

4th MASHCON

International Conference on Ship Manoeuvring in Shallow and Confined Water with Special Focus on Ship Bottom Interaction

23 - 25 May 2016

Elbcampus, Hamburg, Germany

CONFERENCE PROGRAMME

22 MAY 2016 (SUNDAY)

18:00 – 21:00	Registration + Icebreaker Party
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23 MAY 2016 (MONDAY)

8:00 - 9:00	Registration
9:00 - 9:15	Opening address
9:15 - 10:00	Invited Keynote Speech by Capt. Wolfgang Hintzsche, German Shipowners' Association (VDR)
	SESSION A1 Ship Bottom Interaction / C1: Ship Behaviour in Locks (Chair: Prof. N. Kornev)
10:00 - 10:25	<i>Ship-induced sediment transport in coastal waterways (SeST)</i> K. Uliczka and B. Kondziella Federal Waterways Engineering and Research Institute, Germany
10:25 - 10:50	<i>Calculation of hydrodynamic interaction forces on a ship entering a lock using CFD</i> S.L. Toxopeus and K. Bhawsinka MARIN, The Netherlands
10:50 - 11:05	Refreshment break
	SESSION B1: Squat (Chair: Dr. T. Gourlay)
11:05 - 11:30	<i>Development of a squat formula based on numerical calculations</i> A. Gronarz Development Centre for Ship Technology and Transport Systems, Germany
11:30 - 11:55	<i>Squat in berthed ship - passing ship interaction for restricted water cases</i> S.P. Denehy, J.T. Duffy, D. Ranmuthugala and M.R. Renilson AMC Search Ltd, Australia ; Australian Maritime College, Australia
11:55 - 12:20	<i>Impact of banks on ship squat</i> E. Lataire, M. Vantorre and G. Delefortrie Ghent University, Belgium ; Flanders Hydraulics Research, Belgium

12:20 - 13:30	Lunch
	SESSION C2: Ship Bottom Interaction (Chair: Prof. Y. Furukawa)
13:30 - 13:55	<i>Effect of lateral and depth restriction on ship behavior using computational fluid dynamics</i> D.B. Poojari and A.R. Kar Indian Register of Shipping, India
13:55 - 14:20	<i>Interaction between ship-induced stress and associated characteristics of turbidity records</i> S. Niehueser, M. Ulm, A. Arns, J. Jensen, V. Kelln, K. Uliczka and B. Kondziella Research Institute for Water and Environment, University of Siegen, Germany ; Federal Waterways Engineering and Research Institute, Germany
14:20 - 14:45	<i>Ship Manoeuvring Behaviour in Muddy Navigation Areas: State of the Art</i> G. Delefortrie and M. Vantorre Flanders Hydraulics Research, Belgium ; Ghent University, Belgium
14:45 - 15:10	<i>Numerical analysis of the flow in the gap between the ship hull and the fairway bottom in extremely shallow water</i> I. Shevchuk, C.-U. Böttner and N. Kornev University of Rostock, Germany ; Federal Waterways Engineering and Research Institute, Germany
15:10 - 15:25	Refreshment break
	SESSION C3: Ship Bottom Interaction (Chair: Dr. K. Uliczka)
15:25 - 15:50	<i>A simplified maneuvering performance of a large container ship passing through the Suez Canal</i> Y. You and W. Kim Daewoo Shipbuilding & Marine Engineering Co., Ltd., Rep. of Korea
15:50 - 16:15	<i>A new slender body theory for shallow water and comparison of the results with experimental and two other numerical methods</i> M. Alidadi, O. Gören, D.B. Danişman and S. Calisal University of British Columbia, Vancouver, Canada ; Istanbul Technical University, Istanbul, Turkey ; Piri Reis University, Istanbul, Turkey
16:15 - 16:40	<i>The definition of the nautical bottom in muddy navigational areas</i> M. Druyts and P. Brabers MDCE bvba, Belgium; Demco nv, Belgium

24 MAY 2016 (TUESDAY)

8:00 – 09:15	Registration
	SESSION D1: Manoeuvring in Shallow Water (Chair: Dr. C.-U. Böttner)
09:15 – 09:40	<i>Captive model tests based 6 DOF shallow water manoeuvring model</i> G. Delefortrie, K. Eloit, E. Lataire, W. Van Hoydonck, M. Vantorre Flanders Hydraulics Research, Belgium ; Ghent University, Belgium
09:40 - 10:05	<i>Experimental study on the manoeuvrability of KVLCC 2 in shallow water</i> D.J. Yeo, K. Yun and Y. Kim Korea Research Institute of Ships and Ocean Engineering, Rep. of Korea
10:05 - 10:30	<i>Shallow water effects on longitudinal components of hydrodynamic derivatives</i> Y. Furukawa, H. Ibaragi, Y. Nakiri and K. Kijima Kyushu University, Japan
10:30 – 10:45	Refreshment break
	SESSION E1: Ship-Bank and Ship-Ship Interaction Effects (Chair: Dr. G. Delefortrie)
10:45 - 11:10	<i>Progress on real-time prediction of ship-ship-shore interactions based on potential flow</i> J.A. Pinkster PMH bv, The Netherlands
11:10 - 11:35	<i>Passing ships interaction in the oil terminal of São Sebastião (Brazil): an applied study to define the operational limits</i> F. Ruggeri, R.A. Watai and E.A. Tannuri Argonáutica Engineering & Research, Brazil ; Numerical Offshore Tank of the University of São Paulo (TPN-USP), Brazil
11:35 - 12:00	<i>Parametric study of a modified panel method in application to the ship-to-ship hydrodynamic interaction</i> S. Sutulo and C. Guedes Soares Centre for Marine Technology and Ocean Engineering, Instituto Superior Técnico, University of Lisbon, Portugal
12:00 – 12:25	<i>Shallow water and interaction effects in ECDIS real-time motion prediction system</i> A. Ozersky and E. Rogozhina Transas Technologies, Russia
12:25 - 13:30	Lunch
	SESSION F1: Experimental Measurements (Chair: Dr. J. Duffy)
13:30 – 13:55	<i>The Towing Tank for Manœuvres in Shallow Water</i> G. Delefortrie, S. Geerts and M. Vantorre Flanders Hydraulics Research, Belgium ; Ghent University, Belgium

13:55 - 14:20	<p><i>Measured ship motions in Port of Geraldton approach channel</i> J.H. Ha, T.P. Gourlay and N. Nadarajah Centre for Marine Science and Technology, Curtin University, Australia ; Global Navigation Satellite Systems Research Centre, Curtin University, Australia</p>
14:20 - 14:45	<p><i>Manoeuvring with negative underkeel clearance: 2nd full scale field test in the Port of Delfzijl</i> R. Barth, C.J.A.W. van der Made, L. Bourgonjen, J. van Dijken, M. Vantorre and J. Verwilligen Wiertsema & Partners, The Netherlands ; Groningen Seaports, The Netherlands; Ghent University, Belgium ; Flanders Hydraulics Research, Belgium</p>
14:45 - 15:10	<p><i>Running sinkage and trim of the DTC container carrier in harmonic sway and yaw motion: open model test data for validation purposes</i> K. Eloot, M. Vantorre, G. Delefortrie and E. Lataire Flanders Hydraulics Research, Belgium ; Ghent University, Belgium</p>
15:10 – 15:25	Refreshment break
	SESSION C4: Ship Bottom Interaction (Chair: Prof. O. el Moctar)
15:25 - 15:50	<p><i>Numerical simulation of the ship bottom interaction of DTC container carrier for different keel clearance in pure sway motion</i> R. He, Z.Z. Zhang, X.Z. Wang and D.K. Feng School of Naval Architecture and Ocean Engineering, Huazhong University of Science and Technology, P. R. Of China</p>
15:50 – 16:15	<p><i>RANS-based Numerical Simulation of Captive Model Tests in Shallow Water for the DTC Container Carrier</i> Y. Liu, Z.-J. Zou and L. Zou School of Naval Architecture, Ocean and Civil Engineering, Shanghai Jiao Tong University, China ; State Key Laboratory of Ocean Engineering, Shanghai Jiao Tong University, China ; Collaborative Innovation Center for Advanced Ship and Deep-Sea Exploration, Shanghai, China</p>
16:15 – 16:40	<p><i>Investigation of ship-bank, ship-bottom and ship-ship interactions by using potential flow method</i> Z.-M. Yuan, A. Incecik Department of Naval Architecture, Ocean and Marine Engineering, University of Strathclyde, UK</p>
16:40 – 17:05	<p><i>CFD simulation of PMM motion in shallow water for the DTC container ship</i> G.B. Deng, A. Leroyer, E. Guilmineau, P. Queutey, M. Visonneau and J. Wackers METHRIC, LHEEA/UMR 6598 CNRS, Ecole Centrale de Nantes, France</p>
18:00 – 19:30	International Maritime Museum
19:30 – 23:00	Conference Dinner at the International Maritime Museum

25 MAY 2016 (WEDNESDAY)

08:00 - 09:00	Registration
	SESSION B2: Squat (Chair: Dr. A. Gronarz)
9:00 – 9:25	<i>Validation studies on numerical prediction of ship squat and resistance in shallow water</i> P. Mucha, G. Deng, T. Gourlay and O. el Moctar University of Duisburg-Essen, Germany ; Federal Waterways Engineering and Research Institute (BAW), Germany ; Ecole Centrale de Nantes, France ; Curtin University, Australia
09:25 – 09:50	<i>Water level forecasts and squat calculation for the Traverse du Nord</i> S. Mercier, B. Cayer, D. Lefaivre, G. Sauvé and A. D'Astous Corporation des pilotes du Bas Saint-Laurent, Canada; Fisheries and Oceans Canada / Maurice Lamontagne Institute, Canada; Innovation maritime, Canada
09:50 – 10:15	<i>Applicability of artificial neural networks to squat prediction of Very Large and Ultra Large Container Vessels based on measurements on the Elbe estuary</i> B. Reiter, T. Albers, F. Treuel and H. Jansch von Lieberman GmbH, Germany ; Hamburg University of Technology, Germany ; Federal Waterways Engineering and Research Institute, Germany
10:15 – 10:40	<i>Application of potential flow methods to ship squat in different canal widths</i> T. Gourlay, E. Lataire and G. Delefortrie Curtin University, Australia ; Ghent University, Belgium ; Flanders Hydraulics Research, Belgium
10:40 – 10:55	Refreshment break
	SESSION E2: Ship-bank and ship-ship interaction effects (Chair: Prof. A. Härting)
10:55 – 11:20	<i>Simultaneous ship-to-ship interaction and bank effect on a vessel in restricted water</i> A.Y. Sian, A. Maimun, Y. Ahmed and Rahimuddin Marine Technology Centre, Universiti Teknologi Malaysia, Malaysia ; Universitas Hasanuddin, Indonesia
11:20 – 11:45	<i>Numerical modelling of propeller-induced flow velocities on embankments</i> S. Leschka, B. Xu, L. Yde, O. Stoschek and J. Best DHI Deutschland GmbH, Germany; DHI Water & Environment (S) Pte. Ltd., Singapore and Hamburg Port Authority AöR, Germany
11:45 – 12:10	<i>Bank effects modelling in Real-Time Manoeuvring Simulations</i> R. Redondo, R. Atienza, I. Trejo, I. Verdugo and J.R. Iribarren Siport21, Spain
12:10 – 12:30	Closing Words
12:30 – 13:30	Lunch
14:00 - 17:00	Technical excursion to the Port of Hamburg

26 MAY 2016 (THURSDAY)

09:00	Meet at Elbcampus
09:15	Departure/Bustransfer to BAW
10:00	Visit at BAW
12:00	Small Lunch
13:00	Departure to CentralStation / Airport