

Conference Agenda

TUESDAY, AUGUST 26

8:00 am – 5:00 pm	Design of Coastal Structures Short Course
3:00 pm – 6:00 pm	Registration Open
5:00 pm – 7:00 pm	Welcome Reception

WEDNESDAY, AUGUST 27

7:00 am – 3:30 pm	Registration Open
8:30 am – 10:00 am	Spouse Breakfast
8:30 am – 5:00 pm	Poster Session I
8:30 am – 10:00 am	Plenary Session
10:00 am – 10:30 am	Refreshment Break



10:30 am – 12:00 Noon Concurrent Technical Sessions — Period 1

Session 1A – Risk-Based Design

Risk-Based Optimization as a Decision Tool for the Choice of Breakwater Types
K. Laenen, HBG Civiel bv

Virtual Performance of Rubble Mound Structures
N. Kobayashi, University of Delaware

Performance Design of Maritime Structures and Its Application to Stones and Blocks of Breakwaters
S. Takahashi, Port and Airport Research Institute

Breakopt: A Simulation System for the Probabilistic Optimization of Rubble Mound and Vertical Breakwaters
S. Alfageme, Moffatt & Nichol Engineers

Session 1B – Groins and Rocky Shores

Groin Notching in Spring Lake, New Jersey
L. Bocamazo, U.S. Army Engineer District, New York

Beach Mining Design for a Rocky Coast Close to a Harbor and Sensitive Estuary on the Namaqualand Coast
A. Theron, CSIR

Design of Timber Groynes
U. Perdok, HR Wallingford

Economical Rock Groynes
M. Crossman, HR Wallingford

Session 1C – Wave Runup and Overtopping 1

Wave Overtopping Database and a First Neural Network Prediction Method
H. Verhaeghe, Ghent University

Wave Overtopping at Seadikes
H. Schuettrumpf, Federal Waterways Engineering and Research Institute

Large Scale Wave Run-Up Tests on a Rubble Mound Breakwater
B. VandeWalle, Ghent University

Wave Runup and Wave Overtopping on a Rubble Mound Breakwater: Comparison of Prototype and Laboratory Investigations
J. Moeller, Leichtweiss-Institute for Hydraulic Engineering

12:00 Noon – 1:30 pm Awards Luncheon

1:30 pm – 3:00 pm Concurrent Technical Sessions — Period 2

Session 2A – Rubble Mound Design

New Wave Parameter for Coastal Structure Design
S. Hughes, U.S. Army Engineer Research and Development Center

Armor Stability Based on Wave Momentum Flux
J. Melby, U.S. Army Engineer Research and Development Center

Roundhead Stability Using High Density Armor
H. Burcharth, Aalborg University

Developments in Coastal Structures and Future Needs: General Remarks
K. Pilarczyk, Rijkswaterstaat

Session 2B – Waves 1

Proyecto SHOA, Olas, Chile: The Development of a 40-Year Wave Climate for the Entire Chilean Coastline
C. Fournier, Atria Baird Consultores S.A.

Influence of Dredged Channels on Wave Penetration Into Harbors: The Malamocco Inlet Case
G. Beltrami, University of L'Aquila

3-D Numerical Analysis of Wave-Flow Interaction in a Port
D.-S. Hur, Nagoya University

Definition of Sea State Characteristics Critical for the Operativeness of Venice Gates
R. Piscopia, University of Rome

Session 2C – Wave-Structure Interaction 1

Dynamic Pressure to Waterproof Sheet Placed in the Backfill Region of a Cassion-Type Bulkhead for Waste Disposal
H. Ino, Penta-Ocean Construction

Numerical Study of Three-Dimensional Flow Fields Around the Base of a Vertical Cylinder in Oscillatory Plus Mean Flow
S. Umeda, Kanazawa University

Effects of Wave-Current Secondary Circulation on Seawater Intake Design
N. Ismail, Academy for Science and Technology

Designing An Outfall Extension Through a Beach Renourishment for Deal Lake, New Jersey
J. Cox, Foster Wheeler Environmental

3:00 pm – 3:30 pm Refreshment Break

3:30 pm – 5:00 pm Concurrent Technical Sessions — Period 3

Session 3A – Rubble Mound Stability 1

Dependence of the Stability of Mound Breakwaters on the Reflection Process
M. Benedicto, University of Granada

Stability of Rock Slopes with Shallow Foreshores
M. Van Gent, Delft Hydraulics

Wave Grouping and Spectral Shape Effects on the Stability of Rubble Mound Breakwaters
B. Ozbahceci, DLH Ins. Gn. Mdlugu, Arastirma Dairesi

Effects of Layer Thickness and Core Material on Stability of Wave Dissipating Concrete
S. Kubota, Tetra

Session 3B – Port and Harbor Design

Container Wharf Seismic Upgrade Plan at the Port of Los Angeles
P. Yin, Port of Los Angeles

Pier 300 Extension Using Dredged Materials from the Main Channel, Port of Los Angeles
J. Schneider, Furgo West

Joint Use of Instrumentation and Probabilistic Modeling Applied to a Container Wharf
L. Verdure, LGCNSN

Case Study — Performance Investigation of a Sunken Concrete Ship Cargo Handling Wharf at the Port of Newport, Oregon
M. Byington, BERGER/ABAM Engineers

Session 3C – Wave Overtopping – CLASH

Violent Wave Overtopping: CLASH Field Measurements at Samphire Hoe
T. Pullen, HR Wallingford

Hazards Resulting from Wave Overtopping — Field Measurements
J. Geeraerts, Ghent University

Full-Scale Wave Overtopping Measurements
J. DeRouck, Ghent University

Field Measurement of Wave Overtopping at Ostia Yacht Harbor Breakwater
L. Franco, University of Rome III

Conference Agenda

THURSDAY, AUGUST 28

8:00 am – 3:30 pm

Registration Open

8:30 am – 10:00 am

Concurrent Technical Sessions — Period 4

Session 4A – Rubble Mound Stability 2

A Coherent Approach for Assessing the Stability of Submerged Rock Armor

M. Davies, Pacific International Engineering

Head and Trunk Stability of Low-Crested Breakwaters in Short Crested Waves

M. Kramer, Aalborg University

Rapid Stabilization of the Immersed Tunnel Element

K. Sumida, Okinawa General Bureau

Wave Height, Pressure and Velocity CDF's Around Rubble Mound Protections for Submarine Outfalls

P. Lomonaco, University of Cantabria

Session 4B – Innovative Shore Protection: Alternative Materials

Wave Transmission and Force on Fabric Tube Breakwaters

H. Hosoi, Nagoya University

Sand-Filled Geotextile Containers for Shore Protection

M. Bleck, Leichtweiss-Institute for Hydraulic Engineering

Advances in Geotextile Tube Technology

D. Heilman, Shiner Moseley and Assoc.

Samoa Stone: An Architectural and Functional Concrete Armor Unit

G. Turk, URS

Session 4C – Wave Overtopping 2

Experimental and Numerical Study of Solitary Wave Past a Vertical Barrier

K. Al-Banaa, Cornell University

Extreme Statistics Analysis of Wave Overtopping Rate by a Stochastic Typhoon Model

F. Kato, National Institute for Land and Infrastructure Management

Overtopping of Seawalls Under Oblique Wave Attack and at Corners

N. Napp, Edinburgh University

Wave Overtopping on Chicago Shoreline Revetment

M. Krecic, Taylor Engineering

10:00 am – 10:30 am

Refreshment Break

10:30 am – 12:00 Noon

Concurrent Technical Sessions — Period 5

Session 5A – Rubble Mound Damage 1

Back Analysis of Rubble Mound Armorstone Design

O. Sayao, Taylor Engineering

Measurement of Armor Damage on Rubble Mound Structures: Comparison Between Different Methodologies

C. Vidal, University of Cantabria

Damage Development on Stone Armored Jetties

J. Ramos-Ortiz, U.S. Army Engineer Research and Development Center

Damage and Failure of Inner Slopes of Rubble Mound Breakwaters

H.J. Verhagen, Delft University of Technology

Session 5B – Case Studies 2

Performance of a Shore-Parallel Submerged Spur, North Jetty, Grays Harbor, Washington

N. MacDonald, Pacific International Engineering

Crown Wall Parapet Failure After a Strong Wave Storm, Alboran Isle, Mediterranean Sea

V. Negro, Madrid Polytechnical University

The Chicago Shoreline Protection Project

A. Benziger, U.S. Army Engineer District, Chicago

Historical Breakwaters on Lake Champlain, New York/Vermont History, Inspection and Preservation

V. Gelfer, Parsons Brinckerhoff

Session 5C – Wave-Structure Interaction 2

Physical Model Studies of Wave-Induced Forces on Exposed Jetties: Towards New Prediction Formulae

M. Tirindelli, University of Bologna

Numerical Simulation on Coupled Motion of Waves and Vertical Cantilever

T. Sakakiyama, Central Research Institute of Electric Power Industry

Frequency Domain Dynamic Analysis of a Floating Bridge

M. Isaacson, University of British Columbia

Fluid-Structure Interaction Technique for Simulation of Mooring Forces

S. Aliabadi, Clark Atlanta University

12:00 Noon – 1:30 pm

Lunch on Own

1:30 pm – 3:00 pm

Concurrent Technical Sessions — Period 6

Session 6A – Caisson and Composite Structures

Performance of Composite Breakwaters from the Viewpoint of Expected Sliding Distance of Caisson

M. Hanzawa, Tetra

A Design Method for Double Slit Wall Breakwaters

S. Kakuno, Osaka City University

Wave-Structure Interaction for Caisson Breakwaters: Wave Reflection, Wave Breaking, and Wave Loading for Various Caisson Geometries

A. Schuetttrumpf, Leichtweiss-Institute for Hydraulic Engineering

A Proposal for Effective Consideration of Uncertain Factors for Reliability-Based Design of Caisson-Type Breakwaters

T.-M. Kim, Kyoto University

Session 6B – Innovative Shore Protection - Section 227

National Shoreline Erosion Control Development and Demonstration Program Status (Section 227)

W. Curtis, U.S. Army Engineer Research and Development Center

A Dynamic Revetment and Artificial Dune at Cape Lookout State Park, Oregon: The "Design with Nature" Approach for Shore Protection

J. Allan, Oregon Department of Geology and Mineral Industries

Innovative Shore Protection Structures at Cape May Point, New Jersey

M. Giovannozzi, U.S. Army Engineer District, Philadelphia

Section 227 Shoreline Erosion Control Demonstration Project, Jefferson County, Texas

J. Waters, U.S. Army Engineer District, Galveston

Session 6C – Wave-Structure Interaction 3

Effect of Breakwater Reflections on Local Sea Steepness and Navigation

N.W.H. Allsop, HR Wallingford

Morphodynamic Modeling in Front of Vertical and Sloping Walls

K. Gislason, Technical University of Denmark

Wave Dissipation and Reflection on Muddy Bottoms

D. Shen, Han-Padron Associates

Modeling Wave Reflection and Transmission Around Near Structures

S. Pan, The University of Liverpool

3:00 pm – 3:30 pm

Refreshment Break



3:30 pm – 5:00 pm

Concurrent Technical Sessions — Period 7

Session 7A – Miscellaneous

Use of the CORE-LOC as a Baffling System at the Chicago River Turning Basin Cutoff Wall

D. Duma, Consoer Townsend Envirodyne Engineers

Hydraulic Analyses and Design of a Sediment Cap at a Superfund Site

J. Ramsden, PB Ports & Marine

The Design and Application of Pocket Wave Energy Absorbers in Harbor Entrances

D. Carpenter, Lawrence Technological University

Developments in the Use of Recycled Materials in Coastal Structures

J. Simm, HR Wallingford

Session 7B – Innovative Shore Protection 2

Ft. Pierce Federal Shore Protection Project: Shoreline Stabilization by T-Head Groins

C. Goshow, Taylor Engineering

Composite T-Head Groins for Erosion Control

B. Moore, Humiston & Moore Engineers

Field Measurements of Hydrodynamics around a Beach Defense System

R. Archetti, University of Bologna

Seawalls: Where Have We Been and Where Are We Going?

G. Griggs, University of California, Santa Cruz

Session 7C – Wave-Structure Interaction 4

Laboratory Experiments for Mass Transport Velocities and Turbulence Flows Due to New Type Wave Front Breaker over Artificial Reef

T. Saitoh, Kanazawa University

Numerical Wave Modeling over Submerged Coral Reefs

G. Abul-Azm, Cairo University

Wave Field Computation around Artificial Reefs with Gradational Breaker Model

Y. Goda, ECOH

Improved Boussinesq Model and Its Application to Wave Transformations over Artificial Reef on Sloping Beach

M. Nakajima, Hokuriku Electric Power

FRIDAY, AUGUST 29

8:00 am – 3:30 pm

Registration Open

8:30 am – 5:00 pm

Poster Session II

8:30 am – 10:00 am

Concurrent Technical Sessions — Period 8

Session 8A – Rubble Mound Damage 2

Estimating Breakwater Behavior Using Solid Modeling and Discrete Element Methods

J. Kelley, Tyco Telecom

A Simulation for Deformation of Rubble Structures Based on Stochastic and Dynamic Theory

K. Itoh, Taisei

Armor Damage Analysis Using Neural Networks

J. Medina, University Politécnica of Valencia

Monte Carlo Simulation on Damage of Armorstone Covering Composite Breakwater Mound

A. Matsumoto, Tetra

Session 8B – Innovative Shore Protection 3

Grays Harbor, Washington, North Jetty Rehabilitation Project

R. Parry, U.S. Army Engineer District, Seattle

Evaluation of Submerged Narrow Crested Breakwaters for Shoreline Protection

J. Tabar, PBS&J

Structural Rehabilitation of the Holly Beach, Louisiana Breakwater Field

D. Mann, Coastal Planning & Engineering

Feasibility Analysis of Shore Protection Alternatives for Rockefeller Wildlife Refuge in the Chenier Plain of Southwestern Louisiana

L. Wise, Shiner Moseley and Assoc

Session 8C – Wave Transmission – Low-Crested Structures

Wave Transmission behind Low-Crested Structures

R. Briganti, University of Rome III

Oblique Wave Transmission over Low-Crested Structures

J. Van der Meer, INFRAM

Analysis of Wave Transmission behind Rubble Mound Low-Crested Structures Using Neural Networks

A. Panizzo, University of L'Aquila

Computation of Wave Transmission Coefficients at Detached Breakwaters for Shoreline Response Modeling

T. Wamsley, U.S. Army Engineer Research and Development Center

10:00 am – 10:30 am

Refreshment Break

10:30 am – 12:00 Noon

Concurrent Technical Sessions — Period 9

Session 9A – Case Studies: Breakwaters and Jetties

Kaumalapau Harbor Breakwater Repair

S. Sullivan, Sea Engineering

Broad Toe Berm Jetty Head Design, Yaquina North Jetty

H. Moritz, U.S. Army Engineer District, Portland

Large Jetty Construction Challenges, Yaquina North Jetty, Oregon

B. Wegner, U.S. Army Engineer District, Portland

Sirevag Berm Breakwater, Design, Construction and Experience After Design Storm

S. Sigurdurson, Icelandic Maritime Administration

Session 9B – Innovative Shore Protection 4

Submerged Reef Structures for Beach Erosion Control

L. Harris, Florida Institute of Technology

Relation Between Aggregating Effect of Artificial Fish Reef and Flow Pattern around Reef

M. Ono, Kochi National College of Technology

Laboratory Study on Wave Transmission Through Hemispherical Hollow Artificial Reefs

H. Armono, Queen's University

Liquefaction of Loosely Deposited Sandbed behind a Breakwater Due to Wave Overtopping

K. Suzuki, Port & Airport Research Institute

Session 9C – Overtopping 3

Numerical Simulation of Hydraulic Overflow Pressure Acting on the Structures behind the Seawall

T. Arikawa, Port and Airport Research Institute

Violent Wave Overtopping —Extension of Prediction Method to Broken Waves

T. Bruce, University of Edinburgh

Numerical and Experimental Predictions of Overtopping Volumes for Violent Overtopping Events on Seawalls

D. Ingram, Manchester Metropolitan University

Numerical Study for Small Freeboard Wave Overtopping and Overflow of Sloping Sea Wall

A. Soliman, University of Nottingham

12:00 Noon – 1:30 pm

Lunch on Own



Conference Agenda

1:30 pm – 3:00 pm

Concurrent Technical Sessions — Period 10

Session 10A – Coastal Structure Design and Inspection

The Spanish ROM Program
G. Portal, State Ports of Spain

ROM 1.1: A Recommendation for Dikes against Sea Oscillations
M. Losada, University of Granada

Rubble-Mound Breakwater Inspection in Portugal
M. Neves, Laboratorio Nacional de Engenharia Civil

General Conditions for Stability Mound Breakwater Tests
G. Iglesias, University of La Coruna

Session 10B – Case Studies: Oregon

Evaluating a Federal Navigation Project as a Complete System in Tillamook Bay, Oregon
H. Sumerell, U.S. Army Engineer District, Portland

Columbia River Waterway Risks
Y. Wang, Oregon Department of Geology and Mineral Industries

Holistic Framework for Assessing the Functional Integrity of Navigation Structures at the Mouth of the Columbia River
H. Moritz, U.S. Army Engineer District, Portland

Rehabilitation of North Jetty and Sediment Management of North Spit Coos Bay, Oregon
J. Hays, U.S. Army Engineer District, Portland

Session 10C – Wave Loading on Walls

Wave Loading on Vertical Structures with Chamfered and Overhanging Upper Sections
A. Budvietas, Canadian Hydraulics Centre

Field and Laboratory Measurement of Wave Impacts
G. Bullock, University of Plymouth

Dynamic Wave Loads on Coastal Structures: Analysis of Impulsive and Pulsating Wave Loads
G. Cuomo, HR Wallingford

Influence of Parapets and Recurves on Wave Overtopping and Wave Loading of Complex Vertical Walls
A. Kortenhaus, Leichtweiss-Institute for Hydraulic Engineering

3:00 pm – 3:30 pm

Refreshment Break

3:30 pm – 5:00 pm

Concurrent Technical Sessions — Period 11

Session 11A – Rubble Mound Structures

New Stability Formula for Rubble Mound Armor Units of Composite Breakwaters
S. Matsuda, Tetra

Armorstone Integrity – Towards a Possible Destructive Test Method
S. Dupray, Imperial College

Improved Shape Assessment of Rock Armor
J. Latham, Imperial College

Rehabilitation of the Ross Bay Seawall with a Gravel Beach and Rock Sill System
B. Emmett, Archipelago Marine Research

Session 11B – Waves 2

Velocity Profiles at the Swash Zone
G. Tomasicchio, University of Calabria

Pressures by Breaking Waves on a Slope Computed with a VOF-Model
N. Doorn, Delft Hydraulics

NEES Multidirectional Wave Basin for Tsunami Research
S. Yim, Oregon State University

Kinematics of Focused Waves on a Plane Beach in the U.K. Coastal Research Facility
A. Hunt, University of Oxford

Session 11C – Wave-Structure Interaction 5

Wave and Current Flows around Low-Crested Structures
A. Lamberti, University of Bologna

Stochastic Characteristics of Wave and Velocity Field in Presence of Low-Crested Breakwaters
D. Vicinanza, University of Napoli

2-D Experimental and Numerical Analysis of Wave Interaction with Low-Crested Breakwaters Including Breaking and Flow Recirculation
I. Losada, University of Cantabria

Validation of Numerical Models Against Laboratory Measurements of Waves and Currents around Low-Crested Structures
E. Christensen, DHI Water and Environment

6:00 pm – 10:00 pm

Chinese Garden Reception

SATURDAY, AUGUST 30

9:00 am – 6:00 pm

Technical Tours

Poster Sessions

Poster Session I

Wednesday, August 27, 8:30 am – 5:00 pm

A Flushing System to Clean up Coastal Lagoons
M.A. Alatorre, Instituto de Ciencias del Mar y Limnología

Innovative Permitting and Design Approach of a Wetland Mitigation Project in the New York Harbor
G.M. Goll, Princeton Hydro

Stem Waves along Vertical Wall under Regular and Irregular Actions
J.-I. Lee, Korea Institute of Marine Sciences

Analysis of Sliding Stability of a Submerged Double-T
A.H. Peltz, U.S. Army Engineer Research and Development Center

Wave Parameter Estimation Using Neural Networks
J.D. Agrawal, Central Water and Power Research Station

Numerical Simulation of Wave Run-Up on Dikes
T. Droste, Leichtweiss-Institute for Hydraulic Engineering

An Evaluation of Breakwater Construction in Malaysia
Ir. S.-C. Lee, National Hydraulic Research Institute of Malaysia

Project Manukau: Coastal Restoration and Protection Using Crenulated Beaches
D. Papps, CH2M Beca

Erection of 80m Long Steel Girder from a Barge Moored in High Tidal Currents
K. Bando, Kajima

Tsunami Assessment along the Northwestern Egyptian Coastline in the Mediterranean Sea
Y.a. Hegazy, D'Appolonia Engineering

Poster Session II

Friday, August 29, 8:30 am – 5:00 pm

Wave Protection Measures for Port Livingston, Louisiana
M. Loeffler, Weston Solutions

Geotechnical Considerations for Beach Access Structures, San Diego, California
D. Schug, URS

Improving the Aesthetics of Shore Protection Structures: A Case Study
R.H. Boudreau, Moffatt and Nichol Engineers

Wave Reflection by Submerged Breakwater with Various Types of Regular Wave Actions
Y.-T. Kim, Korea Institute of Construction Technology

Section 227 Study Miami Beach, Dade County, Florida
T. R. Martin, U.S. Army Engineer District, Jacksonville

Intrinsic Permeability and Drag Coefficient
C.-Y. Chen

Hydraulic Failure and Soil-Structure Deformation Due to Wave and Draw Down Loading
H.-J. Koehler, Federal Waterways Engineering and Research Institute

Effectiveness of a Reflection Wave Dissipator of Vertical Barrier Type
T. Nakamura, Ehime University

Morphological Behavior of an Exposed Sandy Coast Using Complex Principal Component Analysis
Y. Uchiyama, Port and Airport Research Institute

Vulnerability and Survivability of Composite Structures Relevant to Shore Facilities
N. Uddin, University of Alabama at Birmingham



Poster Session guidelines are listed on the conference web site at www.asce.org/conferences/coastal2003.