

# Coastal Structures 2011

## Program

Date	Session No.	Session Title and Chair Persons			
		Room A	Room B	Room C	Room D
Sep. 6 (Tue)	Opening Ceremony (09:20-09:50)	Opening Ceremony			
	Keynote Speech (9:55-10:55)	Keynote Speech			
	Session 1 (11:15-12:30)	(O.S.) THESEUS - Coastal risks in a changing climate (1)	Rubble Mound & Berm Breakwaters	Numerical Modelings (1)	Tsunami Wave Force
	Session 2 (13:45-15:25)	(O.S.) THESEUS - Coastal risks in a changing climate (2)	Movable Structures	Numerical Wave-Structure interaction	Tsunami Prevention Measures
	Session 3 (15:45-17:25)	(O.S.) Sea Level Rise	Wave-Structure Interaction	Numerical Modelings (2)	Tsunami Simulation & Observation
Sep. 7 (Wed)	Session 4 (09:15-10:55)	(O.S.) Wave Overtopping Simulator (1)	Wave Force	Wave- Seabed-Structure Interaction	Shore Protection (1)
	Session 5 (11:15-12:30)	(O.S.) Wave Overtopping Simulator (2)	Wave Runup and Overtopping	Coastal Environment	Shore Protection (2)
	Session 6 (13:45-15:00)	(O.S.) Coastal Structure Project	Rubble Mound Breakwater & Wave Transmission	Storm Disaster	Erosion & Sediment Transport
	Poster Session (15:00-16:00)	Poster Session (at Registration and Poster Session Room)			
	Session 7 (16:00-17:40)	(O.S.) Numerical Simulations (1)	Probabilistic Design & Life Cycle Evaluation	Design Wave & Storm Surge	Geotechnical Design
Sep. 8 (Thu)	Session 8 (09:15-10:55)	(O.S.) Numerical Simulations (2)	Wave & Vertical Breakwater Interaction	Geotextile & Concrete Mattress	
	Session 9 (11:15-12:30)	(O.S.) Ocean Energy (1)	Artificial Blocks	Construction & Rehabilitation	
	Session 10 (13:45-15:25)	(O.S.) Ocean Energy (2)	Stability of Blocks (1)	Case Studies (1)	
	Session 11 (15:45-17:00)	(O.S.) Ocean Energy (3)	Stability of Blocks (2)	Case Studies (2)	
	Closing Ceremony (17:10-17:30)	Closing Ceremony			

## Room A (Organized Sessions)

Date	Session No.	Session Title and Chair Persons	Paper No.	Paper Title	Presenter
Sep. 6 (Tue)	Keynote (9:55-10:55)	Keynote Speech	Keynote 1	Impact of global warming on coastal structures and adaptation strategy	M. Isobe
			Keynote 2	Energy from wind and ocean - markets and technologies	C. Lund
	Session 1 (11:15-12:30)	THESEUS - Coastal risks in a changing climate (1) N. Kobayashi, B. Zanuttigh	A1-1	Innovative technologies for safer European coasts in a changing climate	B. Zanuttigh
			A1-2	Coastal risk assessment in a time-varying climate	I. J. Losada
			A1-3	Combinations of submerged structures and floating breakwater for shore protection	S. Kuznetsov
	Session 2 (13:45-15:25)	THESEUS - Coastal risks in a changing climate (2) N. Kobayashi, B. Zanuttigh	A2-4	Modeling coastal risk at cesenatico, northern Adriatic sea, Italy	M.J Castagnetti
			A2-5	Maintenance of Beach and Dune for Coastal Flooding Reduction	N. Kobayashi
			A2-6	Wave dragon wave energy converters used as coastal protection: a physical model test study	J. H. Nørgaard
	Session 3 (15:45-17:25)	Sea Level Rise  H. Kawai	A2-7	An experimental evaluation of wave energy dissipation due to submerged structures	R. Silva-Casarin
			A3-8	Coastal Structures & Sea Level Rise: Adaptive Management Approach	J. R. Headland
			A3-9	Assessments of Early Adaptations due to Sea-Level Rises and Storm Surges in Asian and Oceanic Coastal Zones	H. Nobuoka
A3-10			Sea level rise and the increase in rubble mound breakwater damage	M. Esteban	
Sep. 7 (Wed)	Session 4 (09:15-10:55)	Wave Overtopping Simulator (1)  J. Van Der Meer, K. Hirayama	A3-11	Effect of sea level rise and increase in typhoon intensity on coastal structures in Tokyo bay	S. Hoshino
			A4-12	Design and operation of the US Wave Overtopping Simulator	J. van der Meer
			A4-13	Testing levee slope resiliency at the new Colorado state university wave overtopping test facility	C. Thornton
			A4-14	Destructive Wave Overtopping Tests on Felmish Dikes	G. J. Steendam
	Session 5 (11:15-12:30)	Wave Overtopping Simulator (2) J. Van Der Meer, K. Hirayama	A4-15	Wave overtopping resistance of grassed dike slope in Viet Nam	L. H. Trung
			A5-16	Method to quantify the notional permeability	H. J. Verhagen
			A5-17	Empirical formula for wave overtopping on vertical structures: difference on wave spectrum	Y. T. Kim
	Session 6 (13:45-15:00)	Coastal Structure Project  K. Shimosako	A5-18	Multiphase Flow Simulation of Dynamic Behavior of Floating Panel for Wave Overtopping Reduction under Regular Wave Action	H. D. Ut
			A6-19	Development of new type structures in major coastal projects of Japan	T. Takayama
			A6-20	Present and future of coastal engineering structures in the United States	B. L. Edge
	Session 7 (16:00-17:40)	Numerical Simulations (1)  T. Sakakiyama, J. Latham	A6-21	The Construction of an Open-Sea Port in the Mediterranean Sea under Adverse Conditions: The "Eitan" Terminal, Port of Ashdod, Israel.	Z. Hoch
A7-22			Large eddy simulation for settling block using euler-lagrange coupling approach	E. Harada	
A7-23			Verification of CADMAS-SURF/3D for tsunami inundation flow acting on structures	T. Sakakiyama	
A7-24			Numerical simulation of impulsive breaking-wave pressures based on gas-liquid two phase VOF method	T. Arikawa	
Sep. 8 (Thu)	Session 8 (09:15-10:55)	Numerical Simulations (2)  T. Sakakiyama, J. Latham	A7-25	The immersed body method combined with mesh adaptivity for fluid-solid coupling	F. Milthaler
			A8-26	Simulation of flip-through wave impact by CMPS method with SPS-turbulence model	C. Hori
			A8-27	Numerical analysis of wave-induced flow around breakwater heads with a three dimensional navier-stokes model	J. L. Lara
			A8-28	Numerical Simulation on Moored Floating Body in Wave by Improved Particle Method	H. Ikari
	Session 9 (11:15-12:30)	Ocean Energy (1)  T. Nagai	A8-29	Modelling breakwater armour layers and the dynamic response of armour units	J. Xiang
			A9-30	Development of wave energy utilization in Japan	S. Nagata
			A9-31	Oscillating water column wave energy converters at the coast: a review and forward look	T. Bruce
	Session 10 (13:45-15:25)	Ocean Energy (2)  S. Shiraishi	A9-32	Hydrodynamic stability analysis of oscillating water column (OWC) wave energy caisson	K.Thiruvenkatasamy
			A10-33	Low cost wave power conversion plan by combined system of Pendular and existing walled coastal structures	H. Kondo
			A10-34	Performance evaluation of a point absorber wave energy converter: numerical model development and validation against new physical model	G. Bellotti
			A10-35	Energy generation due to tidal currents in Melinka Island, Chile.	P. F. Carrasco
Session 11 (15:45-17:00)	Ocean Energy (3)  T. Bruce				
		A11-36	Statistic study on joint distribution of offshore waves and winds in Japan using NOWPHAS GPS buoy data	T. Nagai	
		A11-37	Wind energy utilization by use of middle sized wind turbine in coastal area	S. Shiraishi	
		A11-38	Examination concerning the potential of wind power generation in a ship	K. Nomura	

Room B

Date	Session No.	Session Title and Chair Persons	Paper No.	Paper Title	Presenter	
Sep. 6 (Tue)	Session 1 (11:15-12:30)	Rubble Mound & Berm Breakwaters  M. Hanzawa	B1-39	Stability of rubble mound breakwaters with a berm	M. R. A. van Gent	
			B1-40	Front slope stability of the icelandic berm breakwater	S. Sigurdarson	
			B1-41	Investigations of wave reflection and transmission through berm structures	S.S.L.Hettiarachchi	
	Session 2 (13:45-15:25)	Movable Structures  I. Losada	B2-42	Three-dimensional hydroelastic physical model of neutrally buoyant sector gates in the New Orleans storm surge barrier	P. Grant	
			B2-43	Hydraulic boundary conditions and the development of structure geometry for the inner harbor navigation canal surge barrier project, New Orleans,	J. F. Gilman	
			B2-44	Field experiment project of flap-gate breakwater for tsunami and storm surge protection	Y. Kimura	
			B2-45	Research and development of flap-gate breakwater for wave protection	K. Nakayasu	
	Session 3 (15:45-17:25)	Wave-Structure Interaction  M. van Gent	B3-46	Experimental Study on Damage to Wave Splash Barrier for a Coastal Road	K. Kamikubo	
			B3-47	Study on wave transmission through bridge piers	D. Shen	
			B3-48	Study of new-type long-period wave absorber utilizing wave non-linearity	S. Nakajima	
	Sep. 7 (Wed)	Session 4 (09:15-10:55)	Wave Force  T. Nakamura	B4-49	Impact forces on a vertical pile from plunging breaking waves	Ø. A. Arntsen
B4-50				Forces and subpressures on non-overtoppable vertical breakwaters	M. Vilchez	
B4-51				Wave loads on a multi-purpose platform in Vado Ligure (Italy)	M. di Leo	
B4-52				Hydrodynamic Loading of Wave Return Walls on top of Seaside Promenades	T. Verwaest	
Session 5 (11:15-12:30)		Wave Runup and Overtopping  G. Cuomo	B5-53	Runup formulation for seawalls near shoreline	T. Tamada	
			B5-54	A least square method for determination of front velocities in runup events on dikes in oblique and short-crested waves	T. L. Andersen	
			B5-55	Laboratory investigation of breakwater crown walls comprised of permeable rock baskets	S. Baker	
Session 6 (13:45-15:00)		Rubble Mound Breakwater & Wave Transmission  J. Melby	B6-56	Analysis and design of refurbishment for unusual damage to a rubble mound breakwater	W. Allsop	
			B6-57	A study of group wave effects on internal waterlevel variation in permeable breakwater	J. H. Kim	
			B6-58	Further developments in a new formulation of wave transmission	G. R. Tomasicchio	
Session 7 (16:00-17:40)		Probabilistic Design & Life Cycle Evaluation  T. Takayama	B7-59	CS-Sim: coastal structure time-dependent life-cycle analysis software	J. A. Melby	
			B7-60	Optimum design for breakwaters covered with wave dissipating blocks by minimum life cycle cost	D. Tsujio	
			B7-61	Rationalization of safety factors for breakwater design in hurricane-prone areas	V. Tsimopoulou	
			B7-62	Forecasting of damage level of maritime structures caused by typhoons based on improved ewe method	R. Hashimura	
Sep. 8 (Thu)		Session 8 (09:15-10:55)	Wave & Vertical Breakwater Interaction  K. Suzuki	B8-63	Stokes second-order wave interaction with vertical slotted wall breakwater	H. Ahmed
				B8-64	Wave loading and overtopping of low crest caisson breakwaters	G. Cuomo
	B8-65			Interaction of solitary wave and a bottom-mounted barrier: experiment and RANS modeling	Y. T. Wu	
	B8-66			A theory on reflection of nonlinear short-crested wave groups interacting with an upright fully reflective breakwater	A. Romolo	
	Session 9 (11:15-12:30)	Artificial Blocks  S. Sigurdarson	B9-67	Armor unit placement, randomness and porosity of cube and cubipod armor layers	J. R. Medina	
			B9-68	Development of a nursery block for snow crabs ensuring stable behavior during free drop in water	S. Ogata	
			B9-69	Imaging technique to measure deformations of wave-dissipating structures	Y. Mitobe	
	Session 10 (13:45-15:25)	Stability of Blocks (1)  W. Allsop	B10-70	Effects of wave steepness and wave breaking on stability of wave dissipating blocks	T. Yasuda	
			B10-71	Design and verification of high stability wave dissipating block	H. Matsushita	
			B10-72	Stability of block revetments on low crested breakwaters	M. K. Breteler	
			B10-73	Stability of tetrapods armoring mound breakwater	J. S. Kang	
	Session 11 (15:45-17:00)	Stability of Blocks (2)  J. Medina	B11-74	Damage evaluation using the damage depth	B. Hofland	
			B11-75	Statistical characteristics of deformation quantity of rubble mound seawall	T. Ota	
			B11-76	Evaluation of the critical condition on armor block stability for submerged breakwaters.	A. Matsumoto	

Room C

Date	Session No.	Session Title and Chair Persons	Paper No.	Paper Title	Presenter
Sep. 6 (Tue)	Session 1 (11:15-12:30)	Numerical Modelings (1) K. Kawasaki	C1-77	A numerical investigation of the influence of friction in laboratory scale armour unit layers	J. P. Latham
			C1-78	Three Dimensional Numerical Modeling of Breaking Wave Impact on a Slender Cylinder with the Level Set Method	H. Bihs
			C1-79	Refined wave impact pressure calculations by an enhanced particle method	A. Khayyer
	Session 2 (13:45-15:25)	Numerical Wave-Structure interaction H. Gotoh	C2-80	Effect of mooring angle on interaction between wave and floating breakwater	P. Wei
			C2-81	Interaction of surface and internal waves with very large floating structures	T. Kakinuma
			C2-82	Experimental and numerical study on cross-shore volume flux over a submerged breakwater	S. Mohsin
	Session 3 (15:45-17:25)	Numerical Modelings (2) N. Mori	C3-83	Computer Simulation of Yeong-il Man New Harbor for Harbor Resonance	M. Kwak
			C3-84	Modelling beach topography evolution due to waves and currents in the vicinity of coastal structures	P. T. Nam
			C3-85	Numerical Study on Typhoon Wave-Induced Damages on Breakwater	D. W. Chen
	Sep. 7 (Wed)	Session 4 (09:15-10:55)	Wave- Seabed-Structure Interaction K. Kaneda	C4-86	Dynamic Response of PBA Revetments and Subsoil to Wave Loading
C4-87				Numerical simulation on local scouring around bottom-mounted movable short cylinder	T. Nakamura
C4-88				Temporal-spatial response between caisson breakwater and seabed caused by wave-induced liquefaction	S. Dong
C4-89				Hydro-geotechnical stability of rubble mound breakwaters under wave action	C. Cantelmo
Session 5 (11:15-12:30)		Coastal Environment R. Cox	C5-90	Characteristics of turbidity dispersion due to disposal of dredged sediments into the bottom of stratified water column	M. Takeda
			C5-91	Ecological modeling of emergent vegetation for sustaining wetlands in high wave energy coastal environments	H. D. Yoon
			C5-92	Coastal habitat restoration using detached breakwaters as refuge	B. Kamali
Session 6 (13:45-15:00)		Storm Disaster H. Nobuoka	C6-93	Numerical analysis and field survey of flood behavior of storm surge due to cyclone Nargis in Myanmar	T. Shibayama
			C6-94	Disaster by High Waves on the coast of Nyuzen Fishing Port, In February, 2008	H. Kato
			C6-95	High waves disaster of fishing ports in Sado island on February, 2008	H. Katayama
Session 7 (16:00-17:40)		Design Wave & Storm Surge M. Esteban	C7-96	A case study regarding the relationship between wave period and wave height in the Caspian sea, Persian gulf and gulf of Oman	A. Golshani
			C7-97	Applicability of Hindcasting and Forecasting Methods for Storm Surge Mapping in the Caribbean	J. Banton
			C7-98	Diffraction uncertainty toward the future estimation of return wave height	T. Kitano
	C7-99		A caution against use of annual maximum data for design wave selection	Y. Goda	
Sep. 8 (Thu)	Session 8 (09:15-10:55)	Geotextile & Concrete Mattress N. Mizutani	C8-100	Large-scale physical model tests on sand-filled geotextile tubes and containers under wave attack	P. van Steeg
			C8-101	Geotextile tube used for pemex marine facilities protection	Z. Lin
			C8-102	Field and laboratory studies for constructing geotextile structure on high-energy Japanese beaches	K. Watanabe
			C8-103	Articulated concrete mattress for submarine pipeline protection: evaluation of the wave-induced forces and stability analysis.	A. Lamberti
	Session 9 (11:15-12:30)	Construction & Rehabilitation K. Kimura	C9-104	Breakwater Construction under severe wave attack	A Trigo-Teixeira
			C9-105	resistance of aged asphaltic concrete to wave attack	A. K. de Loeff
			C9-106	The rehabilitation of a concrete dry-dock	M. Banijamali
	Session 10 (13:45-15:25)	Case Studies (1) T. Sekimoto	C10-107	Reengineering of the South Coast of Barbados for Social Enhancement	L. Brewster
			C10-108	Advanced marine works for deepwater immersed tunnel in the Bosphorus strait	K. ITO
			C10-109	Basic design of a fish-tail like marine structure for flares of a ING plant	B. Banijamali
			C10-110	Detail conformal study on Basin, Turning Circle and Navigation Channel LNG & LPG carriers in berthing zone of IRAN LNG national project and its	A. Sheikhabahaei
	Session 11 (15:45-17:00)	Case Studies (2) L. Franco	C11-111	Modelling and Design of a Porous Dike Cooling Water Intake Structure	K. Macintosh
			C11-112	A newly developed resonator to attenuate very long waves	N. Z. Latt
C11-113			The improvement of harbor tranquility by Numerical and Hydraulic Model Test for Rectangular Port in Korea	B. Shin	

Room D

Date	Session No.	Session Title and Chair Persons	Paper No.	Paper Title	Presenter
Sep. 6 (Tue)	Session 1 (11:15-12:30)	Tsunami Wave Force  T. Tomita	D1-114	Large-scale wave basin experiments on the influence of large obstacles on tsunami inundation forces	D. Cox
			D1-115	Experimental study of structures impacted by simulated tsunami bore	T. AL-Faesly
			D1-116	Tsunami Wave Force Acting on Structures	K. Fujima
	Session 2 (13:45-15:25)	Tsunami Prevention Measures  D. Cox	D2-117	Development of vertically telescopic breakwater and its practical application	K. Obara
			D2-118	Experimental research on detached breakwaters'effect on tsunami disaster mitigation	M. Hanzawa
			D2-119	Coastal trees as a tsunami barrier structure - Their morphology and hydraulic resistance -	T. Asano
			D2-120	Characteristics of wave pressure and fluid force acting on bridge beam by tsunami	S. Araki
	Session 3 (15:45-17:25)	Tsunami Simulation & Observation  K. Fujima	D3-121	Wave Behavior in Tokyo Bay Caused by a Tsunami or Long-period Ground Motions	K. Ohira
			D3-122	Field survey and analysis of tsunami disaster in the Samoan islands 2009	T. Mikami
			D3-123	Simulation of tsunami-induced currents in ports and harbors	P. Lynett
			D3-124	Complex hydrodynamics of local tsunamis in Chile	P. Monárdez
	Sep. 7 (Wed)	Session 4 (09:15-10:55)	Shore Protection (1)  T. Asano	D4-125	Investigating the effects of current coastal defenses on the state of the coastal zone at cleveleys, Lancashire, UK using airborne laser altimetry (Lidar)
D4-126				An approach to shore protection against climate change induced sea level rise, storm and tsunami hazard at the Mediterranean coast of Israel	S. D. ROSEN
D4-127				Cross-shore profile response to storm waves:Slapton Beach, UK	H. Karunarathna
Session 5 (11:15-12:30)		Shore Protection (2)  D. Rosen	D5-128	Discussion of over wash prevention construction on the northern part of Sendai coast	N. X. Tinh
			D5-129	A Feasibility Study of Use a Submerged Breakwater as a sand Reservoir for Shore Protection	W. J. Chen
			D5-130	Impacts of coastal protection structures around Rosetta promontory on large scale morphology change of the Nile River Delta	A. Mostafa
Session 6 (13:45-15:00)		Erosion & Sediment Transport  T. Suzuki	D6-131	Dike erosion strength after initial damage – large scale model testing	G. Wolters
			D6-132	Modeling regional sediment transport and tidal inlet development	L. X. Hoan
			D6-133	The Effect of Sendai Port Breakwater to Sediment Movement on Its Vicinity	E. Pradjoko
Session 7 (16:00-17:40)		Geotechnical Design  K. Zen	D7-134	Two-dimensional numerical analysis of wave-induced instability of artificial shallow composed of dredged soil	R. Ishihara
			D7-135	Optimum Target Probability of Failure for reliability-based design of Quay Wall Foundation	G. L. Yoon
			D7-136	Reliability based approach to marine geotechnical (soil consolidation) system	J.Rajaraman
			D7-137	Effect of Permeability on Liquefaction-induced Lateral Flow	W. Bo

Poster Session

Date	Paper No.	Paper Title	Presenter
Sep. 7 (Wed) (15:00-16:00)	P-001	The attractive port facilities of the Seto inland sea	Y. Sega
	P-002	Oi container wharf redevelopment project - regeneration of the port using existing stocks -	K. Kagami
	P-003	The storm surge protection breakwater in the port of Nagoya	H. Yoshimura
	P-004	A study on eco-friendly breakwater in Okinawa	I. Hasegawa
	P-005	Construction and field observation of high mound composite seawall at Mori port	K. Kimura
	P-006	Ports of Ibaraki	H. Sasaki
	P-007	New runway project of Haneda airport	N. Suzuki
	P-008	A study on tsunami propagation modeling for southern coastal areas of Sri Lanka	M. A. C. Niroshinie
	P-009	Kansai international airport project	T. Hida
	P-010	Advanced development of container terminals at the port of Yokohama	S. Saito
	P-011	Storm surge protection in Mabori beach of Yokosuka harbor	K. Matsuo
	P-012	First project of immense reclamation in Tokyo bay, Japan	N. Matsuda
	P-013	The world's deepest breakwater, Kamaishi-port tsunami protection breakwater	R. Nagao
	P-014	Advanced technology for Akashi-Kaikyo Bridge	M. Nishitani
	P-015	Kawasaki port tunnel	T. Karasawa
	P-016	Offshore expansion project of Haneda Airport	H. Yoneyama
	P-017	Artificial tidal flat project at port of Onomichi-Itozaki	T. Okutani
	P-018	Automatic mooring and discharge system of the KAISHO-MARU, a trailing suction hopper dredger combined oil recovery vessel	H. Kume
	P-019	Guide to the Tokyo wan aqua-line	K. Tsuji
	P-020	Beach erosion control on Niagara west coast	M. Kawano

# Coastal Structures 2011

## Events

Date	Time	Event	Venue	Remarks
Sep. 5 (Mon)	13:00 - 17:30	Pre-conference Event (International Workshop on Coastal Disaster Prevention)	Port Opening Memorial Hall	need reservation (closed)
Sep. 5 (Mon)	18:00 - 20:00	Ice Breaker Party	Hotel New Grand (The Admiral Perry Room)	
Sep. 6 (Tue)	13:30 - 14:30	Cruising Tour of Yokohama Port	Marine Shuttle (Yamashita Park Embarkation place)	need reservation (at the registration desk)
Sep. 6 (Tue)	18:30 - 20:30	Dinner Party	Kenmin Hall (Restaurant Eiichibankan, 6 Floor)	need reservation (closed)
Sep. 7 (Wed)	10:20 - 11:20	Cruising Tour of Yokohama Port	Marine Shuttle (Yamashita Park Embarkation place)	need reservation (at the registration desk)
Sep. 7 (Wed)	13:30 - 14:30	Cruising Tour of Yokohama Port	Marine Shuttle (Yamashita Park Embarkation place)	need reservation (at the registration desk)
Sep. 8 (Thu)	19:00 - 21:20	Banquet (Cruising Dinner Party)	Marine Shuttle (Yamashita Park Embarkation place)	
Sep. 9 (Fri)	9:00 - 17:30	Technical Visit 1	Tokyo Port and Asakusa	
Sep. 9 (Fri)	9:30 - 17:00	Technical Visit 2	Port and Airport Research Institute and Kamakura	
Sep. 9 (Fri) - 10 (Sat)	9:00 (Fri) - 18:30 (Sat)	Post-conference Tour	Tsunami stricken area in Miyagi Prefecture	optional (closed)