THE COASTAL EDUCATION AND RESEARCH FOUNDATION

Post Office Box 210187 Royal Palm Beach, FL 33421, USA

Officers of the Foundation

Founded in 1983 by: Charles W. Finkl, Sr., Charles W. Finkl, Jnr., Rhodes W. Fairbridge, and Maurice L. Schwartz

President & Executive Director: Charles W. Finkl. Jnr.

Vice President:

Rhodes W. Fairbridge

Secretary-Treasurer

Charles J. Miller (Deceased)

Board of Directors

P. Bruun	R. P. Paskoff
JC. Dionne	M. L. Schwartz
R. Dolan	I. Shennan
T. Healy	A. D. Short
D. Hopley	D. J. Stanley
R. Huff	J

The Coastal Education and Research Foundation / CERF / is a nonprofit corporation dedicated to the advancement of the coastal sciences. The Foundation is devoted to the multi-disciplinary study of the complex problems of the coastal zone. The purpose of CERF is to help translate and interpret coastal issues for the public and to assist professional research and public information programs. The Foundation specifically supports and ecourages field and laboratory studies on a local, national, and international basis. Through the medium of scientific publications, television, and radio CERF brings accurate information to the public and coastal specialists on all aspects of coastal issues in an effort to maintain or improve the quality of shoreline resources.

1656 Cypress Row Drive West Palm Beach, FL 33411, USA

Because CERF is concerned with broad environmental issues, our efforts concentrate on significant problems such as maintenance of good quality (potable) water with adequate supply, and hazards associated with potential beach erosion, flooding, and susceptibility of developed shorelines to storm surge and wave attack. By focusing attention on these potential man-made and natural hazards, it is hoped that our research efforts will help others improve the quality of life in diverse coastal areas. CERF thus aims to stimulate awareness of coastal (marine and freshwater shorelines) land and water problems; initiate and foster research and innovation to promote long-term coastal productivity; establish an educational forum for the debate of contentious coastal issues; and develop new principles and approaches for enlightened coastal management, and encourage their adoption and use.

CERF members provide a basis for cooperative investigation of biophysical resources found in open and naturally protected coastal regions, estuaries, large inland bodies of water bounded by shorelines, wetlands, and other coastal environments. Joint investigative efforts by faculty, students, and staff at various institutions span a wide and diversified range of interrelated topics that are relevant to solutions of today's dynamic problems. It is hoped that these combined attempts to better understand the nature of coastal processes will help forestall what may become contentious issues of tomorrow.

☐ CERF MEMBERSHIP ☐

Members are individuals, institutions, and corporations that support the aims of the foundation through personal and group efforts or by donations. Memberships are available in different categories with privileges.

Publications of the Foundation:

CERF Quarterly Journal:

Journal of Coastal Research (JCR) (ISSN 0749-0208).

JCR Special Issues and Reports:

No. 1 (1986): Late Quaternary Sea-Level Changes and Coastal Evolution (out of print)

No. 2 (1986): Annotated Bibliography of Quaternary Shorelines, Fourth Supplement 1978-1983 (out of print)

No. 3 (1988): Dune/Beach Interaction, Norbert P. Psuty (ed.). [\$US 45.00]

No. 4 (1988): The Effects of Seawalls on the Beach, N. C. Kraus and O. H. Pilkey (eds.). [\$US 45.00]

No. 5 (1989): High Concentration Cohesive Sediment Transport, A. J. Mehta and E. J. Hayter [\$US 45.00]

No. 6 (1990): Artificial Beaches, M. L. Schwartz and E. C. F. Bird (eds.). [out of print]

No. 7 (1990): Rational Design of Mound Structures, N. Kobayashi and M.A. Losada (eds.). [\$US 45.00]

No. 8 (1991): Impacts of Hurricane Hugo: September 10-22, 1989, C. W. Finkl and O. H. Pilkey (eds.). [\$US 45.00]

No. 9 (1990): Proceedings of the Skagen Symposium (September 1990) [out of print]

No. 10 (1992): Simplified Technical Summary of the Complete Delta Works [out of print] No. 11 (1991): Geology of Long Island Sound, P. T. Gayes, R. S. Lewis, and H. J. Bokuniewicz (eds.). [\$US 45.00]

No. 12 (1994): Coastal Hazards, C. W. Finkl (ed.). [\$US 60.00]

No. 13 (1995): Atlas of Coastal Geomorphology and Zonality, D. Kelletat [\$US 45.00]

No. 14 (1995): Impacts of Sea-Level Rise on Developing Countries, R. Nicholls and S. P. Leatherman [\$US 45.00]

No. 15 (1993): Beach and Surf Zone Morphodynamics, A. D. Short (ed.). [\$US 45.00]

No. 16 (1992): International Bibliography of Coastal Geomorphology, D. Sherman (ed.). [\$US 45.00]

No. 17 (1995): Holocene Cycles: Climate, Sea Level, and Coastal Sedimentation, C. W. Finkl (ed.). [\$US 60.00] No. 18 (1993): Beach/Inlet Processes and Management, A. J. Mehta (ed.). [\$US 45.00]

No. 19 (1996): International Bibliography of Coastal Geomorphology, 1991–1994, D. Kelletat (ed.). [out of print]

No. 20 (1994): Coastal Wetland Loss in Louisiana, D. F. Boesch (ed.). [\$US 45.00]

No. 21 (1995): Impacts of Hurricane Andrew (1992), G. W. Stone and C. W. Finkl (eds.). [\$US 45.00]

No. 22 (1995): The Polish Coast: Past, Present & Future, K. Rotmicki (ed.). [\$US 45.00]

No. 23 (1996): Understanding Physical Processes at Inlets, A. J. Mehta (ed.). [\$US 45.00] No. 24 (1998): Island States at Risk, S. P. Leatherman (ed.). [\$US 45.00]

No. 25 (1997): Sediment Transport and Buoyancy in Estuaries, D. G. Aubrey (ed.). [\$US 45.00]

No. 26 (1998): Proceedings of the International Coastal Symposium (ICS '98), C.W. Finkl and P. Bruun (eds.). [\$US 60.00]

No. 27 (2000): Tidal Wetlands: Physical and Ecological Processes, P. Goodwin and A. J. Mehta (eds.). [\$US 45.00]

No. 28 (1999): Coastal Erosion Mapping and Management, S. P. Leatherman and M. Crowell (eds.). [\$US 45.00]

No. 29 (2001): Natural and Artificial Reefs for Surfing and Coastal Protection, K. Black et al. (eds.). [\$US 45.00]

Journal of Coastal Research

VOL. 17, NO. 2 (pages 271–506)

SPRING 2001

CO	NT	Т		NT	Т	C
UU	אני	T	L.	IJ	T	\mathbf{z}

Nearshore Processes Along Tikkavanipalem Beach, Visakhapatnam, India	
Shoal Bypassing in Mixed Energy Inlets: Geomorphic Variables and Empirical Predictions for Nine South Carolina Output Description: V. Sanil Kumar, K. Ashok Kumar and N.S.N. Raju Shoal Bypassing in Mixed Energy Inlets: Geomorphic Variables and Empirical Predictions for Nine South Carolina	271
Inlets	280
Temporal Change in Bed Level of a River Mouth Channel, Yangtze River Mouth: with Emphasis on the Response to River Discharge and Storm	292 297
Beach Erosion Potential for Severe Nor'easters	309
B.K. Jena, P. Chandramohan and V. Sanil Kumar	322
Absorption, Scattering, and Remote-Sensing Reflectance Relationships in Coastal Waters: Testing a New Inversion Algorithm	328
Numerical Modeling of the Wave Climate in the Southern Baltic Sea S. Blomgren, M. Larson, and H. Hanson	342
Filter Design Criteria for Sediment Caps in Rivers and Harbors	
	353
Beach	363
Eigenfunction Analysis of Decadal Fluctuations in Sandbank Morphology at Gt Yarmouth	
	371
Impact of Soil Nematodes on Salt-marsh Plants: a Pilot Experiment Carsten F. Dormann and René van der Wal	383
Fine-Grained Sedimentation in a Shallow Harbor	389
Long-Term Forecasting of the Extreme El-Niño Events	394
Modeling the Effect of Weathering on the Evolution and Morphology of Shore Platforms	398
Predicting the Depth, Across-Channel Location, and Speed Variability of Tidal Current Core Maxima at the Mouth of the Chesapeake Bay Dennis J. Whitford	407 420
Human-Induced Desalinization of Manzala Lagoon, Nile Delta, Egypt: Evidence from Isotopic Analysis of Benthic	420
Invertebrates Eduard G. Reinhardt, Daniel Jean Stanley and Henry P. Schwarcz	431
Net Longshore Sediment Transport and Textural Changes in Beach Sediments along the Southwest Alabama and Mississippi Barrier Islands, U.S.A	443
Late Holocene Evidence of Coseismic Subsidence on the San Juan Delta, Pacific Coast of Colombia	
	459
Flow Kinematics of Low-energy Rip Current Systems	468
Inter-tidal Dynamics of Surface Moisture Content on a Meso-tidal Beach	482
Departments	
Membership Directory	503
Coastal Calendar	504