

Stanford



Robert Street

William Alden and Martha Campbell Professor in the School of Engineering, Emeritus
Civil and Environmental Engineering

CONTACT INFORMATION

- **Administrator**

Carmen Torres - Administrative Associate

Email carment@stanford.edu

Tel (650) 723-4372

Bio

BIO

Born in Honolulu, HI, raised in Beverly Hills, CA, came to Stanford as member Class of '56: Stanford University, 1952-57 (no B.S.; Pres., ASCE Student Chapter, 1957), M.S.C.E., 1957 (Hydraulics); Stanford University, 1960-62 Ph.D., Jan., 1963 (Fluid mechanics; Mathematics minor).

Faculty Member, Department of Civil Engineering, Stanford University 1962-2004; William Alden and Martha Campbell Professor in the School of Engineering [Emeritus] and Professor of Fluid Mechanics and Applied Mathematics in the Departments of Civil and Environmental Engineering and (by courtesy) Mechanical Engineering [Emeritus], 2005--present.

ACADEMIC APPOINTMENTS

- Professor Emeritus, Civil and Environmental Engineering
- Affiliate, Stanford Woods Institute for the Environment

HONORS AND AWARDS

- Fellow, American Association for the Advancement of Science (1993)
- Member, National Academy of Engineering (2004)
- Hunter Rouse Hydraulic Engineering Award, ASCE (2005)
- Distinguished Member, American Society of Civil Engineers (2009)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chairman, Board of Trustees, University Corporation for Atmospheric Research (1987 - 1991)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , Fluid Mechanics; mathematics minor (1963)
- Master of Science, Stanford University , Hydraulics (1957)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Street focuses on numerical simulations related to geophysical fluid motions. His research considers the modeling of turbulence in fluid flows, which are often stratified, and includes numerical simulation of coastal upwelling, internal waves and sediment transport in coastal regions, flow in rivers, valley winds, and the planetary boundary layer.

PROJECTS

- Collaborative Research: Subgrid-scale Models for Large-eddy Simulation of Cloud Formation and Evolution - Stanford University (7/1/2015 - 6/30/2019)

Publications

PUBLICATIONS

- **An Evaluation of LES Turbulence Models for Scalar Mixing in the Stratocumulus-Capped Boundary Layer** *JOURNAL OF THE ATMOSPHERIC SCIENCES*
Shi, X., Chow, F., Street, R. L., Bryan, G. H.
2018; 75 (5): 1499–1507
- **Large-eddy simulation of the stratocumulus-capped boundary layer with explicit filtering and reconstruction turbulence modeling** *Journal of the Atmospheric Sciences*
Shi, X., Hagen, H. L., Chow, F. K., Bryan, G. H., Street, R. L.
2018; 75 (2): 611-637
- **Assessment of the Effectiveness of a Constructed Compound Channel River Restoration Project on an Incised Stream** *JOURNAL OF HYDRAULIC ENGINEERING-ASCE*
MacWilliams, M. L., Tompkins, M. R., Street, R. L., Kondolf, G. M., Kitanidis, P. K.
2010; 136 (12): 1042-1052
- **Effect of Turbulence Models and Spatial Resolution on Resolved Velocity Structure and Momentum Fluxes in Large-Eddy Simulations of Neutral Boundary Layer Flow** *JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY*
Ludwig, F. L., Chow, F. K., Street, R. L.
2009; 48 (6): 1161-1180
- **Evaluation of Turbulence Closure Models for Large-Eddy Simulation over Complex Terrain: Flow over Askervein Hill** *JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY*
Chow, F. K., Street, R. L.
2009; 48 (5): 1050-1065
- **The stability of marine sediments at a tidal basin in San Francisco Bay amended with activated carbon for sequestration of organic contaminants (vol 42, pg 15, 2008)** *WATER RESEARCH*
Zimmerman, J. R., Bricker, J. D., Jones, C., Dacunto, P. J., Street, R. L., Luthy, R. G.
2008; 42 (20): 5072-5072
- **Effects of grid resolution on the simulation of internal tides** *16th International Offshore and Polar Engineering Conference (ISOPE 2006)*
Jachec, S. M., Fringer, O. B., Street, R. L., Gerritsen, M. G.
INT SOC OFFSHORE POLAR ENGINEERS.2007: 105–11
- **Progress on nonlinear-wave-forced sediment transport simulation** *IEEE JOURNAL OF OCEANIC ENGINEERING*
Gilbert, R. W., Zedler, E. A., Grilli, S. T., Street, R. L.
2007; 32 (1): 236-248
- **Flow convergence routing hypothesis for pool-riffle maintenance in alluvial rivers** *WATER RESOURCES RESEARCH*
MacWilliams, M. L., Wheaton, J. M., Pasternack, G. B., Street, R. L., Kitanidis, P. K.
2006; 42 (10)
- **Numerical simulation of internal tides and the resulting energetics within Monterey Bay and the surrounding area** *GEOPHYSICAL RESEARCH LETTERS*
Jachec, S. M., Fringer, O. B., Gerritsen, M. G., Street, R. L.

2006; 33 (12)

- **Sediment transport over ripples in oscillatory flow** *JOURNAL OF HYDRAULIC ENGINEERING-ASCE*
Zedler, E. A., Street, R. L.
2006; 132 (2): 180-193
- **High-resolution large-eddy simulations of flow in a steep Alpine valley. Part I: Methodology, verification, and sensitivity experiments** *JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY*
Chow, F. K., Weigel, A. P., Street, R. L., Rotach, M. W., Xue, M.
2006; 45 (1): 63-86
- **Application of the complementary volume method to simulation of flows on an unstructured grid** *16th International Offshore and Polar Engineering Conference (ISOPE 2006)*
Zhao, G., Kitanidis, P. K., Street, R. L.
INTERNATIONAL SOCIETY OFFSHORE& POLAR ENGINEERS.2006: 402-405
- **Effects of grid resolution on the simulation of internal tides** *16th International Offshore and Polar Engineering Conference (ISOPE 2006)*
Jachec, S. M., Fringer, O. B., Street, R. L., Gerritsen, M. G.
INTERNATIONAL SOCIETY OFFSHORE& POLAR ENGINEERS.2006: 432-438
- **An unstructured-grid, finite-volume, nonhydrostatic, parallel coastal ocean simulator** *OCEAN MODELLING*
Fringer, O. B., Gerritsen, M., Street, R. L.
2006; 14 (3-4): 139-173
- **High-resolution large-eddy simulations of flow in a steep Alpine valley. Part II: Flow structure and heat budgets** *JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY*
Weigel, A. P., Chow, F. K., Rotach, M. W., Street, R. L., Xue, M.
2006; 45 (1): 87-107
- **A numerical study of surface-subsurface exchange processes at a riffle-pool pair in the Lahn River, Germany** *WATER RESOURCES RESEARCH*
Saenger, N., Kitanidis, P. K., Street, R. L.
2005; 41 (12)
- **Reducing numerical diffusion in interfacial gravity wave simulations** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Fringer, O. B., Armfield, S. W., Street, R. L.
2005; 49 (3): 301-329
- **Explicit filtering and reconstruction turbulence modeling for large-eddy simulation of neutral boundary layer flow** *JOURNAL OF THE ATMOSPHERIC SCIENCES*
Chow, F. K., Street, R. L., Xue, M., FERZIGER, J. H.
2005; 62 (7): 2058-2077
- **Joel Henry Ferziger** *PHYSICS TODAY*
Kim, J., Koseff, J. R., Leonard, A., Street, R. L.
2005; 58 (6): 74-75
- **Obituary - Joel Henry Ferziger** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Kim, J., Koseff, J. R., Leonard, A., Street, R. L.
2005; 47 (12): 1421-1422
- **Stably stratified flows near a notched transverse ridge across the Salt Lake valley** *JOURNAL OF APPLIED METEOROLOGY*
Chen, Y., Ludwig, F. L., Street, R. L.
2004; 43 (9): 1308-1328
- **Large-eddy simulation of coastal upwelling flow** *ENVIRONMENTAL FLUID MECHANICS*
Cui, A. Q., Street, R. L.
2004; 4 (2): 197-223
- **The dynamics of breaking progressive interfacial waves** *JOURNAL OF FLUID MECHANICS*
Fringer, O. B., Street, R. L.
2003; 494: 319-353

- **A numerical study of inversion-layer breakup and the effects of topographic shading in idealized valleys** *JOURNAL OF APPLIED METEOROLOGY*
Colette, A., Chow, F. K., Street, R. L.
2003; 42 (9): 1255-1272
- **Numerical study of the wake structure behind a three-dimensional hill** *JOURNAL OF THE ATMOSPHERIC SCIENCES*
Ding, L., Street, R. L.
2003; 60 (14): 1678-1690
- **Numerical simulation of strongly stratified flow over a three-dimensional hill** *BOUNDARY-LAYER METEOROLOGY*
Ding, L., Calhoun, R. J., Street, R. L.
2003; 107 (1): 81-114
- **Patterns on a free surface caused by underwater topography: a laboratory-scale study** *INTERNATIONAL JOURNAL OF REMOTE SENSING*
Calhoun, R. J., Street, R. L.
2002; 23 (8): 1609-1620
- **An analysis and comparison of the time accuracy of fractional-step methods for the Navier-Stokes equations on staggered grids** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Armfield, S., Street, R.
2002; 38 (3): 255-282
- **Modeling unresolved motions in LES of field-scale flows** *15TH SYMPOSIUM ON BOUNDARY LAYERS AND TURBULENCE*
Chow, F. K., Street, R. L.
2002: 432-435
- **Inversion-layer breakup in steep valleys and the effects of topographic shading** *10TH CONFERENCE ON MOUNTAIN METEOROLOGY*
Colette, A. G., Street, R. L.
2002: 101-104
- **Numerical modeling of airflow in the vicinity of the Jordan narrows in the Salt Lake valley** *10TH CONFERENCE ON MOUNTAIN METEOROLOGY*
Chen, Y., Street, R. L., Ludwig, L.
2002: 39-41
- **Large-eddy simulation of turbulent rotating convective flow development** *JOURNAL OF FLUID MECHANICS*
Cui, A., Street, R. L.
2001; 447: 53-84
- **Turbulent flow over a wavy surface: Stratified case** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
Calhoun, R. J., Street, R. L., Koseff, J. R.
2001; 106 (C5): 9295-9310
- **Turbulent flow over a wavy surface: Neutral case** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
Calhoun, R. J., Street, R. L.
2001; 106 (C5): 9277-9293
- **The fractional-step method for the Navier-Stokes equations on staggered grids: The accuracy of three variations** *JOURNAL OF COMPUTATIONAL PHYSICS*
Armfield, S., Street, R.
1999; 153 (2): 660-665
- **On simulation of turbulent nonlinear free-surface flows** *JOURNAL OF COMPUTATIONAL PHYSICS*
Hodges, B. R., Street, R. L.
1999; 151 (2): 425-457
- **Large-eddy simulations of a round jet in crossflow** *JOURNAL OF FLUID MECHANICS*
Yuan, L. L., Street, R. L., FERZIGER, J. H.
1999; 379: 71-104
- **Invited lecture: Setting the stage: Large eddy simulation of laboratory scale flows** *2nd International Symposium on Environmental Hydraulics*
Street, R. L.

A A BALKEMA PUBLISHERS.1999: 277–286

- **Trajectory and entrainment of a round jet in crossflow** *PHYSICS OF FLUIDS*
Yuan, L. L., Street, R. L.
1998; 10 (9): 2323-2335
- **Patterns on a free-surface caused by underwater topography: a laboratory-scale study** *Conference on Earth Surface Remote Sensing II*
Calhoun, R. J., Street, R. L.
SPIE-INT SOC OPTICAL ENGINEERING.1998: 228–238
- **Large-eddy simulation of free-surface decaying turbulence with dynamic subgrid-scale models** *PHYSICS OF FLUIDS*
Salvetti, M. V., Zang, Y., Street, R. L., Banerjee, S.
1997; 9 (8): 2405-2419
- **A comparison of turbulent flow over two- and three-dimensional sinusoidal topographies** *12th Symposium on Boundary Layers and Turbulence*
Calhoun, R., Street, R.
AMER METEOROLOGICAL SOCIETY.1997: 528–529
- **A nonhydrostatic mesoscale ocean model .1. Well-posedness and scaling** *JOURNAL OF PHYSICAL OCEANOGRAPHY*
Mahadevan, A., OLIGER, J., Street, R.
1996; 26 (9): 1868-1880
- **A nonhydrostatic mesoscale ocean model .2. Numerical implementation** *JOURNAL OF PHYSICAL OCEANOGRAPHY*
Mahadevan, A., OLIGER, J., Street, R.
1996; 26 (9): 1881-1900
- **Analysis of small-scale patterns of atmospheric motion in a sheared, convective boundary layer** *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*
Ludwig, F. L., Street, R. L., Schneider, J. M., Costigan, K. R.
1996; 101 (D5): 9391-9411
- **Linear dynamics of wind waves in coupled turbulent air-water flow .2. Numerical model** *JOURNAL OF FLUID MECHANICS*
Harris, J. A., Belcher, S. E., Street, R. L.
1996; 308: 219-254
- **Environmental fluid mechanics - A review of some recent results** *11th Engineering Mechanics Conference*
Street, R. L.
AMER SOC CIVIL ENGINEERS.1996: 30–32
- **Numerical simulation of coastal upwelling and interfacial instability of a rotating and stratified fluid** *JOURNAL OF FLUID MECHANICS*
Zang, Y., Street, R. L.
1995; 305: 47-75
- **A COMPOSITE MULTIGRID METHOD FOR CALCULATING UNSTEADY INCOMPRESSIBLE FLOWS IN GEOMETRICALLY COMPLEX DOMAINS** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Zang, Y., Street, R. L.
1995; 20 (5): 341-361
- **MODIFICATION OF MULTIREOLUTION FEATURE ANALYSIS FOR APPLICATION TO 3-DIMENSIONAL ATMOSPHERIC WIND FIELDS** *JOURNAL OF THE ATMOSPHERIC SCIENCES*
Ludwig, F. L., Street, R. L.
1995; 52 (1): 139-159
- **New analysis techniques applied to the study of observed small scale atmospheric motions and corresponding les results** *11th Symposium on Boundary Layers and Turbulence*
Ludwig, F. L., Street, R. L., Schneider, J. M., Costigan, K. R.
AMER METEOROLOGICAL SOC.1995: 299–302
- **A NON-STAGGERED GRID, FRACTIONAL STEP METHOD FOR TIME-DEPENDENT INCOMPRESSIBLE NAVIER-STOKES EQUATIONS IN CURVILINEAR COORDINATES** *JOURNAL OF COMPUTATIONAL PHYSICS*
Zang, Y., Street, R. L., Koseff, J. R.

1994; 114 (1): 18-33

- **LINEAR DYNAMICS OF WIND-WAVES IN COUPLED TURBULENT AIR-WATER FLOW .1. THEORY** *JOURNAL OF FLUID MECHANICS*
Belcher, S. E., Harris, J. A., Street, R. L.
1994; 271: 119-151
- **NUMERICAL-SIMULATION OF TURBULENT-FLOW OVER A MOVING WAVY BOUNDARY - NORRIS AND REYNOLDS EXTENDED** *Symposium on Turbulence, in honor of the 60th Birthday of William Craig Reynolds*
Harris, J. A., Street, R. L.
AMER INST PHYSICS.1994: 924-43
- **A DYNAMIC MIXED SUBGRID-SCALE MODEL AND ITS APPLICATION TO TURBULENT RECIRCULATING-FLOWS** *PHYSICS OF FLUIDS A-FLUID DYNAMICS*
Zang, Y., Street, R. L., Koseff, J. R.
1993; 5 (12): 3186-3196
- **A COUPLED MULTIGRID DOMAIN-SPLITTING TECHNIQUE FOR SIMULATING INCOMPRESSIBLE FLOWS IN GEOMETRICALLY COMPLEX DOMAINS** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Perng, C. Y., Street, R. L.
1991; 13 (3): 269-286
- **MODULATED FLOWS BENEATH WIND-RUFFLED, MECHANICALLY GENERATED WATER-WAVES** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
Jiang, J. Y., Street, R. L.
1991; 96 (C2): 2711-2721
- **A STUDY OF WAVE-TURBULENCE INTERACTION BY USE OF A NONLINEAR WATER-WAVE DECOMPOSITION TECHNIQUE** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
Jiang, J. Y., Street, R. L., KLOTZ, S. P.
1990; 95 (C9): 16037-16054
- **3-DIMENSIONAL UNSTEADY-FLOW SIMULATIONS - ALTERNATIVE STRATEGIES FOR A VOLUME-AVERAGED CALCULATION** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Perng, C. Y., Street, R. L.
1989; 9 (3): 341-362
- **TRANSIENT FLOW IN A SIDE-HEATED CAVITY AT HIGH RAYLEIGH NUMBER - A NUMERICAL STUDY** *JOURNAL OF FLUID MECHANICS*
Schladow, S. G., Patterson, J. C., Street, R. L.
1989; 200: 121-148
- **ADAPTIVE GRID REFINEMENT FOR NUMERICAL WEATHER PREDICTION** *JOURNAL OF COMPUTATIONAL PHYSICS*
Skamarock, W., OLIGER, J., Street, R. L.
1989; 80 (1): 27-60
- **WAVE-FOLLOWING MEASUREMENTS IN THE WATER BENEATH AN AIR-WATER-INTERFACE** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
Cheung, T. K., Street, R. L.
1988; 93 (C11): 14089-14097
- **THE TURBULENT LAYER IN THE WATER AT AN AIR WATER INTERFACE** *JOURNAL OF FLUID MECHANICS*
Cheung, T. K., Street, R. L.
1988; 194: 133-151
- **THE BURSTING SEQUENCE IN THE TURBULENT BOUNDARY-LAYER OVER PROGRESSIVE, MECHANICALLY GENERATED WATER-WAVES** *JOURNAL OF FLUID MECHANICS*
PAPADIMITRAKIS, Y. A., Street, R. L., HSU, E. Y.
1988; 193: 303-345
- **NON-LINEAR TRANSIENT PHENOMENA IN A COMPLEX RECIRCULATING FLOW - A NUMERICAL INVESTIGATION** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Freitas, C. J., Street, R. L.

1988; 8 (7): 769-802

- **SIMULATION OF ENVIRONMENTAL FLOW PROBLEMS IN GEOMETRICALLY COMPLEX DOMAINS .2. A DOMAIN-SPLITTING METHOD** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
Meakin, R. L., Street, R. L.
1988; 68 (3): 311-331
- **SIMULATION OF ENVIRONMENTAL FLOW PROBLEMS IN GEOMETRICALLY COMPLEX DOMAINS .1. A GENERAL COORDINATE TRANSFORMATION** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
Meakin, R. L., Street, R. L.
1988; 68 (2): 151-175
- **CHARACTERISTICS OF MECHANICALLY-GENERATED WAVES** *JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING-ASCE*
PAPADIMITRAKIS, Y. A., HSU, E. Y., Street, R. L.
1987; 113 (1): 39-59
- **THE ROLE OF WAVE-INDUCED PRESSURE-FLUCTUATIONS IN THE TRANSFER PROCESS ACROSS AN AIR-WATER-INTERFACE** *JOURNAL OF FLUID MECHANICS*
PAPADIMITRAKIS, Y. A., HSU, E. Y., Street, R. L.
1986; 170: 113-137
- **AN INSTRUMENT FOR MEASURING TURBULENT PRESSURE-FLUCTUATIONS** *REVIEW OF SCIENTIFIC INSTRUMENTS*
PAPADIMITRAKIS, Y. A., HSU, E. Y., Street, R. L.
1986; 57 (4): 666-673
- **NUMERICAL-SIMULATION OF MIXED-CULTURE BIOFILM - CLOSURE** *JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE*
Kissel, J. C., McCarty, P. L., Street, R. L.
1985; 111 (4): 549-551
- **CIRCULATION STRUCTURE IN A STRATIFIED CAVITY FLOW** *JOURNAL OF HYDRAULIC ENGINEERING-ASCE*
Koseff, J. R., Street, R. L.
1985; 111 (2): 334-354
- **ON THE RESOLUTION OF ORGANIZED SPURIOUS PRESSURE-FLUCTUATIONS IN WIND WAVE FACILITIES** *JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA*
PAPADIMITRAKIS, Y. A., HSU, E. Y., Street, R. L.
1985; 77 (3): 896-906
- **ON THE NUMERICAL COMPUTATION OF LAMINAR BOUNDARY-LAYERS AT A PHASE-CHANGING, GAS-LIQUID INTERFACE** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
KLOTZ, S. P., Street, R. L.
1985; 5 (11): 957-980
- **NUMERICAL-SIMULATION OF 3-DIMENSIONAL FLOW IN A CAVITY** *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS*
Freitas, C. J., Street, R. L., Findikakis, A. N., Koseff, J. R.
1985; 5 (6): 561-575
- **A GROUNDWATER MASS-TRANSPORT AND EQUILIBRIUM CHEMISTRY MODEL FOR MULTICOMPONENT SYSTEMS** *WATER RESOURCES RESEARCH*
CEDERBERG, G. A., Street, R. L., Leckie, J. O.
1985; 21 (8): 1095-1104
- **THE LID-DRIVEN CAVITY FLOW - A SYNTHESIS OF QUALITATIVE AND QUANTITATIVE OBSERVATIONS** *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*
Koseff, J. R., Street, R. L.
1984; 106 (4): 390-398
- **ON END WALL EFFECTS IN A LID-DRIVEN CAVITY FLOW** *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*
Koseff, J. R., Street, R. L.
1984; 106 (4): 385-389

- **NUMERICAL-SIMULATION OF MIXED-CULTURE BIOFILM** *JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE*
Kissel, J. C., McCarty, P. L., Street, R. L.
1984; 110 (2): 393-411
- **ON THE STRUCTURE OF THE VELOCITY-FIELD OVER PROGRESSIVE MECHANICALLY-GENERATED WATER-WAVES** *JOURNAL OF PHYSICAL OCEANOGRAPHY*
PAPADIMITRAKIS, Y. A., HSU, E. Y., Street, R. L.
1984; 14 (12): 1937-1948
- **VISUALIZATION STUDIES OF A SHEAR DRIVEN 3-DIMENSIONAL RECIRCULATING FLOW** *JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME*
Koseff, J. R., Street, R. L.
1984; 106 (1): 21-29
- **FLOW VISUALIZATION OF A RECIRCULATING FLOW BY RHEOSCOPIC LIQUID AND LIQUID-CRYSTAL TECHNIQUES** *EXPERIMENTS IN FLUIDS*
Rhee, H. S., Koseff, J. R., Street, R. L.
1984; 2 (2): 57-64
- **APPROXIMATE NUMERICAL-MODEL FOR STRATIFIED FLOW** *JOURNAL OF ENGINEERING MECHANICS-ASCE*
Findikakis, A. N., Street, R. L.
1983; 109 (4): 950-969
- **FINITE-ELEMENT SIMULATION OF STRATIFIED TURBULENT FLOWS** *JOURNAL OF THE HYDRAULICS DIVISION-ASCE*
Findikakis, A. N., Street, R. L.
1982; 108 (8): 904-920
- **COMPARISON OF PROFILES AND FLUXES OF HEAT AND MOMENTUM ABOVE AND BELOW AN AIR-WATER-INTERFACE** *JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME*
Howe, B. M., Chambers, A. J., KLOTZ, S. P., Cheung, T. K., Street, R. L.
1982; 104 (1): 34-39
- **MATHEMATICAL-DESCRIPTION OF TURBULENT FLOWS** *JOURNAL OF THE HYDRAULICS DIVISION-ASCE*
Findikakis, A. N., Street, R. L.
1982; 108 (8): 887-903
- **VERTICAL STRUCTURE OF INTERNAL-MODES IN STRATIFIED FLOWS** *JOURNAL OF THE ENGINEERING MECHANICS DIVISION-ASCE*
Findikakis, A. N., Street, R. L.
1982; 108 (4): 583-595
- **MOMENTUM AND ENERGY-TRANSFER IN WIND GENERATION OF WAVES** *JOURNAL OF PHYSICAL OCEANOGRAPHY*
Hsu, C. T., Wu, H. Y., HSU, E. Y., Street, R. L.
1982; 12 (9): 929-951
- **TRANSPORT OF ION-EXCHANGING SOLUTES IN GROUNDWATER - CHROMATOGRAPHIC THEORY AND FIELD SIMULATION** *WATER RESOURCES RESEARCH*
Valocchi, A. J., Street, R. L., Roberts, P. V.
1981; 17 (5): 1517-1527
- **SIMULATION OF THE TRANSPORT OF ION-EXCHANGING SOLUTES USING LABORATORY-DETERMINED CHEMICAL-PARAMETER VALUES** *GROUND WATER*
Valocchi, A. J., Roberts, P. V., Parks, G. A., Street, R. L.
1981; 19 (6): 600-607
- **ON THE STRUCTURE OF TURBULENT-FLOW OVER A PROGRESSIVE WATER-WAVE - THEORY AND EXPERIMENT IN A TRANSFORMED, WAVE-FOLLOWING COORDINATE SYSTEM** *JOURNAL OF FLUID MECHANICS*
Hsu, C. T., HSU, E. Y., Street, R. L.
1981; 105 (APR): 87-117
- **ALGEBRAIC MODEL FOR SUBGRID-SCALE TURBULENCE IN STRATIFIED FLOWS** *JOURNAL OF THE ATMOSPHERIC SCIENCES*
Findikakis, A. N., Street, R. L.

-
- 1979; 36 (10): 1934-1949
- **TURBULENT HEAT AND MASS TRANSFERS ACROSS A ROUGH, AIR-WATER-INTERFACE - SIMPLE THEORY** *INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER*
Street, R. L.
1979; 22 (6): 885-899
 - **MODELING GROUNDWATER-FLOW FIELDS CONTAINING POINT SINGULARITIES - TECHNIQUE FOR SINGULARITY REMOVAL** *WATER RESOURCES RESEARCH*
Charbeneau, R. J., Street, R. L.
1979; 15 (3): 583-594
 - **EXPERIMENTAL-STUDY OF NON-LINEAR WAVE-WAVE INTERACTION AND WHITE-CAP DISSIPATION OF WIND-GENERATED WAVES** *DYNAMICS OF ATMOSPHERES AND OCEANS*
Wu, H. Y., HSU, E. Y., Street, R. L.
1979; 3 (1): 55-78
 - **MODELING GROUNDWATER-FLOW FIELDS CONTAINING POINT SINGULARITIES - STREAMLINES, TRAVEL-TIMES, AND BREAKTHROUGH CURVES** *WATER RESOURCES RESEARCH*
Charbeneau, R. J., Street, R. L.
1979; 15 (6): 1445-1450
 - **EXISTENCE OF TEMPERATURE WAVES AT A WAVY AIR-WATER-INTERFACE** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS AND ATMOSPHERES*
Miller, A. W., Street, R. L.
1978; 83 (NC3): 1353-1365
 - **MEASUREMENTS OF SPRAY AT AN AIR-WATER-INTERFACE** *DYNAMICS OF ATMOSPHERES AND OCEANS*
Wang, C. S., Street, R. L.
1978; 2 (2): 141-152
 - **TRANSFERS ACROSS AN AIR-WATER-INTERFACE AT HIGH WIND SPEEDS - EFFECT OF SPRAY** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS AND ATMOSPHERES*
Wang, C. S., Street, R. L.
1978; 83 (NC6): 2959-2969
 - **DETERMINATION OF AQUEOUS SUBLAYER THICKNESSES AT AN AIR-WATER-INTERFACE** *JOURNAL OF PHYSICAL OCEANOGRAPHY*
Street, R. L., Miller, A. W.
1977; 7 (1): 110-117
 - **INFLUENCE OF AIR-WATER INTERFACIAL CONDITIONS ON TURBULENT TRANSFER OF LATENT AND SENSIBLE HEAT** *GEOPHYSICAL RESEARCH LETTERS*
MCINTOSH, D. A., Street, R. L., HSU, E. Y.
1975; 2 (1): 12-14
 - **NUMERICAL-MODEL BASED ON COUPLED ONE-DIMENSIONAL RICHARDS AND BOUSSINESQ EQUATIONS** *WATER RESOURCES RESEARCH*
PIKUL, M. F., Street, R. L., Remson, I.
1974; 10 (2): 295-302