

BOOK OF ABSTRACTS



Seventh International Conference

On

Coastal and Port Engineering in Developing Countries

"Best Practices in the Coastal Environment"

held at
Dubai Intercontinental Festival City
Dubai, U.A.E.

on 24 to 28 February 2008 Organized by



Dubai Municipality

on behalf of

The Coastal & Port Engineering Community of United Arab Emirates

Keynote Addresses

- K-1 CHALLAENGES IN REGULATION, STRATEGY AND POLICY IMPACT ON PORTS AND SHIPPING O. C. Phang
- K-2 COASTAL AND MARINE DEVELOPMENT PRINCIPLES AND MAJOR ISSUES IN THE ARABIAN GULF Nayef Al-Kalali and Wijesiri Subasing

Port Engineering

- 3 NUMERICAL MODELLING OF SEDIMENT TRANSPORT IN IMAM PORT COMPLEX M.Jandaghi Alaee, M. Entezari and A. Kebriaee
- 4 WAVE INDUCED WATER LEVEL ELEVATION AND PRESSURE DISTRIBUTION AT VERTICAL PERFORATED WALLS H. Bergman and H. Oumeraci
- 5 Single Layer Armour Systems Toe, Crest And Roundhead Details P. Besley and M. Denechere
- THE IMPORTANCE OF PRESSURE SAMPLING FREQUENCY IN MODELS FOR DETERMINATION OF CRITICAL WAVE LOADINGS ON MONOLITHIC STRUCTURES H.F. Burcharth, T. Lykke Andersen and P. Meinert
- 7 HARBOUR PLANNING AND COASTAL PROCESSES: THE CITY OF SALERNO AND ITS BAY E. Pugliese Carratelli, F. Messineo, F. Dentale, G. Spulsi and M. Monaco
- 8 INTEGRATED HYDRAULIC STUDIES TO SUPPORT THE MASTERPLAN FOR MUNDRA BASIN PORT, GUJARAT STATE, INDIA TJ Chesher, M McBride, MP Shukla and JV Smallman
- 9 COMPATIBILITY AND SUSTAINABILITY OF MARINA PLANNING AND DESIGN Elio Ciralli
- 10 SITE SELECTION AND PLANNING ISSUES FOR NEW LNG MARINE TERMINALS Stephen Cork and Ridha Bentiba
- 11 INNOVATIVE TECHNIQUES TO REDUCE OR REMOVE THE NEED FOR A BREAKWATER Cruickshank, P. Beresford, S. Grey and N. Tozer
- 12 HYDRAULIC MODEL STUDY TO THE BREAKWATER DESIGN FOR COLOMBO SOUTH PORT D.M.D.T.B. Dassanayake, S. Kumuthini, R. Galappatti, D. Wootton and MS Mendis
- ASSESSING IMPACTS FOR THE DEVELOPMENT OF A MARINE CONTAINER TERMINAL ON A FORMER MILITARY BASE J.M. Ellis and K. F. Ziober
- 14 INNOVATIVE DESIGN OF YACHT HARBOURS IN ITALY L. Franco, P. Contini, P. De Girolamo, M. Marini, A. Noli, P. Sammarco, M. Tartaglini and A. Togna
- 15 EMPLOYMENT OF LARGE CONCRETE PIPES FOR COMPOSITE BREAKWATERS Abdulhamid M. Ghazali and Salah H. Awedat
- 16 ASSESSMENT OF NEARSHORE WAVE CLIAMTE FOR OPTIMIZING LAYOUT OF A PROPOSED SEAPORT IN THE SOUTHERN COAST OF SRI LANKA P.P. Gunaratna, K. Raveenthiran and M. Rasmy
- 17 PROBABILISTIC ECONOMIC OPTIMIZATION OF SIGNIFICANT PORT DEVELOPMENTS John Headland
- 18 OPTIMISATION OF A LOW CREST RUBBLE MOUND BREAKWATER USING PHYSICAL AND NUMERICAL MODELLING Richard Hill, P Besley and I Roberts
- 19 DESIGN, CONSTRUCTION AND MONITORING OF THE NEW CRUISE TERMINAL AT THE PORT OF CIVITAVECCHIA (ROME) Gianluca levolella, P.F.Capolei, P. De Girolamo, L.Franco, O.Mazzola and A. Noli
- 20 SEDIMENTATION PROCESSES IN THE PORT OF UMM QASR, IRAQ C. Jurgensen, S. Salim, J. Abild, C. Jurgensen, A.A. Samir, S. Salim, J.B. Abild, M. Hassan, H.J. Vested, L.Dall & N.Amdal
- 21 EXPERIENCE OF INDEPENDENT ENVIRONMENTAL EXPERTISE OF THE NEW AND DEVELOPED RUSSIAN SEA PORTS I.G. Kantardgi
- 22 STUDY ON HYDRODYNAMICS AND SEDIMENT TRANSPORT IN IMAM PORT COMPLEX FIELD OBSERVATIONS M Kolahdoozan, C. Pattiaratchi, M. Nazarali and M. Allahyar
- 23 HYDRODYNAMIC PERFORMANCE OF HORIZONTAL SLOTTED VERTICAL WAVE SCREEN BREAKWATER -

- C. Krishnakumar, S.A.Sannasiraj and V.Sundar
- 24 DRYDOCK ORIENTATION AND ITS EFFECT ON HYDRODYNAMICS AND SEDIMENT TRANSPORT IN A MACRO-TIDAL ENVIRONMENT - S. Jaya Kumar
- 25 THE REMOTE RECORDING OF SEA SURFACE DISPLACEMENTS IN PORT AND HARBOUR ENTRANCE CHANNELS KR MacHutchon, CH Wu2 and PC Liu3
- 26 STABILITY PREDICTION OF BERM BREAKWATER USING NEURAL NETWORK S. Mandal, Subba Rao and Y.R. Manjunath
- 27 PORT EXPANSION IN THE PORT OF DURBAN: WHAT ARE THE ISSUE FOR THE CITY OF DURBAN A.A. Mather and K. Reddy
- 28 RECONSTRUCTION OF MONTEVIDEO'S PORT BREAKWATERS Andres Nieto
- 29 CORE MADE OF GEOTEXTILE SAND CONTAINERS FOR RUBBLE MOUND BREAKWATERS AND SEAWALLS: EFFECT ON HYDRAULIC STABILITY AND PERFORMANCE H. Oumeraci. A. Kortenhaus and K. Werth
- 30 A MULTI-CLASS QUEUING NETWORK MODEL FOR TRUCK OPERATIONS INSIDE MARINE CONTAINER TERMINALS D. Pachakis, T. Fidell , and J. McNally
- 31 PORT EXPANSION AND SUSTAINABLE DREDGING Eleni Paipai
- 32 MODEL INVESTIGATIONS ON WAVE DISTURBANCE AND SHIP MOVEMENT IN COLOMBO PORT SOUTH HARBOUR, SRI LANKA K P P Pathirana, K. Raveenthiran, R. Galappatti, D. Wootton and M. S. Mendis
- 33 MATHEMATICAL MODEL STUDIES ON AL LAKBI FISHERY HARBOUR IMPROVEMENT Tharanga Pemasiri, K. Ramachandran, M. J. A. Gunawardane, M. Rasmy, K. Raveenthiran, A. Bhadra and M. S. Mendis
- 34 "HARBOUR WATCH" A VIDEO SYSTEM TO SUPPORT SAFE PORT OPERATIONS D. Phelp , N. vd Westhuizen , G Hough and P. Redhead
- 35 INTEGRATED METHOD OF NAVIGATIONAL RISK ASSESSMENT: A CASE STUDY IN THI VAI APPROACH CHANNEL N.M. Quy, J. K. Vrijling, P.H.A.J.M. van Gelder, and R. Groenveld
- 36 ENVIRONMENTAL IMPACT ASSESSMENT OF RECLAMATION WORKS IN PORT PROJECTS Abdelaziz Rabie
- 37 NUMERICAL AND EXPERIMENTAL INVESTIGATIONS ON SUBMERGED HORIZONTAL DOUBLE PLATE BREAKWATER T. Radhakrishnan and S. Nallayarasu
- 38 WAVE CLIMATE MODELLING FOR COLOMBO PORT EFFICIENCY AND EXPANSION PROJECT Mohamed Rasmy, K. Raveenthiran, D. Dales and M. S. Mendis
- 39 HYDRODYNAMIC AND SEDIMENT TRANSPORT MODELLING FOR THE DETAIL DESIGN OF HAMBANTOTA SEA PORT K. Raveenthiran, M. Rasmy and S. P. Samarawickrama
- 40 DEVELOPMENT OF A HANDLING PORT FOR BULK CARGO INTO A MULTIMODAL TRAFFIC AND LOGISTICS CENTRE: THE BALTIC SEA PORT OF ROSTOCK Torsten Retzlaff and Jörg Heinze
- 41 IMPROVING OPERATIONAL CONDITIONS AT LEIXÕES OIL TERMINAL PORTUGAL P. Rosa-Santos, F. Veloso-Gomes, F. Taveira-Pinto, E. Brogueira-Dias and H. Guedes-Lopes
- 42 NEW TECHNIQUE IN REHABILITATION OF DAMAGED CELL (43), CONTAINER TERMINAL, DAMIETTA PORT Tharwat E. Sarhan.

- 43 THE INFLUENCE OF A DEEP DREDGED CHANNEL ON WAVE PENETRATION INTO A NEW PORT IN OMAN M A Sarker, A.J Sleigh and A.W.Hoyle
- 44 MATHEMATICAL MODELLING ON POST-TSUNAMI RECONSTRUCTION OF PANADURA FISHERY HARBOUR N Sugandika, M. Rasmy, M. J. A. Gunawardane, K. Raveenthiran, L. V. Talagala, D. Xianqiao and M. S. Mendis
- 45 BEHAVIOUR OF STONE PROTECTION ON/IN LIQUEFIED SEABED B.M. Sumer and J. Fredsøe
- 46 LABORATORY INVESTIGATIONS ON MULTIPLE PONTOON FLOATING BREAKWATER Shaffiuddin Amer Syed and J.S. Mani
- 47 ANALYSIS OF THE REFLECTION AND TRANSMISSION PROPERTIES OF RIGID THIN BARRIER BREAKWATERS BY SBFEM Bin Teng and Feng-shuai Cao
- 48 BREAKING WAVE IMPACT PRESSURES ON VERTICAL BREAKWATER Nguyen Dhan Thao and Tomoya Shibayama
- 49 PROTECTION OF SLOPES UNDER OPEN PILED STRUCTURES AGAINST PROPELLER ACTION USING VERTICAL FILTER SCREEN E. Tolba and M. Balah
- 53 CONCEPTUAL DESIGN FOR BREAKWATER SYSTEM OF THE SOUTH OF DOSON NAVAL BASE, VIETNAM; OPTIMIZATION VERSUS DETERMINISTIC DESIGN Nguyen Dai Viet, H.J. Verhagen; Pieter H.A.J.M. van Gelder and J.K. Vrijling
- 54 USER REQUIREMENTS AND VOLUME OF PLEASURE BOAT TRAFFIC AS BASIC CRITERIA FOR PLANNING AND DESIGN OF A MARINA Frank Weichbrodt
- 55 PRACTICAL EXPERIENCES IN DEVELOPMENT OF DESIGN GUIDELINES FOR FISHERY HARBOURS SRI LANKA Mangala Wickramanayake, Teja Wedaarachchi and Ayesh Ranawaka
- 56 CURRENT AND SEDIMENTATION MODELLING FOR COLOMBO SOUTH PORT DEVELOPMENT S Wickramaratne, SSL Hettiarachchi, K Raveenthiran, D O'Brian and SP Samarawickrama

Coastal Infrastructure

- 57 HYDRODYNAMIC EFFECT ANALYSIS OF RECLAMATION IN DADENG SEA AREA Yu Dongsheng and Yang Jinyan
- 58 A COASTAL PROCESS MODELLING BASED DECISION SUPPORT SYSTEM FOR "LIVE" MANAGEMENT OF THE DYNAMIC DUBAI COASTAL ZONE C.C. Giarrusso, A. Abdulrahim, F. Viera, I.M. Ibrahim, F. Smit and G.P. Mocke
- 59 WATERFRONT DEVELOPMENTS IN THE GULF REGION: A REVIEW AND EXAMINATION OF FLUSHING AND ITS RELEVANCE TO WATER QUALITY Christopher K. Goshow, Shahab Hosseini and Sean O'Neil
- 60 COASTAL ENVIRONMENT IMPROVEMENT OF ELLAIDHOO TOURIST RESORT L V P N Jayawardena, K. Ramachandran, N. Miguntanna, K. Raveenthiran, M. Aslam, M. Jayasekera and M. S. Mendis
- 61 MARINE LAND DEVELOPMENTS IN QATAR J. Juhl and T. Gierlevsen
- 62 DESIGNING AND CREATING LAGOON BEACHES LESSONS LEARNT AND ACTIONS REQUIRED Jonathan McCue and lan Heijne
- 63 IMPACT OF BOUTIQUE ISLAND DEVELOPMENT AT LANGKAWI COAST, MALAYSIA Nasreen Mohal and Jalauddin Md. Abdul Hve
- 64 THE LARGEST MAN-MADE ISLAND Louay A. Mohammad
- 66 MARINE DATA ACQUISITION AND MODELLING STUDY NEAR ABU DHABI Sean O'Neil, Zhenyong Yang and Tim Lewis

- 67 RECLAMATION OF SUTERA HARBOUR RESORT, KOTA KINABALU, SABAH, MALAYSIA S K Pui
- 68 ACHIEVING SUSTAINABLE SHORELINE MANAGEMENT N I Pontee, K. Burgess and A. Hosking
- 69 PLANNING DESIGN AND CONSTRUCTION OF MARINE WORKS FOR THE BAHRAIN AL DURRAT RESORT I Roberts, R. Hill and A. Cooper
- 70 DESIGN AND CONSTRUCTION OF COASTAL PROTECTION AND WATERFRONT REGENERATION AT PORT LA LIBERTAD. ECUADOR E. Sánchez-Cuadros
- 71 COASTAL MODELLING OF THE DUBAI COASTLINE WITH EMPHASIS ON MORPHOLOGICAL MODEL VALIDATION F Smit, G. P. Mocke C.C. Giarusso and P.Baranasuriya
- 72 THE WORLD BARRIER REEF:BOUNDARY CONDITIONS, CONCEPT DEVELOPMENT AND PRELIMINARY DESIGN J.C. Van Der Lem, A. Capel, J. Dekker and M.R.A. van Gent
- 73 HYDRODYNAMIC IMPACT AND SEDIMENT SILTATION STUDY FOR COASTAL RECLAMATION PROJECT IN MEIZHOU BAY, CHINA Jin-Hai Zheng, Jin-Yan Liang and Jin-Yu Lin

Coastal Erosion and Protection

- 74 ANALYSIS OF SHORELINE CHANGES USING REMOTE SENSING AND NUMERICAL MODELS IN OMAN A.G. Abul Azm, K.A. Rakha and H. El-Gamily
- 75 GENERIC IMPACTS OF LARGE-SCALE STRUCTURES ON THE SHORELINE S.I.A.Mohammed, K. Pysna and R. Simons
- 76 IMPROVEMENTS IN WAVE OVERTOPPING ANALYSIS THE EUROTOP OVERTOPPING MANUAL AND CALCULATION TOOL N.W.H. Allsop, T.A. Pullen, J.W. vD Meer, T. Bruce, H. Schüttrumpf, and A. Kortenhaus
- 77 R&D FACILITIES AND ACTIVITIES IN THE AREA OF COASTAL ENGINEERING IN KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH, KUWAIT M. Al-Sudairawi, S.Neelamani, K. Rakha, K. Al-Banaa, K. Al-Salem, F. Al-Hulail, W. Al-Nassar and A. Al-Ragum
- TRANSITION TO THE LONG-TERM MORPHOLOGICAL IMPACTS OF DAMS CONSTRUCTED IN THE SÃO FRANCISCO RIVER BASIN, ON THE COASTLINE OF SERGIPE STATE BRAZIL J.V. Bandeira, L.H. Salim and O.E. Calisto A.
- 79 MODELING OF ACCELERATED COASTAL EROSION IN THE VICINITY OF THE AMIRABAD PORT DUE TO NEWLY CONSTRUCTED UPDRIFT STRUCTURES B. Banijamali, M. Allahyar
- 80 A MULTI-LAYER COASTAL STRUCTURE TO CAP CONTAMINATED MATERIAL V. Campanaro, G.R. Tomasicchio, M. Maiolo, and F. D'Alessandro
- 81 ECO-FRIENDLY BEACH PROTECTION WORKS K Chakraborty
- 82 PROTECTION OF THE BLACK SEA COAST IN ROMANIA Romeo Ciortan and Khoudir Mezouar
- 83 ON THE SCATTER IN MODEL TESTS ON RUN-UP AND OVERTOPPING K.-F. Daemrich, N. Ohle, S. Mai and H. Schüttrumpf
- 84 DECISION SUPPORT SYSTEM FOR INCORPORATING GEOSYNTHETICS IN COASTAL PROTECTION WORKS K das NEVES, S. GARCIA, M.L. LOPES, F. VELOSO GOMES AND F. TAVEIRA PINTO
- 85 ASSESMENT OF SHORELINE RETREAT AND ESTABLISHMENT OF SET BACK LINES ALONG PRAIA DO PAIVA, NE BRAZIL B. Elfrink, J.M. Landim Dominguez, R. Rego and I. Brøker
- 88 NUMERICAL MODELING APPROACH OF AN ARTIFICIAL MANGROVE ROOT SYSTEM (ARMS) SUBMERGED

- BREAKWATER AS WETLAND HABITAT PROTECTOR Eldina Fatimah, Ahmad Khairi Abd. Wahab and Hadibah Ismail
- 89 DUNE EROSION PREDICTION METHOD BASED ON LARGE-SCALE MODEL TESTS M.R.A. van Gent and J.H. de Vroeg
- 90 SHORE STABILIZATION BY ARTIFICIAL NOURISHMENT, A CASE STUDY: A COASTAL EROSION PROBLEM IN SIDE, TURKEY Isikhan Guler, Cüneyt Baykal and Aysen Ergin
- 91 INFLUENCE OF WAVE OBLIQUITY ON OVERTOPPING OVER SEA DIKES 3D PHYSICAL MODEL TESTING R.M. Hassan and H. Wiyono
- 92 MODELLING OF SIZE-GRADED SAND UNDER STORM CONDITINS W.N. Hassan
- 93 DESIGN AND CONSTRUCTION OF WATERFRONT STRUCTURES WITH SPECIAL DESIGNED NONWOVEN GEOTEXTILES G. Heerten, J. Klompmaker and A. Partridge
- 94 DESIGN OF MAN-MADE BEACHES IN QATAR Christian Helledie and T. Gierlevsen
- 95 INVESTIGATIONS OF WAVE REFLECTION AND TRANSMISSION THROUGH GABION STRUCTURES S S L Hettiarachchi, R. Amaraweera, K.P. M. Fernando and S.P.Samawickrama
- 96 ESTIMATION OF BED PROTECTION DAMAGE USING NUMERICAL FLOW MODELLING Nguyen Thanh Hoan, Rob Booij, Bas Hofland, Marcel J.F. Stive and Henk Jan Verhagen
- 97 COASTAL PROTECTION WORKS Hungudkar R Durgappa
- 98 PHYSICAL INVESTIGATION OF SONG-DO BEACH RESTORATION L V P N Jayawardena, N. Miguntanna, K. Raveenthiran, K. Ahn and M. S. Mendis
- 99 SEA LEVEL VARIATIONS AT THE GERMAN NORTH SEA AND BALTIC SEA COASTLINES J. Jensen and C. Mudersbach
- 100 TRANSPORT OF SIZE-GRADED SEDIMENTS UNDER WAVES I G. Kantardgi and V. Vaitman
- 101 MORPHODYNAMICS OF HEADLAND-BAY BEACHES: EXAMPLES FROM SOUTHERN BRAZIL Antonio Henrique da F. Klein, Oscar Ferreira, João M. A. Dias and Moysés G. Tessler
- 103 MODELING OF SUSPENDED SEDIMENT CONCENTRATION FLUCTUATIONS ABOVE THE PLANE BOTTOM UNDER WAVES WITH GROUP STRUCTURE R.D. Kos'yan, B.V. Divinsky, M.V. Krylenko and C. Vincent
- 104 MORPHODYNAMICS AROUND LOW CRESTED BREAKWATERS A NUMERICAL STUDY S.R. Kularatne, M.A. Dabees and J.W. Kamphuis
- 105 DEPENDENCE OF CONCENTRATION OF SUSPENDED SAND ON INSTANTANEOUS PARAMETERS OF WAVES Sergey Kuznetsov, Iana Saprykina and Sergey Bagno
- 106 MORPHODYNAMIC DEVELOPMENT OF TIDAL FLATS N. von Lieberman and T. Albers
- 107 NUMERICAL MODEL STUDY FOR OPTIMIZATION OF LONG SHOALS FOR COASTAL PROTECTION AND APPLICATION TO FIELD CONDITION M.V. Ramana Murthy, J.S. Mani and B.R.Subramanian
- 110 STABILITY OF COASTAL STRUCTURES MADE OF GEOTEXTILE SAND CONTAINERS: PROCESS-ORIENTED STUDIES TOWARDS DESIGN FORMULAE Juan Recio and Hocine Oumeraci
- 111 EXPERIMENTAL AND NUMERICAL STDUY ON PERFORMANCE OF VERTICAL WALL FRONTED BY A LOW-CRESTED

- BREAKWATER M.G. Muni Reddy, R.Natarajan and S.A.Sannasiraj
- 112 STUDY OF REFLECTION AND TRANSMISSION COEFFICIENTS OF WAVES FROM PERFORATED PLATES AND INTRODUCING DIMENSIONLESS PARAMETER" O" M. Rostaminia and V. Chegini
- 113 INVESTIGATING THE HYDRAULIC PERFORMANCE OF CORAL REEFS BY SIMULATED POROUS STRUCTURES Saman Samarawickrama, S Balasubramanian, HJS Fernando and SSL Hettiarachchi
- 114 HYDRODYNAMIC CHARACTERISTICS OF LOW-CRESTED RUBBLE MOUND STRUCTURES FOR COASTAL STABILISATION I.G.B. Siladharma and Dede M. Sulaiman
- 115 EROSION RATE OF SANUR BEACH NOURISHMENT PROJECT D.M. Sulaiman and I.G.B. Siladharma
- 116 A COMPARATIVE MODELLING OF SHORELINE CHANGES USING SINGLE AND MULTIPLE-LINE MODELS Dang Van To
- 118 WAVE OVERTOPPING ON VIETNAMESE SEA-DIKES Nguyen Ba Tuyen, Le Hai Trung and Gerrit Jan Schiereck
- 119 THE USE OF VETIVER IN COASTAL ENGINEERING H.J. Verhagen, D.J. Jaspers Fock, A. Algera and M.A. Vu
- 120 SWASH ZONE SEDIMENT TRANSPORT IN A LONG-TERM SHORELINE MODEL D. Villarroel-Lamb

Coastal Risk

123

121 MANAGING RISKS OF EROSION AND FLOODING IN COASTAL ZONES – A GERMAN CASE STUDY - T. Albers and N. von Lieberman

EXPLICIT UNSTRUCTURED MODELING OF THE INDIAN OCEAN TSUNAMI - Manasa Ranjan Behera, K. Murali and V. Sundar

- 122 ASSESSING CHARACTERISTICS OF RELATIONSHIP AMONG WAVE HEIGHT, ENERGY AND SLOPE RATIO OF BANYUWANGI 1994 EARTHQUAKE-GENERATED TSUNAMI Achmad Yasir Baeda
- 124 A PUBLIC PRIVATE PARTNERSHIP IN MANAGING COASTAL RISK Matt Crossman
- 125 MITIGATION THROUGH DESIGN FOR EARTHQUAKE-INDUCED LIQUEFACTION AROUND MARINE STRUCTURES Jesper S. Damgaard and Mutlu Sumer
- 126 REGIONAL ANALYSIS OF STORM SURGES STATISTICAL ANALYSES OF FLOOD WATER LEVELS FOR THE BALTIC SEA OF MECKLENBURG VORPOMMERN Steffi Dimke, Konrad Miegel and Peter Fröhle
- 127 EXTREMAL WAVES IN THE NORTH-EASTERN PART OF THE BLACK SEA B.V. Divinskiy and R.D. Kos'yan
- 128 A STUDY ON THE JOINT PROBABILITY OF WAVES AND WATER LEVELS DURING TYPHOONS D.J. Doong, S.H. Ou and C.C. Kao
- 129 COASTAL RISK MANAGEMENT VENICE FLOOD BARRIER PROJECT: RISK & RELIABILITY ASSESSMENT Y. Eprim
- 130 INDICATOR BASED COASTAL VULNERABILITY ASSESSMENT MODEL TO SEA LEVEL RISE Aysen Ergin, G. Özyurt and M. Esen
- 131 PROPOSED METHODOLOGY FOR THE RISK ASSESSMENT OF THE CONSTRUCTION OF CAISSON BREAKWATER IN DEVELOPING COUNTRIES M. Esteban, H. Takagi and T. Shibayama
- 132 TSUNAMI RISK ASSESSMENT FOR PORT CITY OF GALLE, SRI LANKA S S L Hettiarachchi, SP Samarawickrama and N Wijeratne
- 133 FISH HARBOUR REPAIRS AND IMPROVEMENTS: POST-TSUNAMI RECONSTRUCTION IN SRI LANKA M.P.R. Jayaratne, L.V. Talagala, R.J. Robertson, P.C. Fernando, K. Raveenthiran and M.S. Mendis
- 134 MATHEMATICAL MODELLING OF HIKKADUWA FISH HARBOUR: A CASE STUDY AFTER THE 26 DECEMBER 2004

- SUMATRA EARTHQUAKE TSUNAMI M.P.R Jayaratne, K. Raveenthiran, L. V. Talagala, R. J. Robertson and M. S Mendis
- 135 SIMULATION OF SUPER STORMS IN THE NORTH SEA J. Jensen and C. Mudersbach
- 137 ASSESSMENT OF CYCLONE INDUCED WAVE HEIGHT FOR THE COAST OF BANGLADESH: AN APPLICATION OF THE BAY OF BENGAL MODEL M Mahboob-ul Kabir, Flemming Jakobsen and Mir Hammadul Azam
- 139 RECONSTRUCTION OF SEA STATE CONDITIONS AT THE VITÓRIA COAST (BRAZIL) DURING THE JUNE 2006 SWELL EVENT Eloi Melo, M.A.R. Romeu and G.R. Hammes
- 140 EFFECT OF SELECTION OF THRESHOLD VALUE OF THE DATA ON THE PREDICTED 100 YEAR RETURN PERIOD WAVES IN THE UAE TERRITORIAL WATERS S. Neelamani
- 141 INVESTIGATION OF HYDRODYNAMIC DEMANDS OF TSUNAMIS IN INUNDATION ZONE Ceren Ozer, Hulya Karakus and Ahmet Cevdet Yalciner
- 142 FROM TSUNAMIS TO SEICHES Charitha Pattiaratchi
- 143 TSUNAMI IMPACT MITIGATION BY COASTAL VEGETATION IN SRI LANKA A H R Ratnasooriya, R. P. S. S. Bandara and S. P. Samarawickrama
- 144 A RISK BASED FRAMEWORK FOR PREDICTING LONG-TERM BEACH EVOLUTION Dominic Reeve, David Simmonds, Mark Davidson, Andrew Chadwick, Abdulla Kizhisseri and Harshinie Karunarathna, Jhon Lawrence and Ines Martin Grandes
- 147 BREACH INITIATION BY THE RESPONSE OF COASTAL BARRIERS DURING STORM SURGES Thieu Quang Tuan and Henk Jan Verhagen
- 148 IMPACT OF THE 26 DECEMBER 2004 INDONESIAN TSUNAMI ON THE KENYAN COAST R. Warren, J. Tychsen, O. Geertz-Hansen and H. Zhang
- 149 TSUNAMIS IN EASTERN MEDITERANEAN, HISTORIES, POSSIBILITIES AND REALITIES Andrey Zaitsev, Ahmet C. Yalciner, Efim Pelinovsky, Andrey Kurkin, Ceren Ozer, Isil Insel, Hulya Karakus and Gulizar Ozyurt

Coastal Hydrodynamics

- 150 ANALYSIS OF WAVE CLIMATE IN THE SOUTHWEST COAST OF THE BLACK SEA FOR THE ASSESSMENT OF SHORELINE CHANGE PROCESSES H.A. Ari, Y. Yüksel and E. Ö. Çevik
- 151 OPTIMISATION OF WAVE FORCES ON A DUAL CYLINDRICAL STRUCTURE K. Sankar Babu, S.A. Sannasiraj and V. Sundar
- 152 QUALITATIVE DISCRIMINATING OF SHALLOW AND DEEP WATER WAVES FROM DATA BUOY MEASUREMENTS R. Balaji, S.A. Sannasiraj and V. Sundar
- 153 WAVE PROPAGATION STUDY AT THE CENTRAL COAST OF RIO GRANDE DO SUL –BRAZIL Rodrigo C. Barletta, Eloi Melo and Davide Franco
- 154 ASSESSMENT OF SALINE WATER INTRUSION INTO HUONG RIVER IN DRY SEASON Vu Minh Cat
- 155 MORPHO-DYNAMICS OF KANDLA-HANSTHAL CREEK SYSTEM AND THE KANDLA SHIPPING CHANNEL P.V. Chandramohan
- 156 STEEP STEADY WAVES ON WATER OF FINITE DEPTH WITH CONSTANT VORTICITY A.F. Teles Da Silva, R.M. Moreira and D.H. Peregrine
- 158 DEVELOPMENT OF A TWO-DIMENSIONAL FINITE VOLUME ADVECTION DISPERSION MODEL (ADM) AND APPLICATION TO ARTIFICIAL LAGOONS A.H. Daoud, A.G. Abul-Azm and K.A. Rakha
- 159 MODELLING OF MEGA-SCALE EQUILIBRIUM CONDITION OF TIDAL BASINS IN WESTERN DUTCH WADDEN ZEE USING A PROCESS BASED MODEL A Dastgheib, Z.B. Wang, J. de Ronde and J. A. Roelvink

- 160 THE FUNWAVE MODEL APPLICATION & ITS VALIDATION USING LABORATORY DATA F *De Serio and M. Mossa*
- 161 GEOMORPHOLOGY AND SEDIMENT TRANSPORT IN CHABAHAR BAY Mohammad Dibajnia, Mohsen Soltanpour and Mohammad Reza Allahyar
- 162 EFFECT OF SEA LEVEL RISE ON INLET MORPHOLOGY D.M.P.K. Dissanayake, J.A. Roelvink and M. Van der Wegen
- 163 OVERVIEW OF ARABIAN GULF HYDRODYNAMICS AND ITS CIRCULATION CONDITIONS Walid Elshorbagy
- NUMERICAL SIMULATION OF SEDIMENT TRANSPORT AS ONE BASIS FOR THE ASSESSMENT OF COASTAL PROTECTION MEASURES IN PALANGA, LITHUANIA Peter Fröhle, Petras Zemlys, Lina Davuliene and Saulius Gulbinskas
- 165 ENGINEERING STUDY ON PREVENTING THE FORMATION OF SAND BAR AT THE OUTLET OF MADU GANGA J A Gunawardena, K. Raveenthiran, D. M. P. K. Dissanayake, R. Galappatti, and L. V. Talagala
- 166 A STUDY ON AIR ENTRAINMENT INTO WATER IN STEADY AND UNSTEADY PLUNGING JETS Ashabul Hoque and S. Aoki
- 167 VARIABILITY OF OCEAN CIRCULATION ALONG WEST COAST OF INDIA DURING SW MONSOON Madhu Joshi and AD
- 168 APPLICATION OF NEURO-FUZZY MODEL IN WAVE FORECASTING OF NEKA M.H. Kazeminezhad, A. Etemad Shahidi and S.J.Mousavi
- 169 PERFORMANCE OF WAVE MODELS VERSUS MEASUREMENTS IMPLICATIONS FOR WAVE FORECASTING AND CLIMATE STUDIES S.K. Khatri
- 170 SEASONAL BEHAVIOUR OF TIDAL INLETS IN A TROPICAL MONSOON AREA Nghiem Tien Lam, Marcel J. F. Stive, Henk Jan Verhagen, and Zheng Bing Wang
- 171 METHOD FOR ESTABLISHING THE CORRESPONDENCE BETWEEN ABSOLUTE ROUGHNESS HEIGHT AND MANNING'S COEFFICIENT V.O. Luca and B. A. Luca
- 172 STATISTICS OF WAVES IN THE ESTUARIES OF EMS AND WESER, NORTH SEA- MEASUREMENT VS. NUMERICAL WAVE MODEL S. Mai
- 173 SEA LEVEL RISE FOR THE EAST COAST OF SOUTH AFRICA A.A. Mather
 - A. DATA ASSIMILATION FOR THE MEDITERRANEAN SEA Metwally and A. G. Abul-Azm
- 174 NONLINEAR INTERACTIONS BETWEEN WAVE GROUPS AND CURRENTS R.M. Moreira
- 175 PARAMETERIZATION OF NEAR-FIELD EFFECTS OF THERMO-HALINE DISCHARGES INTO FAR-FIELD COASTAL HYDRODYNAMIC MODELS Shubra K. Misra, Andrew M. Driscoll, Atilla Bayram and Christopher M. Carr
- 176 DEALING WITH SALINE INTRUSION AT RIVER WATER INTAKES IN WEST AND SOUTH SRI LANKA M. Nanseer and R. Galappatti
- 177 BEHAVIOUR AND PROPERTIES OF FLUID MUD H. Nasner, R. Pieper and P. Torn
- 180 A WAVE FORECASTING SYSTEM FOR COASTAL GULF OF MAINE Gaurav Singhal and Vijay Panchang
- 181 MONITORING AND MODELING OF CONCEIÇÃO LAGOON, FLORIANÓPOLIS, BRAZIL Cesar B. M. Rocha, E. Melo, D. Franco and H. Frasson
- 182 THE ORIGINS AND PROPERTIES OF WAVE IRREGULARITY ON DEEP AND SHALLOW WATER lana Saprykina and Sergev Kuznetsov
- 183 WAVE PERIOD FORECASTING AND HINDCASTING Christian Schlamkow and Peter Fröhle
- 184 A COMPARATIVE STUDY ON THE VALIDITY OF NSW EQUATIONS AND BOUSSINESQ MODELS IN THE SWASH ZONE A Shanehsazzadeh and B. Moradvasi

- 185 WAVE AND HYDRODYNAMIC MEASUREMENTS OF CHABAHAR BAY Mohsen Soltanpour, Mohammad Dibajnia, Alireza Kebriaee, Amin Afshar and Mohammad Hosseiny Bandarabady
- 186 SEMI-ALE: SIMULATION OF NONLINEAR FREE SURFACE WAVES V. Sriram, S.A. Sannasiraj and V. Sundar
- 187 CONCEPTION FOR THE OPTIMISATION OF AUTONOMOUS MEASURING PLATFORMS LOCATIONS IN THE POLISH EEZ OF THE BALTIC SEA K. Szefler, L. Gajewski and A. Staśkiewicz
- 188 LONG TERM CHARACTERISTICS OF WAVES IN THE CASPIAN SEA, PERSIAN GULF AND GULF OF OMAN S. Taebi and A. Golshani
- 189 MORPHOLOGICAL BEHAVIOUR OF NAM TRIEU ESTUARY VIETNAM Nguyen Thi Phuong Thao, Mick Van Der Wegen and Dano Roelvink
- 190 STRATEGY FOR STABILIZATION TIDAL INLETS IN THE CENTRAL COAST OF VIETNAM Tran T. Tung, Marcel J.F. Stive and Jan V.d. Graaff
- 191 LONG-TERM MORPHODYNAMIC EVOLUTION OF THE WESTERN SCHELDT ESTUARY, THE NETHERLANDS, USING A PROCESS BASED MODEL Mick ven der Wegen, Dano Roelvink , John de Ronde and Ad van der Spek

Coastal Environment and Sustainability

- 192 A REVIEW OF MARINE ENVIRONMENTAL ISSUES AND THEIR MITIGATION ALONG DUBAI CREEK FOR THE MANAGEMENT OF MARITIME DEVELOPMENT PROJECTS Khalid AI Zahed, Easa A. AI Dossari and Mohammed. A. Hassan
- 193 PROTECTION WORKS OF THE SEA COAST IN ALGERIA R Belkessa, F. Houma, R. Ciortan and K.Mezouar
- 196 ENVIRONMENTAL IMPACT ASSESSMENT OF THE DEVELOPED YACHT PORTS ALONG THE RUSSIAN BLACK SEA COAST EV Bondareva, N.A. Grishin, Y.I. Dreizis an I.G. Kantardgi
- 197 ECONOMICS AS AN ENGINEERING TOOL LIFE CYCLE ANALYSIS OF COASTAL ENGINEERING INNOVATION Lillian Almodovar, Mark B. Gravens and William Curtis
- 198 CANCUN BARRIER: ALTERNATIVES FOR BEACH RESTORATION Javier J Diez, M.D. Esteban and Rosa M.Paz
- 199 DESIGN CONDITIONS AND SOLUTIONS FOR EXTENDING A NAVY AMMUNITION WHARF IN GUAM, MARIANA ISLANDS David Dykstra and Robert Sloop
- 200 COASTAL ZONE MANAGEMENT AND ENVIRONMENT THE VENICE LAGOON ENVIRONMENT MANAGEMENT Y. Eprim and A. Bettinetti
- 201 HYDRODYNAMIC AND WATER QUALITY MODELLING OF THE DUBAI COAST: FRAMEWORK FOR PREDICTING COASTAL CHANGES EV Gallagher, P.J. Anid, L. D. De Rosa, J. J. Fitzpatrick, E. Howlett and O.S. Petersen
- 202 RE-USE OF BORROW PITS: THE DUTCH APPROACH TO STORE (CONTAMINATED) DREDGED MATERIAL AL Hakstege and D. Heineke
- 203 MARINE FORECASTING AND OIL SPILL MODELLING IN DUBAI E. Howlett, C. Swanson, P. Anid, P. Akar, G.P. Mocke & F. Smit
- 204 COASTAL AREAS TERRESTRIAL PART ASSESSMENT; TOWARDS A CLASSIFICATION/EVALUATION OF HELLENIC COASTAL SPACE John Kiousopoulos
- 205 PRESENT-DAY STATE OF THE SOUTH-EASTERN COAST OF THE SEA OF AZOV M.V. Krylenko
- 206 A NETWORK OF METADATA AND WEB SERVICES FOR INTEGRATED COASTAL ZONE MANAGEMENT R Lehfeldt, H.-C. Reimers, J. Kohlus and F. Sellerhoff
- 207 EROSIONAL PROCESSES, COASTAL PROTECTION CONCEPT AND SOLUTION IMPLEMENTATION AT MANZANILLA BEACH, ON THE CENTRAL-EAST COASTLINE OF TRINIDAD R Mohammed, C.Gray, C.Stere and P.Webber

- 209 SHORELINE MANAGEMENT OF THE DUBAI COAST Karsten Mangor, Gary Mocke, Claudia Giarrusso, Francois Smit, R. Bloch, J. Fuchs, U. Lumborg and S. L. Niemann
- 210 PIANC COCOM OWRKING GROUP 2 BEST PRACTISES FOR SHORELINE STABILITION METHODS Karsten Mangor, Gray Mocke, C. Pattiarachchi, K. Drost, J. Vianna Bandeira, B.Malherbe, P.Frohle, F.Kapp, S. Sigurdarson, K.Peters and T. Merten
- 211 AN EULERIAN-LAGRANGIAN MODEL FOR PREDICTION OF OIL SPILL TRAJECTORY IN SEAWATERS M. Nagheeby and M. Kolahdoozan
- 212 PLANNING AND DESIGN OF BEACH NOURISHMENT AND BEACH CHANGE AFTER NOURISHMENT ON CORAL REEF COAST IN BALI Susumu Onaka, Shubun Endo, Ichiro Yoshi and Takaaki Uda
- 213 MANAGEMENT OF COASTAL RESOURCES IN PUTTALAM LAGOON, SRI LANKA K.P.P. Pathirana, A.R.I. Kamal, M.C. Riyas and A.L.M. Safeek
- 214 COASTAL NETWORK INFORMATION SYSTEM, GOLD COAST QEENSLAND, AUSTRALIA R. Pointeau, R. Tomlinson and Shannon Hunt
- 215 DUBAI MARITIME CITY Khidhir Elias Putres
- 216 CHALLENGES TO ICM EMERGING FROM THE TSUNAMI IMPACT ASSESSMENT IN SRI LANKA Jayampathy Samarakoon, S. Epitawatte and R. Galappatti
- 217 MODELLING THE CHANGES IN WATER QUALITY DUE TO THE COLOMBO SOUTH HARBOUR Saman Samarawickrama, SSL Hettiarachchi, M Jayaweera, D O'Brien, K Raveenthiran and S Wickramaratne
- 218 SETHUSAMUDRAM SHIP CHANNEL PROJECT: CHANGES IN HYDRODYNAMICS AND SEDIMENT TRANSPORT REGIME IN THE VICINITY OF ADAM'S BRIDGE Saman Samarawickrama, J Gunawardena, SSL Hettiarachchi, M Mendis and K Raveenthiran
- 219 A LARGE SCALE BEACH CONSERVATION PROJECT IN JAMAICA D.A.Y. Smith, B. Pozueta, and P.S. Warner
- 220 IMPROVING THE COASTAL ENVIRONMENT AT THE END OF THE WORLD P.A. Tarela, E.A. Perone and F.J. van Avermaete
- 221 INTEGRATED STUDY OF NATURAL AND SOCIAL SYSTEMS FOR IMPROVED COASTAL ZONE MANAGEMENT Nalin Wikramanayake and J. Roy

Miscellaneous & Late Submissions

- 222 RESEARCH ON SEAGRASS GROWTH AND ITS TRANSPLANTATION IN SUB-TROPICAL MARINE ENVIRONMENTS N. Katakura, Z. Jokadar, H. Katsui, S. Lenehan, Y. Takayama and M. Plowman
- 226 LINKAGE OF COASTAL MUDBANKS AND NEAR-SHORE GREENING TO GROUND WATER FLUXES THROUGH POROUS SEDIMENT LAYER J.S. Paimpillil and K.K. Balachandran
- 227 HYDRODYNAMIC STUDY ON THE CURRENTS AT AN INTAKE BASIN IN KUWAIT BAY K.A. Rakha, K. Al-Banaa, A. Al-Ragum, and F. Al-Hulail
- 228 ON THE HYDRODYNAMICS AND MOTION RESPONSE OF A 1:20 MODEL MOORED OWC WAVE ENERGY DEVICE IN RANDOM WAVES E. Vijayakrishna Rapaka and R. Natarajan
- 229 DIFFUSION OF COOLING WATER UNDER TIDAL INFLUENCE Holger Schüttrumpf and Holger Rahlf
- 230 INTRODUCTION OF PUBLIC WATER TRANSPORT TO DUBAI AND ITS CHALLENGES Senerath Weerakoon, Khalid al Zahed and Essa Al Dossari
- 231 KEELCLEAR, A REAL-TIME UNDERKEEL CLEARANCE SYSTEM TO MAXIMISE DRAFT AND OPTIMISE DREDGING Wallace G. Cray and Scott W. Kean
- 232 MANAGING COASTAL DUNES: LESSONS FROM CORNWALL, UK A Moon, M. Clemo, N. I. Pontee and J. R. Rogers
- 233 SEVERE CORROSION TO STEEL STRUCTURES IN AQUATIC ENVIRONMENT: A LONG-TIME AND PROVEN SOLUTION

- TO A WORLDWIDE THREAT Louis Van Schel
- 234 ECO-FRIENDLY COASTAL PROTECTION USING MULTI-FUNCTIONAL ARTIFICIAL REEFS A Jackson, G. Mocke, F. Smit, B. Corbett
- 235 CONTROL OF FLOODING AT MAURITIUS CONTAINER TERMINAL Shakeel Goburdhone
- 236 THE ICELANDIC-TYPE BERM BREAKWATER -BREAKING THE 8.0M SIGNIFICANT WAVE HEIGHT LIMIT Sigurdur Sigurdarson
- 237 WATER QUALITY MANAGEMENT IN THE LAGOONS DEVELOPMENT DUBAI UAE G.Sinawi, M.Antonopoulou and S. Bin Eied