

WEDNESDAY 16 SEPTEMBER 2009

A1 CONFERENCE OPENING

10:00	Welcome and Introduction	William Allsop , <i>Technical Director, Maritime Structures</i> , HR Wallingford, and <i>Visiting Prof</i> , University of Southampton
10:10	Scottish Government Views of Marine Renewables	Jim Mather MSP , <i>Minister for Enterprise, Energy and Tourism</i> , Scottish Government
10:30	Marine Scotland Managing the Development of Marine Renewable Technologies in Scottish Waters	Phil Gilmour , <i>Project Manager</i> , Marine Energy Spatial Planning Group, Marine Scotland
10:40	Sustainability in Coastal Engineering	Prof Paul Jowitt , Heriot Watt University, and <i>President Elect</i> , Institution of Civil Engineers
10:55	Progress towards a Viable UK Marine Renewable Energy	Prof Ian Bryden , <i>Chair, Renewable Energy</i> , and <i>Deputy Head</i> , Institute for Energy Systems, University of Edinburgh

11:15 Refreshment Break

11:40	Historical Experience of Vertical Breakwaters in the United Kingdom	William Allsop , <i>Technical Director, Maritime Structures</i> , HR Wallingford, and <i>Visiting Prof</i> , University of Southampton
12:00	The Sea versus Wick Breakwater, 1863-77: An Instructive Disaster	Prof Roland Paxton , Heriot-Watt University
12:20	Breakwater Development in Spain: The Last Ten Years	Ramón Gutiérrez-Serret , <i>Director, Maritime Experimental Laboratory</i> , CEDEX, and <i>Secretary General</i> , IAHR
12:40	Discussion	

13:00 Lunch

STREAM A

STREAM B

STREAM C

	A3 DESIGN OPTIMISATION		B3 PLANNING FOR RENEWABLES		C3 SHORELINES: ADAPTING TO CHANGE	
14:00	Cost Effectiveness of the Renovation Scenarios of the IJmuiden Breakwaters	Hans Janssen, Senior Advisor, Hydraulic Engineering, Rijkswaterstaat	Developing Standards and Guidelines for Marine Energy Devices	John Griffiths, Technical Director, EMEC	The Water Framework Directive and the Management of Physical Habitats in Estuaries and Coasts	Dr Lucy Bolton, Technical Advisor, Hydromorphology, Environment Agency
14:15	Stochastic Risk-based Life Cycle Simulation of Century Old Jetties at the Mouth of the Columbia River, USA	Hans Moritz, Hydraulic and Ocean Engineer, US Army Corps of Engineers	The Development of Technology Evaluation Protocols for the Equitable Evaluation of Marine Renewable Energy Converters	Prof David Ingram, University of Edinburgh	Coastal Defences: Social Utility, Imagination and Justice	Jonathan Simm, Technical Director, HR Wallingford
14:30	Risk Awareness: Key to a Sustainable Design Approach for Breakwater Armouring	Bas Reedijk, Head, Coastal Department, Delta Marine Consultants	Tidal Power from the Estuaries of North West England	Terry Hedges, Senior Lecturer, University of Liverpool	Precautionary versus Reactionary Adaptation to Coastal Climate Change: Local Solutions to this Global Problem	Mike Attwell, Regional Operations Manager, Environment Agency
14:45	Reliability Analysis of Breakwater Armour Blocks of Harbours in Korea	Seung-Woo Kim, PhD Student, Seoul National University	Analysis of the Wave Energy Resource at the European Marine Energy Centre	Dr Matt Folley, Senior Research Fellow, Queen's University Belfast	An Innovative Tool for Improving Stakeholder Engagement	Kevin Burgess, Executive Director, Maritime Business, Halcrow Group
15:00	Discussion		Discussion		Discussion	

15:20 Refreshment Break

	A4 BREAKWATERS		B4 SEAWALLS		C4 SHORELINES: MEASURING CHANGE	
15:50	Single Layer Armour Systems: Toe, Crest and Roundhead Details	Phil Besley , <i>Group Manager</i> , HR Wallingford	Optimisation of a Step-berm Embankment	Dr Jeffrey A Melby , <i>Head, Coastal Structures Group</i> , US Army Engineer Research and Development Center	A Performance Based Assessment of Design Tools and Design Conditions for a Beach Management Scheme	Dr Andrew Bradbury , <i>Director</i> , Channel Coastal Observatory
16:05	On the Design of Quasi-static Berm Breakwaters	Dr Otavio Sayao , <i>Senior Engineer</i> , Sandwell Engineering	Flare-shaped Revetments: Installation Experience and Results on Sensitivity of Design to Climate Change	Prof Isao Irie , Kyushu University, and IDEA Consultants	Coastal Monitoring and Analysis of the "Dynamic" Anglian Coastline	Nigel Pask , <i>Project Manager</i> , Environment Agency
16:20	Development of an Icelandic-type Berm Breakwater for the Oakajee Port Project in Western Australia	Sigurður Sigurðarson , <i>Senior Coastal and Harbour Engineer</i> , Icelandic Maritime Administration	Development of Guidance for the Management of the Toe of Coastal Defence Structures	Michael Wallis , <i>Coastal Research Scientist</i> , HR Wallingford	Global Warming Influences on Tidal Wetland in Japan	Dr Hajime Tanji , <i>Head, Laboratory of Coastal Engineering</i> , National Institute for Rural Engineering
16:35	Evolution of Damage on Roundheads Protected with Cubes and Cubipod Armour Units	Dr Pedro Lomónaco , <i>Senior Research Officer</i> , Environmental Hydraulics Institute of Cantabria	The Role of Water and Beach Levels in Seawall Abrasion in the Macro-tidal High Energy Environment of Southeast England	Dr Uwe Dornbusch , <i>Coastal Technical Specialist</i> , Environment Agency	Dee Estuary Evolution: An Expatiation	Dr Philip Barber , <i>Senior Partner</i> , Shoreline Management Partnership
16:50	Discussion		Discussion		Discussion	

17:05 Drinks Reception sponsored by



THURSDAY 17 SEPTEMBER 2009

	STREAM A		STREAM B		STREAM C
	A5 IMPROVING EXISTING FACILITIES		B5 RENEWABLE SCHEMES		C5 FRINGE PAPERS
09:00	Isles of Scilly Link Harbour Improvements: Social and Environmental Issues in a Unique Island Location	Gareth Robertshaw , <i>Senior Engineer</i> , Halcrow Group	Construction Planning for the Greater Gabbard Offshore Wind Farm	David Summers , <i>Construction Manager</i> , Fluor	See page X
09:15	Extending the Life of Brighton Marina Breakwaters from 30 to 130 Years	Jonathan Orrell , <i>Managing Director</i> , Hemsley Orrell Partnership	Development of Wave Energy Breakwater at Siadar, Isle of Lewis	Christopher Patterson , <i>Technical Director, Ports and Maritime</i> , Jacobs Engineering	
09:30	Restoration of St Catherine's Breakwater Roundhead, Jersey, Channel Islands	Steve Hold , <i>Associate</i> , Arup	Overtopping Performance of Sea Wave Slot Cone Generator	Dr Jens Peter Kofoed , <i>Associate Professor</i> , Aalborg University	
09:45	Discussion		WaveRush: A New Concept for a Breakwater Wave Energy Converter	Iain Roberts , <i>Associate Maritime Engineer</i> , Atkins Consultants	
10:00	Fringe Papers: Breakwaters		Discussion		

10:20 Refreshment Break

	A6 USE OF CONCRETE IN MARITIME ENGINEERING		B6 BEACH-STRUCTURE INTERACTIONS		C6 HYDRODYNAMICS	
10:50	Introducing the New CIRIA Manual on the Use of Concrete in the Maritime Environment	Dr Sébastien Dupray, <i>Senior Engineer,</i> CETMEF	Simulation of Long-term Beach Changes within a Flood Defence Scheme	Prof Dominic Reeve, University of Plymouth	Modification of the Goda Formula to Evaluate the Movement of a Caisson Breakwater Protected by Failed Armour	Dr Miguel Esteban, <i>Post-Doctoral Fellow,</i> United Nations University Institute of Advance Studies
11:05	Review of the Use of Concrete in the Manufacture of Concrete Armour Units	Dr Sébastien Dupray, <i>Senior Engineer,</i> CETMEF	Towards Design Guidance for Nearshore Detached Breakwaters on Macro-tidal Coasts	Hakeem Johnson, <i>Associate Director,</i> Halcrow Group	Dynamic Analysis of Fluid-elastic Solid Interaction Using the Moving Particle Semi-implicit Method	Toshinori Ogasawara, <i>Assistant Professor,</i> Iwate University
11:20	Cube and Cubipod Armour Unit Drop Tests and Cost Analysis	Prof Josep Medina, Technical University of Valencia	Beach Nourishment Modelling: Impact of Coastal Structures	Dr Shunqi Pan, <i>Reader,</i> University of Plymouth	Large Scale Simulations on Impulsive Wave Pressures by Using CADMAS-SURF/3D	Dr Taro Arikawa, <i>Senior Researcher,</i> Port and Airport Research Institute
11:35	Application of the Finite-discrete Element Method to Dynamic Stress Development in Armour Units and Armour Layers	Dr John-Paul Latham, <i>Senior Lecturer,</i> Imperial College	Numerical Modelling Morphodynamics of Offshore Breakwaters Using an Improved Q3D Model	Dr Ming Li, <i>Lecturer,</i> University of Liverpool	Physical Modelling of Violent Flows and their Impact Using a New Tsunami Generator	Tristan Lloyd, PhD <i>Student,</i> University College London
11:50	Physical Modelling of the Mechanical and Hydrodynamic Behaviour of Reinforced Concrete Floating Breakwaters: Application in Baiona (Galicia, Spain)	Dr Enrique Peña-González, <i>Associate Professor,</i> University of A Coruña	Vulnerability to Climatic Changes with a 2DH Modelling on Four French Beaches	Dr Philippe Larroudé, <i>Assistant Professor,</i> Joseph Fourier University	Resonant Fluid Motions in Joint Gap of Caisson-type Breakwater Under Random Wave Attack	Dr Takehisa Saitoh, <i>Associate Professor,</i> Kanazawa University
12:05	Discussion		Discussion		Discussion	

12:25 Lunch

	A7 INNOVATION IN CONSTRUCTION		B7 FOUNDATIONS AND RENEWABLES		C7 REVETMENTS	
13:25	Rehabilitation of the Old Cube Breakwater of Port of Poti, Georgia, with Xbloc® Armour Units	Pieter Bakker , <i>Senior Coastal Engineer</i> , Delta Marine Consultants	Competitive Concrete Gravity Base Foundations for Offshore Wind Farms	William Brook-Hart , <i>Technical Director</i> , Gifford	Guidance on Erosion Resistance of Inner Slopes of Dikes from Three Years of Testing with the Wave Overtopping Simulator	Dr Jentsje van der Meer , <i>Principal</i> , Van der Meer Consulting BV
13:40	Installation of Caisson Breakwater at Costa Azul, Mexico	Martin Young , <i>Associate</i> , Scott Wilson	Ocean Brick System (OBS) as a Foundation Structure for Offshore Wind Turbine: An Experimental Study for Wave Loads and Stability	Andreas Kortenhaus , <i>Senior Researcher</i> , Technical University of Braunschweig	Coastal Defences and Biodiversity: The Influence of Material Choice and Small-scale Surface Texture on Biological Outcomes	Martin Coombes , <i>PhD Postgraduate</i> , University of Exeter
13:55	Dredging Innovations for Dames Point Container Terminal, Jacksonville	Dr Paul Starr , <i>Regional Manager</i> , Jacksonville, Halcrow Group	Foundations to Precast Marine Structures	Martin Hawkswood , <i>Director</i> , Proserve	Riprap Stability for Deep Water, Shallow Water and Steep Foreshores	Marcel Mertens , <i>Structural Engineer</i> , BAM Infraconsult
14:10	Innovation in the Extension to the Port of Gijón	José Luis Díaz-Rato , <i>General Manager</i> , Gijón Port Authority	Scour Around Gravity-based Wind Turbine Foundations: Prototype Measurements	Annelies Bolle , <i>Project Engineer</i> , International Marine and Dredging Consultants	Polyurethane Bonded Aggregate (PBA) Revetments in Coastal Engineering	Egon Bijlsma , <i>Junior Specialist</i> , Flood Defenses, ARCADIS
14:25	Discussion		Discussion		Discussion	

14:45 Refreshment Break

A8 PLENARY: COASTAL MANAGEMENT

15:10	Our Living Coast: A Strategic Overview	Alison Baptiste , <i>National Coastal Policy Manager, Environment Agency</i>
15:30	One Hundred and Beyond: Using Shoreline Management Plans	Gregor Guthrie , <i>Associate Director, Royal Haskoning</i>
15:50	UK Shoreline Management Planning: Enlightened or Occult	Dr Philip Barber , <i>Senior Partner, Shoreline Management Partnership</i>
16:10	Louisiana's Comprehensive Master Plan for a Sustainable Coast: A Response to Hurricanes Katrina and Rita in 2005	Ben Hamer , <i>Director, Maritime, UK, Europe and Central Asia, Halcrow Group</i>
16:30	Discussion	

17:00 Drinks Reception sponsored by

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FRIDAY 18 SEPTEMBER 2009

	STREAM A		STREAM B		STREAM C	
	A9 ARMOUR UNIT PLACEMENT		B9 COASTAL DEFENCE		C9 METOCEAN	
09:00	An Overview of the Construction of the Core-loc™ Armoured Breakwater at Newbiggin-by-the-Sea, Northumberland	Andrew Wareing, <i>Engineer, Atkins Consultants</i>	Saltcoats Flood Prevention Scheme: Analysis, Design and Construction	Dr Elizabeth Johnson, <i>Engineer, Royal Haskoning</i>	Evaluating Potential Implications of Cumulative Storm Power on Coastal Infrastructure Damage and Shoreline Erosion	Heidi Moritz, <i>Coastal Engineer, US Army Corps of Engineers</i>
09:15	Innovative Technique for Single Layer Armour Unit Placement: An Example of Increased Production Efficiency whilst Improving Health and Safety	Peter van Gelderen, <i>Senior Engineer, Van Oord Dredging and Marine Contractors</i>	The Construction of Weston-super-Mare Sea Defences and Seafront Enhancements	Christopher Hill, <i>Project Manager, Birse Coastal</i>	Tropical Cyclone Gonu: Post Event Wave Modelling	Nicholas Elderfield, <i>Coastal Engineer, Atkins Consultants</i>
09:30	Armour Unit Placement and Positioning in 3D Real Time	Alain Mouquet, <i>Manager, MESURIS</i>	Damage from Waves, Surges and Overtopping at Vertical Seawalls	Dr Vanesa Magar, <i>RCUK Academic Fellow, University of Plymouth</i>	Marine Forecasts for the Safe Construction and Maintenance of Coastal Structures	Nigel Tozer, <i>Principal Scientist, HR Wallingford</i>
09:45	Post-construction Monitoring of a Core-loc™ Breakwater using Tripod-based LiDAR	Jessica Podoski, <i>Coastal Engineer, US Army Corps of Engineers</i>	Sustainable Coastal Defences for Felixstowe	Andrew Rouse, <i>Project Manager, Environment Agency</i>	Tsunami Inundation Modelling and Risk Assessment: City of Galle, Sri Lanka	Prof Sam Hettiarachchi, <i>University of Moratuwa</i>
10:00	Discussion		Discussion		Discussion	

	A10 EROSION RISK		B10 OFFSHORE BREAKWATERS		C10 OVERTOPPING	
10:50	Storm Damage and Rehabilitation of Coastal Structures on the East Coast of South Africa	David Phelp , <i>Research Group Leader, CSIR</i>	Morphological Change of Nourished Beach Fronted by Nearshore Structures	Amy Taylor , <i>PhD Student, University of Aberdeen</i>	Flow Parameters of Combined Wave Overtopping and Storm Surge Overflow of a Trapezoidal Levee	Dr Steven Hughes , <i>Senior Research Hydraulic Engineer, US Army Engineer Research and Development Center</i>
11:05	Coastal Erosion in Uruguay	Guillermo López-Méndez , <i>Assistant Professor and Researcher, University of the Republic</i>	Offshore Breakwater Design Optimisation for the Argentine Coastal Protection	TBC	Effect of Protruding Roughness Elements on Wave Overtopping	Dr Alison Hunt-Raby , <i>Lecturer, University of Plymouth</i>
11:20	A Rock and a Hard Place: Managing Coastal Erosion Risk at Trow Quarry, South Shields	Dr Nick Cooper , <i>Technical Director, Royal Haskoning</i>	Applying the Artificial Submerged Reefs Techniques to Reduce the Flooding Problems along the Alexandria Coastline	Dr Akram Soliman , <i>Associate Professor, Arab Academy for Science and Technology and Maritime Transport</i>	A Comparison of Field and Laboratory Overtopping Measurements with Empirical, Numerical and Probabilistic Predictions	Dr Tim Pullen , <i>Senior Engineer, HR Wallingford</i>
11:35	Cliff Recession Process Modelling as a Basis for Set-back Definition	Dr Trevor Carter , <i>Principal Geological Engineer, Golder Associates</i>	The Design and Performance of a Detached Breakwater and Beach Recharge in a Crenulate Bay: A Case Study, Newbiggin-by-the-Sea, Northumberland	Iain Roberts , <i>Associate Maritime Engineer, Atkins Consultants</i>	Overtopping and Toe Scour at Vertical Seawalls	Dr Jonathan Pearson , <i>Lecturer, University of Warwick</i>
11:50	Successful Minimisation of Cliffling on Recharged Mixed Shingle Beaches	Ian Thomas , <i>Project Manager, Pevensey Coastal Defence</i>	Preliminary Design Studies for a Multifunctional Artificial Surf Reef on the Carrara Coast, Italy	Damiano Scarcella , <i>PhD Student, University of Rome 3</i>	Towards a Unified Approach for Design of Overtopped Coastal Structures	John Headland , <i>Senior Vice President, Moffatt and Nichol</i>
12:05	Discussion		Discussion		Discussion	

12:25 Lunch

	A11 DEVELOPMENT OF PORTS AND HARBOURS		B11 RENEWABLE SCHEMES		C11 BREAKWATER STABILITY	
13:40	Breakwater Construction at New Port in Punta Langosteira, A Coruña, Spain: Execution Process and Technical Innovation	Enrique Maciñeira-Alonso , <i>General Manager</i> , Port Authority of A Coruña	Wave Induced Dynamic Pressures on a 150 kw Capacity OWC Prototype Wave Energy Caisson	Prof Kannapiran Thiruvankatasamy , AMET University	Rehabilitation of Yzerfontein Breakwater by Dolos Armour Units	Kishan Tulsi , <i>Researcher</i> , CSIR
13:55	The New Marina of Rodi Garganico: Design, Construction and Monitoring	Prof Leopoldo Franco , University of Roma 3, and <i>Consultant</i> , MODIMAR	Landing Marine-derived Renewable Energy: Optimising Routing of Electricity Cables in the Nearshore to Offshore Environment	Dr Rosalind Turner , <i>Coastal Scientist</i> , Mott MacDonald	Final Rehabilitation of Sines West Breakwater: Physical and Numerical Modelling of Overtopping	Dr Maria Teresa Reis , <i>Research Officer</i> , National Civil Engineering Laboratory
14:10	Expansion of Jebel Ali Port	Dennis Padron , <i>Executive Vice President</i> , Halcrow Group	Composite Seawalls for Wave Energy Conversion	Dr Gerald Müller , <i>Senior Lecturer</i> , University of Southampton	Modelling of Sohar Intake Breakwater	Dr Ali Riza Günbak , <i>Partner</i> , ARG Coastal Engineering Company
14:25	Design to Construct	Gerard Spaan , <i>Senior Engineer</i> , Van Oord Dredging and Marine Contractors	Development of a Generic Caisson Design for an Oscillating Water Column Power Generator	Steven Preen , <i>Chief Engineer</i> , Heavy Civil Structures, Halcrow Group	HYDRALAB III: Guidelines for Physical Model Testing of Rubble Mound Breakwaters	Dr Guido Wolters , <i>Advisor and Researcher</i> , Deltares / Delft Hydraulics
14:40	Discussion		Discussion		Discussion	

15:00 Refreshment Break

A12 CLOSING PLENARY

15:30	Energy and Carbon Costing of Breakwaters	Dr Tom Bruce , <i>Senior Lecturer</i> , University of Edinburgh
15:50	The Construction and Commissioning of the Mutriku Multiple Oscillating Water Column Breakwater	Dr Tom Heath , <i>Chief Technical Officer</i> , Wavegen
16:10	Re-building East Anglia's Beaches	Steve Hayman , <i>Coastal Advisor</i> , Environment Agency
16:30	Coastal Flooding in Scotland: Past, Present and Future	Dr Tom Ball , <i>Academic Research Fellow</i> , University of Dundee
16:50	Discussion	
17:10	Conference Closure	William Allsop , <i>Technical Director</i> , Maritime Structures, HR Wallingford, and <i>Visiting Prof</i> , University of Southampton

18:30 Conference Dinner

FRINGE PAPERS – THURSDAY 17 SEPTEMBER

A5 FRINGE PAPERS: BREAKWATERS		
10:00	A Database of Major Breakwaters Around the World	Stephen Cork , <i>Technical Director</i> , HR Wallingford, and <i>Chairman</i> , PIANC UK
10:05	Al Khiran Breakwater, Kuwait	Christopher Brown , <i>Coastal and Maritime Engineer</i> , Deborah McLaren Consulting
10:10	Environmental Aspects of Casting Large Armour Units in the Tidal Zone	Christopher Brown , <i>Coastal and Maritime Engineer</i> , Deborah McLaren Consulting

C5 FRINGE PAPERS: COASTAL DEFENCE		
09:00	Seawalls Parameter Characterisation and Sensitivity Analysis: Transmission Coefficients and Maximum Loads	Dr Enrique Peña-González , <i>Associate Professor</i> , University of A Coruña
09:05	Recent Laboratory Tests with Elastomeric Revetments	Henk Jan Verhagen , <i>Associate Professor</i> , Delft University of Technology
09:10	Foil Structures as a Coastal Protection Method	Óscar Suárez-Vaya , <i>Civil Engineer</i> , Ministry for the Environment and Rural and Marine Affairs
09:15	Coastal Erosion: Geometric Detached Breakwaters Indicators for Preventing the Shoreline Erosion	Dr Vicente Negro-Valdecantos , <i>Associate Professor</i> , Polytechnic University of Madrid
09:20	Discussion	

COASTAL PROCESSES AND MARINE STRUCTURES		
09:35	Geospatial Field Measurement of Sediment Transport in Support of Site Assessment for Offshore Windfarm Developments	Kevin Black , <i>Marine Geologist</i> , Partrac
09:40	Corrosion Management: The Key to Sustainable Development of Marine Structures	John Paul Maria Segers , <i>Senior Corrosion and Cathodic Protection Engineer</i> , Halcrow Group
09:45	Oscillating Water Column (OWC) Wave Power Caisson Breakwaters: The Present Status, Need for New Developments and the Problems Ahead	Prof Kannapiran Thiruvencatasamy , AMET University
09:50	Nearshore Automatic Identification Systems (AIS)	Edward Read , <i>Managing Director</i> , Ohmex
09:55	Calculating Extreme Sea Level Estimates in Complex Scottish Loch Systems	Dr Mark Lawless , <i>Technical Director</i> , JBA Consulting
10:00	Field Observation of Wave Energy Dissipation over Saltmarshes and Exploration of the Potential to Adapt the SWAN Wave Model for the Nearshore Saltmarsh Environment	Dr Rosalind Turner , <i>Coastal Scientist</i> , Mott MacDonald
10:05	Discussion	