

SCHOOL of CIVIL and CONSTRUCTION ENGINEERING
OREGON STATE UNIVERSITY
College of Engineering

HUDSPETH, Robert Turner
Professor, Emeritus

BIRTH DATE
November 26, 1940

DEGREES

B.S. (with distinction), Engineering, U.S. Naval Academy, 1963
MSCE Civil Engineering, University of Washington, 1966
Ph.D. Civil Engineering, (Mathematics), University of Florida, 1974

ACADEMIC POSITIONS

Research Assistant, University of Florida, 1971-1974
Assistant Professor, Oregon State University, 1974-1979
Associate Professor, Oregon State University, 1979-1983
Professor, Oregon State University, 1983-present
External Examiner, Ph.D. thesis:
 University of Melbourne; Melbourne, Australia, 1984
 University of British Columbia; Vancouver, Canada, 1985
 University of Stellenbosch, Stellenbosch, South Africa, 1987, 1994
 University of Cape Town, Cape Town, South Africa, 1993
Director, Office of Naval Research-University Research Initiative, 1986-1991
Profesor, Curso de Ingenieria de Costas, Universidad Politecnica de Valencia, Valencia, Spain, 1987
Director, Ocean Engineering Program, Oregon State University, 1991-2002

NON-ACADEMIC POSITIONS

Officer, U.S. Navy, Civil Engineer Corps, 1963-1971
CAPT, Civil Engineer Corps, U.S. Navy Reserve (Retired)
Consultant to:
 Intersea Research Corporation, 1975, 1976, 1979
 Energy Research and Development Administration (ERDA), 1976
 Delft Hydraulics Laboratory, Delft, The Netherlands, 1976-1977
 Eager and Associates, 1977
 CH2M Hill, 1977, 1978, 1979
 Continental Oil Company (CONOCO), 1977-1978
 American Bureau of Shipping (ABS), 1977-1978
 Department of Energy (DOE), 1979, 1984, 1985, 1986
 Marathon Oil Company, 1979, 1980, 1981
 Western Canada Hydraulics Laboratory (WCHL), 1979
 Environmental Protection Agency (EPA), 1979
 Parsons, Brinckerhoff, Quade and Douglas (PBQ & D), 1979
 Dames and Moore, Inc., 1979-1980

Willamette Geotechnical Corporation, 1979
Hydro Research Science (HRS), 1980, 1981
Western Instrument Corp., 1980, 1982, 1983, 1985, 1986
EXXON Production Research Corp., 1980, 1981, 1982
Naval Civil Engineering Laboratory (NCEL), 1979-1992
Brown and Root, 1981
Ingenieurgesellschaft Meerestechnik & Seebau GmbH, Germany (IMS), 1981
C.G. Doris, France, 1981
Union Oil Company, 1981
U.S. Army, Corps of Engineers, Coastal Engrg Research Center (CERC), 1981, 1985, 1986, 1987
Naval Research Laboratory (NRL), 1981
U.S. Geological Survey (USGS), 1982
National Bureau of Standards (NBS), 1982, 1983
American Gas Association (AGA), 1982, 1983, 1984
U.S. Department of Interior, Minerals Management Service (MMS), 1982, 1983
Ogden, Beeman and Associates, 1983, 1987, 1988
TETRA TECH, Inc., 1983, 1984
Gresham Sewage Treatment Plant, Gresham, Oregon 1984
ENVIROTECH Operating Services, 1984
United Nations, 1984
Central Water and Power Research Station, Pune, India, 1984
Rockwell-Hanford, 1984-1987
PMB Systems Engineering, Inc., 1986, 1987, 1988, 1992
Watermeyer, Halcrow & Partners, Consulting Engineers, Cape Town, SA, 1986-1987
AMOCO Production, 1988
ARTEC Offshore Corp., 1988
Evans-Hamilton, Inc., 1988
TAISEI Corp., Tokyo, Japan, 1989, 1991
Houghton Mifflin Publishing Co., 1989
ITB, Bandung, Indonesia, 2nd Indonesia University Project, World Bank XVII, 1989
Polish Academy of Sciences, Gdansk, Poland, 1990
Centro de Estudios de Puertos y Costas (CEPYC), Madrid, Spain, 1990-1991, 1994, 1996
Shinozuka Research Institute (SRI), Tokyo, Japan, 1991-1992
ADK, Athens, Greece, 1996
Holland & Knight, LLP, 2007
ENSR, 2008-2009

FIELDS OF SPECIALIZATION

Stochastic Nonlinear Wave Hydromechanics

Wave Forces on Fixed and Floating Structures
Finite Element Modeling of Nearshore Circulation Dynamics
Poro-Elastic Wave-Soil Interaction
Dispersive Mass Transport in Estuaries
Stability of Marine Pipelines
Parameter Identification in Porous Media
Chaotic Behavior of Nonlinear Dynamics Systems
Penetration of Cylindrical Projectiles into Sandy Media

PROFESSIONAL ACTIVITIES

Registration

State of Oregon (No. 08371 PE)

Professional Societies

American Society of Civil Engineers (ASCE)

American Geophysical Union (AGU)

Sigma Xi

Phi Kappa Phi

Committees, Commissions and Boards

Fluid Mechanics User Committee, Oregon State University, 1975-1984

Academic Computer User Council, Oregon State University, 1976-80

Math User Committee, Oregon State University, 1983-present

Member, Cooperative Institute for Marine Resources Studies (CIMRS)

Chairman, Ocean Engineering Graduate Program, Oregon State University, 1981-present

Dept. Civil Engineering-Faculty Status Committee; 1983-present; Chairman 1984-85

OSU Student Activities Committee (SAC); 1985-1989; Co-Chairman 1986-88

Ad hoc, Engineering Education and Accreditation Committee, ECPD, 1976;1979

Publications Committee for *Journal of Waterways, Port, Coastal and Ocean Division*, ASCE, 1977-present; Vice Chairman 1981-82; Chairman 1982-1983

Editor, *Journal of Waterways, Port, Coastal and Ocean Division*, ASCE, 1982-83

Publications Committee for *Journal Hydraulics Division*, ASCE, 1979

Tidal Hydraulics Committee: Hydraulics Division, ASCE, 1976-80

Task Committee on Sea-Based Structures of the Committee on Special Structures: Committee on Metals; Structural Division, ASCE, 1978-80

Task Committee on Opportunities and Education in Tidal Hydraulics: Tidal Hydraulics Committee; Hydraulics Division, ASCE, Chairman 1981-1983

Task Committee on Microcomputer Applications in Coastal and Ocean Engineering; Waterway, Port, Coastal and Ocean Division, ASCE, 1987

Awards Committee: Waterways, Port, Coastal and Ocean Div, ASCE,

1982-1983; Chairman, 1985-1986

Waves and Wave Forces Tech Comm; Waterways, Port, Coastal and Ocean Div, ASCE, 1981-1986

Coastal Engineering Tech Comm; Waterways, Port, Coastal and Ocean Div, ASCE, 1981-1986

**Publications Chairman, Ocean Structural Dynamics Symposium, OSDS, 1982
Harbor & Coastal Engineering Award Panel, ASCE, 1984-1986; Chairman, 1985-1986**

Review Panel, Basic Research Program, Naval Civil Engineering Laboratory (NCEL), 1989-1990

Marine Board, National Research Council, National Academy of Engineering, 1990-1993

Marine Board, Executive Committee, National Research Council, 1992-1993

Research Advisory Committee, OSU College of Engineering, 1990-1995

Chairman, Technical Program, Civil Engineering in the Oceans V (CEO5) ASCE, 1990-1992

Faculty Advisory Committee, OSU Library Expansion Project, 1990-1996

Ocean Engineering Tech Comm; Waterways, Port, Coastal and Ocean Div, ASCE, 1991-1997

Ocean Engineering/Waves and Wave Forces Technical Committee, ASCE, 1998-2002

Awards

Certificate of Appreciation, ASCE, for service as Editor, *Journal of Waterways, Port, Coastal, and Ocean Div.*, 1983

College of Engineering Research Award, Oregon State University, 1985

College of Engineering Alumni Professor, Oregon State University, 1992

BOOKS and BOOK CHAPTERS

BOOKS

***Waves and Wave Forces on Coastal and Ocean Structures*, R.T. Hudspeth, World Scientific Pub., 2006.**

***The Effect of Random Seas on Pipeline Stability: Finite Element Responding of Pipeline Response Vol 2*, L. E. Borgman and R. T. Hudspeth, American Gas Assoc., 1984.**

***Civil Engineering in the Oceans V: Proceedings of the International Conference*, R. T. Hudspeth, (Editor), American Society of Civil Engineers, 1992.**

BOOK CHAPTERS

A Digital to Analog Wavemaker Simulations, R.T. Hudspeth, J.H. Nath and C.K. Sollitt, *Physical Modelling in Coastal Engineering*, R.A. Dalrymple (Editor), A.A. Balkema Pub., Inc., Boston, 1985, pp. 81-103.

A Nondeterministic Wave Force on Fixed Small Vertical Piles, H. Tuah and

R.T. Hudspeth, *Probabilistic Offshore Mechanics, Progress in Engineering Science*; Vol. 7, Ed. P.D. Spanos, CML Publications, Southampton, England, 1985, pp. 49-54.

A Nonlinear Laboratory Waves, R. T. Hudspeth, Ch. 1 in *Fluid Structure Interaction in Offshore Engineering, Advances in Fluid Mechanics*, Vol. I, Ed. S. Chakrabarti, Boston, 1994, pp. 1-41.

Wavemaker Theories, R.T. Hudspeth and R.B. Guenther, *Handbook of Coastal and Ocean Engineering*, Ch. 2, Ed. Y.C. Kim, World Scientific Pub., 2010, pp. 25-56.

Analyses by the Melnikov Method of Damped Parametrically Excited Cross Waves, R.B. Guenther and R.T. Hudspeth, *Handbook of Coastal and Ocean Engineering*, Ch. 3, Ed. Y.C. Kim, World Scientific Pub., 2010, pp. 57-86.

PUBLICATIONS

Technical Journals

Discussion of Effect of Structures on Irregular Waves Compared to Regular Waves, (with Min-Chu Chen), by Y. Oullet and Y. Morin, Paper 11494, *ASCE, Journal of the Waterways, Harbors and Coastal Engineering Div.*, 102(WW3), Aug 1976, pp. 353-358.
Effects of Nonlinearities on Wave Power Estimates, *ASCE, J Power Div.*, 103(PO1), July 1977, pp. 51-64.

Linear and Nonlinear Wave Action Estimates, (with L.S. Slotta), *ASCE, Journal of Engineering Mechanics Div.*, Vol. 104, EM2, April 1978, pp. 319-334.

Digital Simulation of Nonlinear Random Waves, (with Min-Chu Chen), *ASCE, J of Waterways, Port, Coastal and Ocean Engr Div.*, 105(WW1), Feb 1979, pp. 67-85.

Efficient FFT Simulation of Digital Time Sequences, (with L.E. Borgman), *ASCE, Journal of Engineering Mechanics Div.*, 105(EM2), April 1979, pp. 223-235.

Dynamic Covariance Equations for Hinged Wavemakers, (with J.W. Leonard), *Engineering Structures*, Vol. 2, October 1980, pp. 217-224.

Evaluation of Sand Waves in an Estuary, (with B.R. Baliga), *ASCE, Journal Hydraulics Div.*, 107(HY2), February 1981, pp. 161-178.

Design Curves for Hinged Wavemakers: Theory, (with Min-Chu Chen), *ASCE, Journal Hydraulics Div.*, 107(HY5), May 1981, pp. 533-552.

Design Curves for Hinged Wavemakers: Experiments, (with J.W. Leonard and Min-Chu Chen), *ASCE, J Hydraulics Div.*, 107(HY5), May 1981, pp. 553-574.

Wave Power Extraction from a Transient Heaving Cylinder, (with L.S. Slotta), *Journal of Ship Research*, Vol. 25, No. 2, June 1981, pp. 141-145.

Deterministic Fluid Forces on Structures: A Review, (with J.W. Leonard and C.J. Garrison), *ASCE, J of the Structural Div.*, 107(ST6), June 1981, p. 1041-1057.

Teaching Holistic Thought Through Engineering Design, (with K.J. Williamson), *ASEE, Journal of Engineering Education*, Vol. 72, No. 7, April 1982, pp. 698-703.

Pipeline Stability Under Finite Amplitude Waves, (with Min-Chih Huang), *ASCE, J of*

- Waterways, Port, Coastal and Ocean Engrg Div.*, 108(WW2), May 1982, pp. 125-145.
- Nonlinear Diffraction by Eigenfunction Expansions, (with Min-Chu Chen), *ASCE, J of the Waterways, Port, Coastal and Ocean Engrg Div.*, 108(WW3), Aug. 1982, pp. 306-325.
- Comparisons of Numerical Random Sea Simulations, (with H. Tuah), *ASCE, J of Waterways, Port, Coastal and Ocean Engrg Div.*, 108(WW4), Nov. 1982, pp. 569-584.
- Stream Function Solutions for Steady Water Waves, (with Min-Chih Huang), *Proceedings National Science Council, ROC(A)*, Vol. 7, No. 4, 1983, pp. 294-300.
- Diffraction By Axisymmetric Green's Function, (with Min-Chu Chen), *TN, ASCE, J of the Waterways, Port, Coastal and Ocean Engrg Div.*, V109(1), Feb. 1983, pp. 117-121.
- Nondeterministic Wave Force on Fixed Small Vertical Piles, (with H. Tuah), *Applied Ocean Research*, 5(2), April 1983, pp. 63-68. Reprinted in *Probabilistic Offshore Mechanics, Progress in Engineering Science*; 7, Ed. P.D. Spanos, CML Publications, Southampton, England, 1985, pp. 49-54.
- Stochastic Response of a Prototype Ocean Platform, (with M. Grecco), *ASCE, Journal of Structural Engineering*, 109(5), May 1983, pp. 1119-1138.
- Wave Setup/Setdown and Longshore Current on Non-Planar Beaches, (with W.G. McDougal), *Coastal Engineering*, 7(2), May 1983, pp. 103-117.
- Longshore Sediment Transport on Non-Planar Beaches, (with W.G. McDougal), *Coastal Engineering*, 7(2), May 1983, pp. 119-131.
- Hydrodynamic Interference Between Floating Cylinders in Oblique Seas, (with Min-Chih Huang and J.W. Leonard), *Applied Ocean Res*, 5(3), July 1983, pp. 158-166.
- Editorial, *Journal of Waterways, Port, Coastal, and Ocean Div.*, ASCE, 109(4), Nov. 1983, pp. 359-362.
- Stream Function Solutions for Steady Waves, (with Min-Chih Huang), *Journal of Continental Shelf Research*, 3(2), 1984, pp. 175-190.
- Wave Interference Effects by Finite Element Method, (with Min-Chih Huang and J.W. Leonard), *J of the Waterway, Port, Coastal and Ocean Engrg.*, V111(1), 1985, pp. 1-17.
- Finite Water Depth Effects on Nonlinear Waves, (with H. Tuah), *ASCE, J of the Waterways, Port, Coastal and Ocean Engrg Div.*, Vol. III(2), Mar. 1985, pp. 401-416.
- FEM Solution of 3-D Wave Interference Problems, (with Min-Chih Huang and J.W. Leonard), *J of Waterways, Port, Coastal, and Ocean Engrg*, VIII(4) 1985, pp. 661-677.
- Remarks on Parameter Identification, I, (with R.B. Guenther, W.G. McDougal, and J. Gerlach), *Numerische Mathematik*, 47, 1985, pp. 355-361.
- Dynamic Response of Tension Leg Platforms with Axisymmetric Members, (with J.W. Leonard), *Engineering Structures*, 8(1), Jan. 1986, pp. 55-63.
- Dynamic Behavior of Deep-Ocean Pipeline, (with M. Zimmerman, J.W. Leonard, J.W. Tedesco, and L.E. Borgman), *ASCE, J of Waterway, Port, Coastal, and Ocean Engrg Div.*, 112(2), March 1986, pp. 183-199.
- Influence of Lateral Mixing on Longshore Currents, (with W.G. McDougal), *Journal of Ocean Engineering*, 13(5), 1986, pp. 419-433.
- Flow Equations in Terms of Piezometer Levels for Nonisothermal Fluid in Low-Permeability Porous Medium, (with A.H. Lu, B. Sagar, and R.B. Guenther), *Water Resources Research*, 23(6), June 1987, pp. 1097-1102.

- Earthquake Response of Circular Cylindrical Structures in Water, (with Y. Tanaka), *Earthquake Engineering and Structural Dynamics*, 16, January 1988, pp. 99-119.**
- Wave Phase/Amplitude Effects on Force Coefficients, (with J.H. Nath and P. Khare), *ASCE, J of Waterway, Port, Coastal and Ocean Engrg* , 114(1), Jan 1988, pp. 34-49.**
- Longshore Current and Sediment Transport on Composite Beach Profiles, (with W.G. McDougal), *Journal of Coastal Engineering*, 12, 1989, pp. 315-338.**
- Grupos de Olas y Diseña de Diques en Talud, (with J.R. Medina), *Revista de Obras Publicas*, Oct. 1989, pp. 709-721 (in Spanish).-**
- Significance of Keulegan-Carpenter Parameter, Invited paper presented at G.H. Keulegan Symposium, *Proceedings*, International Conference on Physical Modeling of Transport and Dispersion, IAHR, MIT, August 7-10, 1990, pp. 7.1-7.5.**
- The Dean Eccentricity Parameter and Data Condition, (with J.H. Nath), *ASME, Journal of Offshore Mechanics and Arctic Engineering*, 112, Nov 1990, pp. 327-333.**
- A Review of the Analyses of Ocean Wave Groups, (with J.R. Medina), *Journal of Coastal Engineering*, 14(6), December 1990, pp. 515-542.**
- Wave Forces Acting on Small Offshore Structures, (with M. Kubota and J.W. Leonard), *Coastal Engrg in Japan*, Japanese Soc Civil Engrs, 33(2), 1990, pp. 195-217.**
- Nonlinear Fluid Forces on Hinged Wavemakers, (with T-I Kim), *Journal of Korean Society of Coastal and Ocean Engineers*, 2(4), Dec 1990, pp. 208-222.**
- Effects of Data Condition on C_m and C_d , (with J.W. Leonard, M. Kubota, and H. Kotoguchi), *Proc, Japanese Soc Civil Engrg*, No. 429/II-15, May 1991, pp. 107-114.**
- Stokes Drift in 2-D Wave Flumes, (with W. Sulisz), *Journal of Fluid Mechanics*, 230, September 1991, pp. 209-229.**
- Parameter Identification in Radial Flow, (with R.B. Guenther, K.L. Roley, and W.G. McDougal), Invited paper for Special Issue: On Parameter Identification in Groundwater Flow, Transport and Related Processes; II - Advanced Applications, *Adv Water Res*, V14(5), Oct 1991, pp. 240-251.**
- The Significance of the Keulegan-Carpenter Parameter, Special Edition dedicated to G.H. Keulegan, *ASCE, Journal of Hydraulics Div.*, 117(12), Dec 1991, pp. 1626-1638.**
- Analysis of Nonlinear Response of an Articulated Tower, (with O. Gottlieb and S.C-S Yim), *Journal of Offshore and Polar Engineering*, 2(1), March 1992, pp. 61-66.**
- Scaling Thermal Effects in Radial Flow, (with R.B. Guenther, K.L. Roley, and W.G. McDougal), *Advances in Water Research*, 15(2), 1992, pp. 107-116.**
- Parameter Identification Using a Damped Wave Equation in a Porous Medium, (with F. Mohamed, R.B. Guenther, and W.G. McDougal), *Adv Water Res*, V15(2), 1992, pp. 117-123.**
- Influencia de Los Grupos de Olas Sobre la Estabilidad de los Diques en Talud, (with J.R. Medina and C. Fassardi), *Revista de Obras Publicós*, 1993, pp. 35-47 (in Spanish).**
- Second-Order Wave Loads on Planar Wavemakers, (with W. Sulisz), *Journal of Waterways, Port, Coastal and Ocean Engineering Div.*, 119(5), 1993, pp. 521-536.**
- Complete Second-Order Solution for Water Waves Generated in Wave Flumes, (with W. Sulisz), *Journal of Fluids and Structures*, 7, 1993, pp. 253-268.**
- The Fluid Jetster: A Water-Powered Wheeled Vehicle, (with K. Birky, S. Wright, C.**

- Lowe, and R.B. Guenther), *ASEE, J Engrg Education*, ASEE, 82(4), 1993, pp. 232-237.
- Convergence Criteria for Axisymmetric Green's Function with Application to Floating Bodies, (with T. Nakamura and C-K Pyun), *J Ocean Engrg*, 21(4), 1994, pp. 381-400.
- Breakwater Armor Damage Due to Wave Groups, (with J.R. Medina and C. Fassardi), *J of Waterways, Port, Coastal and Ocean Engrg*, 120(2), Mar/Apr 1994, pp. 179-198.
- Type E Double-Actuated Wavemakers, (with J.M. Grassa, J.R. Medina, and J. Lozano), *IAHR J. Hyd. Res.*, 32(3), 1994, pp. 387-400.
- Domain Mapping of 2-D Free Surface Flows with Surface Tension, (with S.J. De Silva and R.B. Guenther), *Applied Ocean Research*, 18(6), December 1996, pp. 293-302.
- Double-Peaked Spectra Generated by Double-Actuated Wavemakers, (with J.M. Grassa, J.R. Medina, and J. Lozano), *IAHR, J. Hyd. Res.* (in review).
- Discussion of Numerically Simulating Non-Gaussian Sea Surfaces, (with H. Tuah and M-C Chen) by B. Vanhoff, S. Elgar and R.T. Guza, *ASCE, J Waterways, Port, Coastal and Ocean Engrg*, 124(6), 1998, pp. 335-336.
- Discussion of An Improvement to Stokes Nonlinear Theory for Steady Waves, by V. Karambas and C.G. Routitas, *J Waterways, Port, Coastal and Ocean Engrg*, 125(3), MAY/JUN 1999, pp. 157-159.
- Are Cross-Waves Chaotic?, (with C. Boline and R. B. Guenther), *Applicable Analyses*, 72(2-3), 1999, pp. 287-326.
- Conditional Simulation of Laboratory Waves, (with L.E. Borgman and B. Samorsorn), *J Waterways, Port, Coastal and Ocean Engrg* V125(6), NOV/DEC 1999, pp. 311-321.
- Extension of Herglotz Algorithm to Nonautonomous Canonical Transformations, (with J. C. Orum, W. Black and R. B. Guenther), *SIAM Review*, 42(1), 2000, pp. 83-90.
- Discussion of Progression and Variability of Damage on Rubble Mound Breakwaters, (with J. R. Medina and C. Fasardi) by J. A. Melby and N. Kobayashi, *Journal of Waterways, Port, Coastal and Ocean Engineering*, 126(5), SEP/OCT 2000, pp. 268-70.
- Hydrodynamic Forces on Submerged Rigid Bodies - Steady Flow, (with R. B. Guenther and E. A. Thomann), *J. Mathematical Fluid Mechanics*, 4, 2002, pp. 187-202.
- Chaotic Analyses of Weakly Damped Parametrically Excited Cross Waves with Surface Tension, (with R. B. Guenther and S. Fadal), *Acta Mechanica*, 175(1-4), 2005, pp. 139-179.
- Discussion: Reflected and Transmitted Waves in a Channel with Side Porous Mattresses (W. Sulisz), *Coastal Engineering*, 55(12), 2008, pp. 1250-1251.
- Response to Reply: Reflected and Transmitted Waves in a Channel with Side Porous Mattresses (W. Sulisz), *Coastal Engineering*, 57(12), 2010, p. 778.
- Discussion: Generation and Propagation of Transient Nonlinear Waves in a Wave Flume (W. Sulisz and M. Paprota), *Coastal Engineering*, 56(8), 2009, pp. 895-896.
- Response to Reply: Generation and Propagation of Transient Nonlinear Waves in a Wave Flume (W. Sulisz and M. Paprota), *Coastal Engineering*, 57(9), 2010, pp.874-875.
- Penetration of Cylindrical Projectiles into Saturated Sandy Media, (with A. Kharab and R.B. Guenther), *Experimental Mechanics*, 49, 2010, pp. 605-612.
- Multiple Rectangular Resonators for Harbor Entrances, (with A.J. Wickerson), *IAHR* (in review).

Conference Proceedings

Determination of the Limiting Depth for the Stabilization of Submarine Cables, *Proc 8th U.S. Navy Symp on Military Ocean*, Naval PG School, Monterey, CA, 1971, pp. 78-88.

Comparison of Wave Forces Computed by Linear and Stream Function Methods, (with R.A. Dalrymple and R.G. Dean), *1974 Off Tech Conf*, OTC 2037, II, 1974, pp. 17-32.

Wave Force Predictions From Nonlinear Random Sea Simulations, *1975 Offshore Technology Conference*, OTC 2193, I, 1975, pp. 471-486.

Effects of Nonlinearities on Wave Power Estimates, *Proceedings, Wave and Salinity Gradient Energy Conversion*, Energy Research and Development Administration, University of Delaware, Newark, DE, May 24-26, 1976, pp. G-1 to G-23.

Analysis of Hinged Wavemakers for Random Waves, (with D.F. Jones and J.H. Nath), *Proc Sixteenth Coastal Engrg Conf*, ASCE, Hamburg, Germany, 1978, pp. 372-386.

Measured and Simulated Random Wave Forces, (with M.G. Grecco), *Proceedings Civil Engineering in the Oceans IV*, ASCE, San Francisco, CA, 1979, pp. 43-59.

Loads on Sea-Based Structures, (with J.W. Leonard), *ASCE, Structural Technology in the Ocean*, Preprint 3793, Atlanta, GA, 1979.

San Francisco Ocean Outfall Port Valve Development, (with L.E. Hanson, A.L. Davis, H.H.C. Lin and J.S. Readshaw), *Proc 1980 Hyd Specialty Conference*, ASCE, Chicago, IL, 1980, pp. 51-61.

Ocean Engineering for Undergraduates - A 'Right-Brain' Experience in Engineering Design, (with K.J. Williamson), *ASEE*, Los Angeles, CA, 1981.

The Generation of Random Waves in Wave Flumes by Nondeterministic Digital Simulation Methods, University of Delaware, August 24-25, 1981.

Non-Planar Beaches: Wave Induced Setup/Setdown and Longshore Current, (with W.G. McDougal), *IEEE, OCEANS 81*, pp. 834-840.

Non-Planar Beaches: Sediment Transport, (with W.G. McDougal), *IEEE, OCEANS 81*, pp. 841-846.

Green's Function of Diffraction Theory, (with Min-Chu Chen), *Proceedings Fifth Conference on Ocean Engineering*, Republic of China, Hualien, Oct 1-2, 1981, pp. 1-21.

Nonlinear Diffraction by Eigenfunction Expansion, (with Min-Chu Chen), *Proc Fifth Conference on Ocean Engr.*, Republic of China, Hualien, Oct. 1-2, 1981, pp. 37-71.

Hybrid Time Domain Model of Drifting Buoy, (with J.H. Nath), *Proceedings 1983 Marine Technology Society*.

Environmental Forces on Ocean Platforms, *NCEL Ocean Platforms Seminar*, TN N-1681, Naval Civil Engrg Laboratory, Port Hueneme, CA, November 1983, pp. 27-84.

Summary of Research Objectives, *NCEL Ocean Platforms Seminar*, TN No:N-1681, Naval Civil Engineering Laboratory, Port Hueneme, CA, Nov. 1983, pp. 269-277.

Nonlinear Transient Response of Deep-Ocean Pipelines, (with M. Zimmerman, J.W. Leonard, J. Tedesco, and L. Borgman), *Proc Pipelines in Adverse Environments II*, ASCE, San Diego, CA, Nov 1983, pp. 722-736.

Longshore Sediment Transport on Dean Beach Profiles, (with W.G. McDougal), *Proc 19th Coastal Engrg Conf*, II, Ch. 101, ASCE, Houston, TX, Sep 1984, pp. 1488-1506.

- Comparison of Turbulent Lateral Mixing Models, (with W.G. McDougal), *Proc 19th Coastal Engineering Conf*, III, Ch. 214, ASCE, Houston, TX, Sept 1984, pp. 3197-3210.
- Laboratory Wave Forces on Vertical Cylinders, (with J.H. Nath, M-K Hsu, and J.M. Dummer), *Proc Ocean Struc Dynamics Sym '84*, Or. St. Univ, Sept 1984, pp. 312-330.
- Remarks on Parameter Identification in Groundwater Hydrology, (with R.B. Guenther and W.G. McDougal), Abstract, *A GU*, 1985 Fall Meeting, San Francisco, CA.
- Uniqueness of Parameter Identification in Groundwater Hydrology, (with R.B. Guenther and W.G. McDougal), *Fundamentals of Transport Phenomena in Porous Media*, Univ of Delaware, July 1985.
- High Reynolds Number Wave Force Investigation in a Wave Flume, (with J. Dummer and J.H. Nath), *Proceedings 1986 International Mechanics and Arctic Engineering Symposium (OMAE)*, I, Tokyo, Japan, April 13-18, 1986, pp. 113-122.
- Earthquake Response of Circular Cylindrical Structures in Water, (with Y. Tanaka), *Proceedings 1986 International Mechanics and Arctic Engineering Symposium (OMAE)*, Vol. I, Tokyo, Japan, April 13-18, 1986, pp. 655-662.
- Circulation Kinematics in Nonlinear Laboratory Waves, (with W. Sulisz and T-I Kim), *Proc 20th Int Conf Coastal Engrg*, I, Ch. 30, Taipei, Taiwan, 1986, pp. 381-395.
- Effect of Phase Shifts on Morison Force Coefficients, (with P.K. Khare and J.H. Nath), *Proc 3rd Indian Conf Ocean Engrg INCOE-86*, Bombay, India, Dec 1986, pp. B-289-301.
- Nonlinear Estimation of Return Flow in Wave Basins, (with W. Sulisz and T-I Kim), *Proceedings IAHR Seminar on Wave Analysis and Generation in Laboratory Basins*, XXII IAHR Congress, Lausanne, Switzerland, September 1987, pp. 423-434.
- Sea States Defined by Wave Height/Period Functions, (with J.R. Medina), *Proceedings IAHR Seminar on Wave Analysis and Generation in Laboratory Basins*, XXII IAHR Congress, Lausanne, Switzerland, September 1987, pp. 249-259.
- Grupos de Olas y Diseño de Obras Maritimas, (with J.R. Medina), Ch. 5, *Proceedings of Curso de Ingenieria de Costas*, Universidad Politecnica de Valencia, SPUPV-87.3-01, Valencia, Spain, September 1987, pp. 5.1-5.14, (in Spanish).
- Loading and Response of Deep-Ocean Compliant Platforms, (with J.W. Leonard), Special Lecture presented at *Symp Fundamental Study on Dynamic Failure and Design of Ocean Structures*, Daido Institute of Technology, Nagoya, Japan, 1988, pp. 39-64.
- Mass Transport in Wave Flumes, (with W. Sulisz), Abstract *Proc 3rd International Workshop on Water Waves and Floating Bodies*, Woods Hole, MA, April 1988.
- Wave Group Analysis by the Hilbert Transform, (with J.R. Medina), *Proc 21st Int Conf Coastal Engrg*, ICCE, Torremolinos, Spain, 1, Ch. 66, June 1988, pp. 884-898.
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Rev. 6/10

