

Invitation and Aim

The International Association of Hydraulic Engineering and Research, the Engineering Department at University of Salento (Italy), the Maritime Engineering Laboratory of UPC (LIM/UPC), the International Center for Coastal Resources Research from the Generalitat de Catalunya (CIIRC) and the Escola Tècnica Superior d'Enginyers Camins, Canals i Ports de Barcelona from UPC have the pleasure to invite all engineers, physicists, mathematicians, geologists and oceanographers and all others who have an interest in coastal engineering to attend this short conference.

The aim of the 4th SCACR is to provide all participants with information on the latest developments from both scientific and engineering perspectives in coastal and port engineering and to exchange views with users and stake holders of the coastal zone. In addition to the lectures a number of technical papers will be presented during three specialist sessions. SCACR is addressed to both MSc and PhD students, together with scholars and specialists who want to present their papers and to attend the short course lectures dealing with some of the "hot" topics in present coastal research.

The meeting will be held at the Hydraulic Maritime and Environmental Engineering Department of UPC in Barcelona (Spain). All accepted and presented papers will be published in the 4th SCACR Proceedings sponsored by IAHR. The 4th SCACR will be held within UPC premises inside the simultaneously classic and modern city of Barcelona. The Barcelona airport is located 20 minutes from UPC and the main hotels.

Paper topics

The conference will accept papers related to the following topics:

- o Coastal Hydrodynamics.
- o Coastal Morphodynamics and Sediment Transport.
- o Coastal Structures. Functional and resistant design.
- o Impact and mitigation in the coastal zone.

All these topics for present conditions and under future climatic or management scenarios.

Venue and Registration

The course and the workshop will be held at the UPC premises in Barcelona, Spain. The registration fee is 350 € for participants and 320 € for authors (there is a 10% discount for IAHR members and students).

Late registrations will be increased by 90 €. This fee includes participation in all activities, coffee and lunch breaks and the Social Dinner plus one copy of the Proceedings. Registration forms with a copy of the bank transfer must be sent not later than 10 May 2009 to: shortcourse.scacr@upc.edu.

Organizing Committee

Agustin Sanchez-Arcilla, 4th SCACR co-chairman
Roberto Tomasicchio, 4th SCACR co-chairman
Manuel Espino, LOC 4th SCACR
Albert Falques, LOC 4th SCACR
Xavier Gironella, LOC 4th SCACR
Jorge Guillen, LOC 4th SCACR
Jose A. Jiménez, LOC 4th SCACR
Albert Palanques, LOC 4th SCACR
Joan Pau Sierra, LOC 4th SCACR

International Advisory Committee

Khaled A. Al-Banaa, Kuwait Institute for Scientific Research; Giuseppe Barbaro, Mediterranean Univ., Italy; David R. Basco, Old Dominion Univ., USA; Hans. F. Burcharth, Aalborg Univ., Denmark; Mario Calabrese, Univ. of Naples, Italy; Robert G. Dean, Univ. of Florida, USA; Leopoldo Franco, Rome 3rd Univ., Italy; Yoshimi Goda, Yokohama National Univ., Japan; Suzana Ilic, Lancaster Univ., UK; Nobuhisa Kobayashi, Univ. of Delaware, USA; Alberto Lamberti, Univ. of Bologna, Italy; Inigo J. Losada, Univ. of Cantabria, Spain; Alessandro Mancinelli, Univ. of Marche, Italy; Jeff. A. Melby, USACE, USA; Antonio Petrillo, Polytechnic of Bari, Italy; Piero Ruol, Univ. of Padova; Agustín Sánchez-Arcilla, Catalonia Univ. of Technology, Spain; Francisco Sancho, LNEC, Portugal; Holger Schüttrumpf, RWTH Aachen, Germany; Paolo Veltri, Univ. of Calabria, Italy; Jentsie van der Meer, VdM consultants, Netherlands

Contacts

Further information can be obtained from the course/conference secretary at:
Phone : +34 93 401 6468
Fax : +34 93 401 1861
E-mail : shortcourse.scacr@upc.edu



4th SCACR International Short Conference on APPLIED COASTAL RESEARCH

Honouring prof. Hans. F. Burcharth
Aalborg University, Denmark

Barcelona, Spain

15 – 17 June 2009



Final announcement



International Association of Hydraulic
Engineering and Research

PROGRAMME

4th SCACR

International Short Conference on APPLIED COASTAL RESEARCH

Honouring prof. Hans. F. Burcharth

Monday 15th June 2009

- 14:30 – 15:15 Registration
- 15:15 – 15:30 Opening and Welcome address
Agustin Sánchez-Arcilla, LIM/UPC,
Roberto Tomasicchio, University of Salento
- 15:30 – 16:45 **Lecture 1:** “Changing Coastal Environment”
by Marcel Stive, TU Delft, The Netherlands
- 16:45 – 17:00 Coffee Break
- 17:00 – 20:00 **Technical Session 1:** “Sediment and Coastal Dynamics”
Chairman: Jose A. Jiménez (LIM/UPC)

Tuesday 16th June 2009

- 8:30 – 9:45 **Lecture 2A:** “Design of coastal structures”
by Jeff A. Melby, USACE, USA
- 9:45 – 10:15 Coffee Break
- 10:15 – 11:45 **Lecture 2B:** “Design of coastal structures”
by Jeff A. Melby, USACE, USA
- 11:45 – 12:00 Break
- 12:00 – 13:00 **Technical Session 2:** “Waves and Hydrodynamics”
Chairman: Joan Pau Sierra (LIM/UPC)
- 13:00 – 14:30 Lunch Break

Honouring prof. Hans. F. Burcharth

- 14:30 – 16:00 **Lectio Magistralis**
“Breakwater engineering”
by professor Hans F. Burcharth,
Aalborg University, Denmark
- 16:00 – 16:30 Coffee Break
- 16:30 – 18:30 Invited speakers for Specialist Session
- 16:30–17:00 Extreme wave events. Applications to
breakwater engineering (Agustin
Sánchez-Arcilla – LIM/UPC)
- 17:00-17:20 Probabilistic breakwater design (César
Vidal – Cantabria Univ.)
- 17:20-17:40 Instrumented breakwaters. The
Barcelona harbour case (Javier
Uzcanga – Harbour of Barcelona)
- 17:40-18:00 The design and construction of large
breakwater. The Coruña harbour case
(Enrique Maciñeira – Harbour of La
Coruña)
- 21:15 Social Dinner

Wednesday 17th June 2009

- 8:30 – 9:45 **Lecture 3A:** “Overtopping modelling”
Holger Schuettrumpf, Institute of
Hydraulic Engineering and Water
Resources of RWTH, Aachen, Germany
- 9:45 – 10:15 Coffee Break
- 10:15 – 11:15 **Lecture 3B:** “Overtopping modelling”
Holger Schuettrumpf
- 11:15 – 11:30 Break
- 11:30 – 13:00 **Technical Session 3:** “Waves and Hydrodynamics”
Chairman: Manuel Espino (LIM/UPC)
- 13:00 - 14:30 Lunch Break
- 14:45 – 17:15 **Technical Session 4:** “Structures and Interactions”
Chairman: Eugenio Pugliese Carratelli,
University of Salerno, Italy
- 17:15 Discussion and Closing

Registration form

First name _____
Second name _____ Title _____
Organization _____
Address _____
City _____ Postal code _____
Country _____
E-mail _____
Phone _____

Authors should submit a two pages abstract by e-mail to shortcourse@dds.unical.it not later than 20 April 2009. Authors will receive notification of acceptance by 30 April 2009. Full papers are due by 1 September 2009.

Registration fee payment

Please, complete this form and forward with attached copy of the bank transfer (quote 4th SCACR) to shortcourse.scacr@upc.edu by 15 May 2009.

Payments must be in favour of UNIVERSITAT POLITÈCNICA DE CATALUNYA (UPC)

Bank information

Bank Name: “Caixa d’Estalvis i Pensions de Barcelona”
C/ Trias Giró, 11-13 – Ciutat Universitaria – 08034 - Barcelona
Account Number: 2100-0655-76-0200334058
IBAN: ES72 2100 0655 7602 0033 4058
BIC/CODI SWIFT: CAIXESBBXXX

Hotel information and reservation

Barcelona offers a wide variety of hotels covering many prices. Most of them are well connected through the Barcelona public transport system. More specifically the organization has pre-booked a bulk number of rooms in:

Hotel Husa Arenas (****) hotelarenas@husa.es ;
<http://www.hotelhusaarenas.com/es/index.php>
Hotel Husa Pedralbes (****) acami@husa.es ;
<http://husapedralbes.barcelonahotels.it/>
Hotel Bonanova Park (**) comercialbonanovapark@husa.es
<http://www.hotelbonanovapark.com/>

Please, contact directly with hotels for booking before 15th May making reference to 4th SCACR Conference

4th SCACR
International Short Conference on
APPLIED COASTAL RESEARCH
Barcelona, Spain 15 – 17 June 2009
Honouring prof. Hans. F. Burcharth

Monday 15th June 2009

Technical Session 1 (17:00 – 20:00)*

"Sediment and Coastal Dynamics"

Chairman: Jose A. Jiménez (LIM/UPC)

A. Marini, R.E.	Musumeci, L.M. Stancanelli, E. Foti	Non-invasive 3D measurements of sandy bottom evolution: an application to swash zone morphodynamics
G.R. Tomasicchio	R. Gencarelli, F. D'Alessandro	Large-scale wave flume experiment on dune erosion and overwash
Deborah Villarroel-Lamb	Deborah Villarroel-Lamb	Quantitative validation of a probabilistic morphological model
Inés Martín-Grandes	David J. Simmonds, Andrew J. Chadwick, Dominic E. Reeve	Inpoundment technique to calibrate LST rate formula on a mixed beach
Amaia Ruiz de Alegria-Arzaburu	Gerhard Masselink	Quantification of storm response on a gravel beach
Monique M. Villatoro	Christian Ferrarin, Carl L. Amos	Morphodynamics of Chioggia inlet; a model approach
Giuseppe Barbaro	Maria Chiara Martino, Giovanni Malara	Analysis of coastal deformation by wind generated waves
A. Atzeni	C. Pedone, A. Sulis	Morphology of the salient of su Giudeu beach (Sardinia, Italy) and hydrodynamic along shoreline
J. Fernández	M. Espino, V. Gracia, J. Jordá, A. Sánchez-Arcilla	First steps on the implementation of a sediment transport model in the Ebro delta shelf
N. van den Berg	A. Falqués and F. Ribas	Shore nourishments and very oblique wave incidence
L.P. Almeida	O. Ferreira, A. Pacheco	Thresholds for morphological changes as a function of wave height on a sandy exposed beach
B.A. Rodrigues	A. Matias, Ó. Ferreira	The Ancão peninsula vulnerability to overwash events
Mehdi Adjami	Mehdi Shafieefar, Ali Akbar Salehi	Sediment suspension caused by wave breaking turbulence over barred beaches
Alireza Masjedi	Alireza Otoufi	Studying the effect of groin length on scoring depth around it across 180 deg bend
Alireza Masjedi	Hosim Kazemi	Investigation of effect of cylindrical bridge pier position on the scouring depth in the rivers bend

* Speakers should plan for approximately 10 minutes per presentation.

Tuesday 16th June 2009

Technical Session 2 (12:00 – 13:00)*

"Waves and Hydrodynamics"

Chairman: Joan Pau Sierra (LIM/UPC)

Ana Picado	João Miguel Dias, André Bustorff Fortunato	Influence of bathymetric changes on the ria de aveiro hydrodynamics
Magda Sousa	João Miguel Dias	Tidal and residual circulation in the ria Formosa (Portugal)
Al Ragum	F. Reale, K. Rakha, E. Pugliese Carratelli, C. Giarrusso	Satellite altimeter calibration of a wave model in the arabian gulf
H. Kashima	K. Hirayama	Effects of bottom topography characteristics on transformations of long period swell
W. Elshorbagy	A. Bakr ElHakeem	Use of reverse numerical modeling in forecasting the contamination hazard of oil spill against coastal facilities
Asu Inan	Lale Balas	Numerical modelling of extended mild slope equation

* Speakers should plan for approximately 10 minutes per presentation.

Wednesday 17th June 2009

Technical Session 3 (11:30 – 13:00)*

"Waves and Hydrodynamics"

Chairman: Manuel Espino (LIM/UPC)

E. Bosom	J.A. Jiménez	Spatial and temporal variations in storm-related coastal hazards in the catalan coast
V. Stratigaki	E. Manca, P. Prinos	Effects of Posidonia oceanica meadow on wave propagation: large-scale experiments
C.V. Makris	C.D. Memos, Y.N. Krestenitis	Numerical simulation of near-shore wave breaking using SPH Method
A. Bonaduce	N. Pinardi, C. Fratianni	The spatial variability of sea level in the mediterranean basin: observations and model simulations
M. Casas Prat	J.P. Sierra, C. Mösso, A. Sánchez-Arcilla	Trend analysis of the sea level and wave storminess at the catalan coast
W. Sulisz	M. Paprota	Vibrations of a horizontal deck due to freak wave attack
S. Moghimi	H. Reza Qaienee	Comparison between OpenMP and MPI based WAM cycle 4.5
C. Fortes	M. Neves, R. Lemos, J.A. Santos	Composite modelling methodology for the simulation of wave propagation reaching coastal defences
J. Zang	Y. Tao	On modeling the nonlinear wave interaction with coastal structures

* Speakers should plan for approximately 10 minutes per presentation.

Wednesday 17th June 2009

Technical Session 4 (14:45 – 17:15)*

“Structures and Interactions”

Chairman: Eugenio Pugliese Carratelli, University of Salerno, Italy

Enrique Peña	Félix Sánchez-Tembleque, Fernando Pereira, Javier Sopenana, Fernando López	Seawalls parameter characterization and sensitivity analysis
D. Vanneste	P. Troch	Experimental research on the pore pressure attenuation in a 3-layered rubble mound breakwater
Carlo Lorenzoni	Alessandro Mancinelli, Mateo Postacchini, Luciano Soldini	Experimental tests on a sandy beach model protected by low-crested structures
R. Tomasicchio	M. Calabrese, P. Di Pace, M. Buccino, E. Ciralli, A. Argenziano	Laboratory tests on a coastal protection project in Aspra (Italy)
J. De Rouck	K. Van Doorslaer, J. Geeraerts	Reduction of wave overtopping: how research can lead to sound practical solutions
A. Sancho García	J. Guillén, E. Ojeda	Consequences of a setached breakwater on the morphological response to storms of La Barceloneta beach (Barcelona, Spain)
I. Crema	L. Cappietti, P.L. Aminti, E. Mori	Laboratory measurements of wave overtopping of a caisson breakwater
G. Herman	F. Hermosilla	A new proposal to calculate vertical breakwater
A. Brüning	S. Lorke, R. Pohl, M. Spano, J. van der Meer, S. Werk, H. Schüttrumpf	FlowDike - Investigating the effect of wind and current on wave run-up and wave overtopping
M.N. Moghim	A. Tørum, Ø.A. Arntsen	Stability of berm breakwaters for deep water
W. Sulisz	A. Reda	Numerical modelling of the stability of rubble mounds
F. Ciardulli	Buccino M., Calabrese M.	Submerged breakwater as a non-linear device: Experimental investigation
Stanley J. Boc	Cheryl E. Pollock	Coastal structures condition assessment tool box

* Speakers should plan for approximately 10 minutes per presentation.