 3-D Bathymetry," (PI with D. Henderson, R. LeVeque), National Science Foundation, $625,843, 2003-2008

"Comprehensive Tsunami Simulator for the Long Beach Peninsula, Phase-1: Framework Development," Washington State Military Department/NOAA, $ 60,000, 2007 – 2009.

"Collaborative Research: DRU: Community Risk Management of Hurricane and Tsunami Surge Hazards," (PI with C. Pancake), National Science Foundation, $ 337,966, 2005–2009.

"CI-TEAM Demonstration: Tsunami Shelter Challenge," (Co-PI with R. Steckler). National Science Foundation, $ 249,801, 2007 – 2008.

"Localized Extreme Tsunami Run-up," Oregon Sea Grant, $276,498, 2008 – 2009

"A Virtual Organization to Develop Complex, Multi-scale Models Addressing the Impact of Inundation on Natural and Man-made Environments," (Co-PI with C. Pancake). National Science Foundation, $ 190,000, 2007 – 2009.

Current Research

"Coastal Effects of Tsunamis," Oregon Sea Grant, $329,591, 2010 – 2012.

TEACHING

Courses Taught

University of Washington

CEE 472	Environmental Hydraulics
CEE 599	Free-Surface Dynamics
CEWA 540	Hydrodynamics
CEWA/AMATH 544	Water Wave Mechanics
CIVE 342	Fluid Mechanics
CIVE 345	Hydraulic Engineering
CIVE 448	Open Channel
CIVE 472	Environmental Hydraulics
CIVE 473	Coastal Engineering
CIVE 477	Open Channel
CIVE 570	Hydrodynamics

PE license review course
Teaching workshop

Oregon State University

CE 311	Fluid Mechanics I
CE 417/517	Hydraulic Engineering Design
CE 630	Wave Mechanics I
CE 631	Wave Mechanics II
CE 634	Long Wave Mechanics
CE 640	Hydrodynamics for Ocean Engineers

Students

Doctoral

Abdulhamid Ghazali, “Bore Propagation on the Beach,” Spring 1989, Bechtel Corporation
Ram Srinivasan, “Asymptotic Solution of Weakly Nonlinear, Dispersive Wave Propagation Problems by Fourier Analysis,” Summer 1989
Kai Meng Mok, “Higher-Mode Edge Waves,” Summer 1992, (the 1992 Straub Award), University of Macau
Kuo-Tung Chang, “Evolution of Landslide-Generated Edge-Wave Packet,” Winter 1995, National Kaohsiung Institute of Marine Technology
Sherrill Lingel, “Scaling Effects on the Mixing Process of Lock-Exchange,” Spring 1997, Rand Corporation, Santa Monica
Sigurdur Gardarsson, “Shallow-Water Sloshing,” Spring 1997, University of Iceland, Iceland
Eric Dolven, “Sea Quake Waves – Standing Wave Dynamics with Faraday Excitation and Radiative Loss,” 2002, Cray Inc., Seattle
Halldor Arnason, “Interaction between an Incident Bore and a Free-Standing Coastal Structure,” Winter 2005.
Kevin Schock, “Mixing and Light Conditions causing Phytoplankton Community Shift in the Spring Diatom Bloom,” 2007, King County, Seattle
Wenwen LI, (current)
Nuttawut Thanasisathit (Visiting PhD, current)
Yong Shuai Chen (current)

Masters

Øystein Kristiansen, “Wave-Induced Current in a Simulated Ice-Covered Water Body,” Spring 1985
Ezzat El-Sadek, “Dumping Effects of Submerged Breakwater,” Spring 1985
Ingunn Marton, “Runup of a Single Bore on a Beach,” Fall 1987

Kai Meng Mok, "Turbulence in Bore and Hydraulic Jump," Spring 1988
Nigel White, "Mathematical Observation of Depth Averaged Hydrodynamic Equations," Spring 1989
Ricardo Babaran, "Analysis of Ferry Wake by Complex Demodulation," Spring 1989
Mandira Shrestha, "Open-Channel Flow through Screens," Spring 1989
Cami Grandinetti, "Gravity Currents and Internal Bores," Spring 1992
Sigurdur Gardarsson, "Numerical Simulation of Bores using the Random Choice Method," Spring 1993
Lisa Renehan, "Landslide-Generated Surface Waves in Lake Washington," Spring 1993
Linda Meyer, "Gastineau Channel Mixing Properties,"* Winter 1994
Christopher Zappa, "Infrared Field Measurements of Sea Surface Temperature: Analysis of Wake Signatures and Comparison of Skin Layer Models," Spring 1994
Thorhildur Gudmunsdottir, "Transport Model for Chimbote Bay in Peru," Winter 1998
Olof Ros Karadottit, "Numerical Simulation of Internal Bores," Fall 2000
Susan Tonkin de Vries, "Scour Mechanisms around a Cylinder due to Tsunami," Winter 2001
Christopher Renedo, "Evolution of Two Large-Scale Tsunami Simulations,"* Winter 2005.
Ka Kit Ieong, "Investigation on Gravity Currents with Laser Induced Fluorescence Technique," Summer 2005 (Co-Supervisor with Kai Meng Mok).
Wenwen Li, "Analysis of Pressure Variations Observed at the Ocean Bottom during the 2003 Tokachi-Oki Earthquake," September 2006.
Betsy Seiffert, "Flow Visualization for Wake Formation under Solitary Wave Flow", June 2010.
Kun Liu (current)

(* non thesis paper)

Graduate Committee Service

Ph.D.

Jiing-Yih Liou, Jingye Wang, Richard Stockstill, Jinkyu Yu, Antti Arola, Halldor Arnason, Paul DeVries, Chris Zappa, Michael Pantazopoulos (Mechanical Engineering), Ai-Kuo Lee (Mechanical Engineering), Hitoshi Matsuura (Oceanography), Daniel Codiga (Oceanography), Robert Hallberg (Oceanography), Karl Newyear (Oceanography), Lei Wang (Applied Math), Raymond Finch (Applied Math), David Poole (Statistic), Quinn Smithwick (AA), Leif Nathaniel Thomas (Oceanography) – at University of Washington

T.T. Ton (Mathematics), Guoning Chen (EECS), Catalan Mondaca (CE08), Ethan Dereszynski (EECS), Dylan Keon (Geoscience 07), Fernando Morales (Math 08), Matthew Clothier (EECS 08), Guoning Chen (EECS 09), Saikat Roy (EECS, current), Theresa Migler (EECS, current), Mohammad Shahed Sorower, Kshitij Judah (EECS, current) – at Oregon State University

MSCE

Gregory Laird, Thomas Mckeon, Olle Dahlberg, Bruce Barker, Laura Belvin, Kathleen Flenniken, Matthew Gunawan, Lise Johannesen, Halldor Arnason, Christine Richardson, Doug Olson – at University of Washington

MSE

Abdul Chaudhry, Jiyao Yang, Paul DeVries, Cecile Viozat, Roy Schiff, Lionel Shaul, Ruth Fogelberg – at the University of Washington

MS

Saket Joshi, Sinha Shriprakash, Amit Phalgune, Shradda Sorte, Ethan Derezynski (07), Pavan Kumar Vatturi (08), Scott King, Paul Strauss, Madan Thangavelu (09), Hassan Sinky (10) (Computer Science), Samantha Sheehy (Geography); Andrea Schuetz (Atm. Sci. 07); Lisa Andes (COAS 07), Patricio Catalan, Steven Beadle – at Oregon State

University

Visiting Scholars

Dr. Kiyoshi Wada, Gifu National College of Technology, Japan, April 1993–October 1993
Dr. Ben Hodges, Stanford University, September 1994–June 1995
Dr. Toshihiro Wakahara, Institute of Technology, Shimizu Corporation, Japan, June 1995–November 1995
Dr. Sung-Dae Han, Kyungnam University, Korea, July 1995–June 1996
Dr. Kiyoshi Wada, Gifu National College of Technology, Japan, May 1996–March 1997
Dr. Kazuhide Dan, Akashi College of Technology, Japan, September 1996–July 1997
Dr. Tomoyuki Takahashi, DPRI, Kyoto University, Japan, June 2000–September 2000
Dr. Satoshi Takewaka, Tsukuba University, Japan, June 2001–August 2001
Dr. Toshitaka Katada, Gunma University, Japan, April 2001–March 2002
Dr. Nobuaki Koike, Wakayama National College of Technology, Japan, August 2001–March 2002
Mr. Mathew Francis, URS Corporation, EERI Professional Engineer Fellowship, January – December 2006
Dr. Do Sam Kim, Korea Maritime University, Korea, December 2007 – December 2008.
Dr. Nobuaki Koike, Wakayama Technical College, Japan, March 2009 – September 2009.
Dr. S.A. Sannasiraj, Indian Institute of Technology, Madras, India, January 2011 – June 2011.

3/2011