

Van der Meer Consulting B.V.

COASTAL ENGINEERING CONSULTANCY & RESEARCH



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CURRICULUM VITAE

Name: J.W. van der Meer PhD MSc
First name: Jentsje
Year of birth: 1955
Nationality: Dutch

Education: 1988 PhD, Delft University of Technology
1981 MSc, Civil Engineering, Delft University of Technology
1976 BSc, Architecture, Technical College, Leeuwarden.

Languages: Frisian, Dutch, English;
working knowledge of French, German

Professional affiliation: ACOPNE, Diplomate in Coastal Engineering
KIVI, Royal Institution of Engineers, The Netherlands
ASCE, American Society of Civil Engineers
PIANC

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Present position: Principal, Van der Meer Consulting b.v.
Professor Coastal Structures and Ports at IHE Delft (0.2 fte)
Professor at Delft University of Technology
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Employment record: 1997-2007 Infram, Head Department of Engineering
1987-2013 UNESCO-IHE, Guest lecturer on Breakwater Design
1992-1997 Delft Hydraulics, Deputy Director of Harbours, Coasts
and Offshore Technology Division
1989-1992 Delft Hydraulics, Head of Coastal Structures Department
1987-1988 Part time lecturer at Delft University
1981-1989 Delft Hydraulics, Project Engineer and Project Manager

Key qualifications

Dr Van der Meer is an internationally renowned expert in appraisal, design and testing of breakwaters and coastal structures, including seawalls and dikes. His work on rubble mound structures has been included in all manuals all over the world. He has worked 16 years at Delft Hydraulics (now Deltares), a well-known institute on specialised consulting and research of water related issues. At the position of Deputy Division Director he was involved in the management of the wider field of hydraulic and coastal engineering, coastal zone management, risk assessment and was responsible for the research and marketing of the Division (80 people, 50 academics). For ten years he had a position at Infram International, a private consultant for infrastructure appraisal and management, and he exploited his experience in specialized consultancy and research. Flood risk assessment studies became a relevant part of his work, both national and international. In 2007 he started his own firm Van der Meer Consulting b.v. on Coastal Engineering Consultancy & Research. In 2014 he became professor Coastal Structures and Ports at IHE Delft, for one day per week.

In addition to the applied research in the first part of his career he has been project manager or advisor in many projects on design of all kinds of coastal structures all around the world, such as levees, dikes, seawalls, breakwaters, groins, revetments and shingle beaches. Many of them have since then been constructed. The applied research was performed for the Dutch government (various departments) and for the European Union. Later and also recent work was related to wave-structure interaction, such as wave run-up and wave overtopping at dikes, including the strength of these structures under wave attack. He developed a Dutch guideline on wave run-up and overtopping at dikes. The EU-project CLASH was initiated by him and included research institutes like HR Wallingford and Delft Hydraulics (now Deltares). He is co-author of the EurOtop Overtopping Manual, which brings together the knowledge of UK (HR Wallingford), the Netherlands (Infram/Van der Meer Consulting), Germany and Belgium. A second edition of this manual has been released in 2016 with Van der Meer as editor and co-author.

Dr Van der Meer is and has been chairman or member of a large number of national and international committees with respect to safety assessment and design of coastal structures. He has published about 200 papers in international journals, proceedings and books. He wrote the book "Design and construction of berm breakwaters", that was published in 2016. He has obtained the Halcrow Premium in 1987 and the T.K. Shieh award in 1992, both granted by the British Institution of Civil Engineers. Dr Van der Meer has been guest lecturer to the Delft International Hydraulic Engineering courses of UNESCO-IHE for more than twenty five years and contributed to many short courses and post doc courses.

Since 1989 Van der Meer has been involved in many EU-research projects on coastal structures, leading to national and international guidance on behaviour of seawalls, dikes and other coastal structures under storm surge and wave attack. All this research and guidance to practical rules made him a top expert on coastal structures in the Netherlands. The EU-project, Floodsite, which was coordinated by HR Wallingford, included failure mode analysis of seawalls under wave attack and wave overtopping. Through all this EU-research Dr Van der Meer has an excellent international network in Europe and world wide.

In 2000 Van der Meer was asked by Chevron, Pascagoula, Mississippi, to design a flood protection around the refinery at the US Coast. The levee was constructed and withstood the storm surge and waves of hurricane Katrina in 2005, although the whole city of Pascagoula was flooded! He was involved in the immediate repair of some damages and in the risk strategy for the future.

Dr van der Meer was involved in recent flood risk assessment studies in the Netherlands, including fresh water areas (rivers and large lakes) en salt water. But also in similar studies abroad, amongst others in France, Guyana, Canada, Belgium en India. Specific items are given under Special assignments. These studies in the Netherlands are often performed for Water Boards, the main owners of flood protections.

An innovation, with copy rights to Van der Meer, is the Wave Overtopping Simulator. This is a unique device to test the strength of real dikes for overtopping waves. This Simulator has been used to test the strength of various existing levees in the Netherlands in 2007 -2021 for overtopping waves. Other Simulators have been designed for the USA, Vietnam and Singapore. A Wave Impact Simulator and a Wave Run-up Simulator have been designed and constructed in 2012 and 2013, respectively.

Special assignments

Committees

- 2019-pres. Committee on land subsidence by gas exploration in Fryslân, The Netherlands.
- 2018-pres. Editor of EurOtop Live. The EurOtop overtopping manual (www.overtopping-manual.com) will be updated every two years, based on improvements submitted by researchers and practitioners.
- 2005-pres. Member Expertise Network on Flood Defences - Working group on Technical Subjects – ENW.
- 2012-2016 Construction Advisory Board - Açú Breakwaters TX2, Brazil.
- 2009-2012 Design Board for Maasvlakte 2 (extension Port of Rotterdam).
- 2007-2009. Advisory Committee on Scale Model Research for Maasvlakte 2 (extension Port of Rotterdam).
- 2005-2008. Member Expertise Network on Flood Defences - Working group on Wave boundary conditions – ENW.
- 2003-pres. Member PIANC Working Group MarCom 47. Criteria for the selection of breakwater types and their optimum damage risk level.
- 2007 Member Quality Assurance Team Guideline for River Dike Design – ENW.
- 2000-2005. Member Technical Advisory Committee on Water Defences – Working group on Technical Subjects – TAW.
- 1999-2005 Member Technical Advisory Committee on Water Defences – Project group on Wave boundary conditions – TAW-Rand (Rivers, lakes, estuaries and sea).
- 2005 PhD-committee H. Verhaeghe, University of Gent, Belgium
- 2004 PhD-committee N. Napp, University of Edinburgh
- 2003 PhD-committee B. van der Walle, University of Gent, Belgium
- 1991-2000 Member Technical Advisory Committee on Water Defences - Working group on Hydraulic Loads and Revetments – TAW-A.
- 2000 PhD-committee P. Troch, University of Gent, Belgium
- 1991-1999 Member Technical Advisory Committee on Water Defences - Project group Guideline for sea and lake dikes - TAW-D2.
- 1993-1999 Member PIANC PTC II, working group 28. Breakwaters with vertical and inclined concrete walls.
- 1998 PhD-committee A. Arsié, University of Caen, France
- 1987-1997 Chairman Technical Advisory Committee on Water Defences - Project group on Hydraulic Loads - TAW-A1.
- 1995 PhD-committee M.R.A. van Gent, Delft University of Technology
- 1986-1993 Member Technical Advisory Committee on Water Defences - Probabilistic design - TAW-E.
- 1988-1990 Member CUR 67 - CIRIA 402. Manual on the use of rock in coastal and shoreline engineering.
- 1988-1990 Member CUR 70 committee - Structural strength of concrete armour units.
- 1987-1988 Chairman PIANC PTC II, working group 12, sub-working group C, Risk analysis.
- 1984-1985 Member Project group "Computer Applications in the Design of Breakwaters".

Reviewer of research proposals for EPSRC, UK
Reviewer of research proposals for the EU
Reviewer of research proposals for MIUR, Italy

Abroad

- 2020-pres. Advisor on model testing with respect to the rehabilitation of the Zonguldak breakwater, Turkey.
- 2019-pres. Independent expert in arbitration on damage at Nouvelle Route du Littoral de la Réunion.
- 2019-pres. Advisor and reviewer for a Guideline in Singapore on wave overtopping mitigation measures to cope with sea level rise.
- 2018-pres. Partner in EU-project CrossOver. Physical model tests on crossing seas (sea and swell from various directions) and wave overtopping.
- 2018-2020 Design of a dedicated Wave Overtopping Simulator and performance of wave overtopping tests at Pulau Tekong, Singapore.
- 2017-2020 Breakwater expert and advisor to SENER, Barcelona, for the design and model testing of the new breakwater at San Antonio, Chile.
- 2011-2020. Design of breakwater; review of physical model tests; and advice during construction of the new port of Kuantan, Malaysia with 4.5 km breakwater.
- 2018-2019 Breakwater expert and advisor in the assessment of the Quetzal breakwaters, Guatemala.
- 2019 Independent expert in arbitration for damaged revetment at offshore terminal construction at Moin, Costa Rica.
- 2018 Independent reviewer for the design upgrades of the Mackay breakwaters, Australia.
- 2017-2018 Independent expert in arbitration for damage cases breakwater and offshore terminal construction at Moin, Costa Rica.
- 2016-2018 Expert witness in court case on damage in the Mose-project, Venice, Italy.
- 2014-2018 Consultant of design of Port City, Sri Lanka, a new reclamation protected by an offshore breakwater.
- 2017 Advisor for development of an avalanche simulator, Iceland.
- 2016-2017 Partner in ICODEP, an Eu-Hydralab project on large scale model testing of overtopping at a vertical structure with a movable steep beach in front.
- 2016 Set-up and guidance of model testing Dangote breakwater, Nigeria at CSIR, South Africa.
- 2014-2016 Editor and co-author on the second edition of the EurOtop Manual on wave overtopping – www.overtopping-manual.com.
- 2013-2016 Advisor to the Communauté de communes of Ile de Ré, France, on flood risk assessment and strength of present and future flood defences.
- 2008-2016 Consultant to the Client for the Açú breakwater and Terminal Sul Estaleiro during design and construction of the breakwaters, Brazil.
- 2015 Review of damage at Lae Port, Papua New Guinea and review of remedial model testing.
- 2014 Review of design calculations for rehabilitation of the rock armour for the WAC Bennett Dam, Canada
- 2013-2014 Design of an alternative Icelandice type berm breakwater for the new port of Hambantota, Sri Lanka.
- 2013-2014 Peer review of design for a breakwater at Jakarta, Indonesia.
- 2010-2013 Peer review of the design and later consultant to the client on model testing of the Oakajee Breakwater, Australia, including other Peer Reviews.
- 2012-2013 Overtopping tests in cooperation with Colorado State University, CO, USA, on the Herbert Hoover Dike at Lake Oakeechobee.
- 2009-2010 Design of Wave Overtopping Simulator for the USA, three times larger than the Dutch one.
- 2009-2010 Consultant for Antwerp City Council on mobile flood protection along the Scheldt river, Belgium.
- 2008-2010 Assistance in design and construction of a Wave Overtopping Simulator for Vietnam.
- 2008-2010 Flowdike, Hydralab III and KFKI. EU and KFKI-research (Germany) on combined effect of waves and currents on wave overtopping on river and sea dikes.
- 2009 Peer Review of design of the marine works for the Qatar Bahrein Causeway, Qatar.

- 2008 Independent expert assessment on design conditions of breakwaters, Khalifa, Abu Dhabi.
- 2007-2008 Independent expert on breakwater damage assessment, Caucedo, Dominican Republic.
- 2007 Offshore breakwater design for Callao Bay, Peru.
- 2006-2007. Alternative design with geocontainers of offshore breakwater at Açú Port, Brazil.
- 2006-2007 Coastal protection and restoration plan for New Orleans and Louisiana Coast.
- 2005-2008 Damage assessment and risk analysis of the hurricane protection around the Chevron refinery at Pascagoula, Mississippi, US, after having survived hurricane Katrina.
- 2005-2007 Writing the EurOtop Overtopping Manual in a cooperation with UK, Germany and Belgium (www.overtopping-manual.com).
- 2005-2007 ComCoast. European project between governments. Development of innovative wave overtopping resistant dikes and the wave overtopping simulator. Actual tests on a real dike at Groningen (www.comcoast.org).
- 2004-2007 EU-research programme FLOODsite. The only 6th framework programme on flood risk management.
- 2003-2007 Consultant for Dragados during construction of the breakwater at Hayovel, Israel.
- 2003-2007 Reviewer for update of the Rock Manual, Manual on the use of rock in hydraulic engineering.
- 2002-2005 Independent advisor for breakwater design of harbour of Oostende, Belgium.
- 2002-2004 Flood risk assessment study for the Haute Gironde, France.
- 2002-2004. EU-research programme CLASH. Crest level assessment of coastal structures by full-scale monitoring, neural network prediction and hazard analysis on permissible wave overtopping. Development of a homogeneous database on wave overtopping.
- 2001-2004 EU-research programme DELOS: Environmental design of low crested structures. Main task: 3D-tests on wave transmission.
- 2001-2003 Co-author of ICOLD-bulletin 130 on Risk Assessment. Risk assessment in dam safety management.
- 2003 Elaboration study for the EU to invest on shore protection in British Guyana, including site visit.
- 2003 Consultant for COMRISK with respect to safety assessment of the Belgian coast.
- 2002 Advisory Board for W.A.C. Bennet Dam deficiency investigations. Including site visit. British Columbia, Canada.
- 1998-2001 Invited expert at EU research project OPTICREST
- 2001 Peer review for the Wellington International Airport Runway End Enhancement Wave Study, New Zealand
- 2000 Design of flood protection dike around Chevron refinery, including site visit, Pascagoula, Mississippi, USA
- 2000 Review wave climate study and shore protection design, Marsden Point Development, New Zealand
- 2000 Expert Evaluation Panel for EU. Sustainable Marine Ecosystems under the programme Energy, Environment and Sustainable Development
- 2000 Expert Evaluation Panel for EU. Freight handling and ship operation under the programme of Competition and Sustainable Growth
- 1999-2000 Porbandar breakwater damage analysis and advice, including site visit, India.
- 1998-1999 Evaluation of riprap dam Casa de Piedra, including site visit, Argentina.
- 1999 Expert opinion breakwater design Port Said, Egypt
- 1999 Conceptual design seawall Disney Parc, Hong Kong
- 1999 Breakwater expert for design breakwater Barcelona, Spain.
- 1998 Evaluation of coastal structure designs, Jumeirah Coastal Zone, Dubai
- 1997 Evaluation of sliding of coastal protection, including site visit, British Guyana.
- 1995-1996 Breakwater expert in local design team for Ennore Port, India.
- 1981-1998 Various designs of rubble-mound breakwaters all around the world supported by physical model and desk studies concerning stability and functional requirements.
- 1985-1991 Model studies on scale effects and design aspects of berm breakwaters at St George, Alaska; Karwar, India and Funchal, Madeira.
- 1982-1994 Various physical model studies on wave forces and impacts against caissons all

around the world.

- 1989-1994 Manager of EC research program MArine Science and Technology (MAST) on Coastal Structures.
- 1988-1991 Coordinator and guest editor of special issue of "Breakwaters", Journal of Coastal Engineering, Elsevier, Amsterdam.

Home-country

- 2019-pres. Testing sand dikes with grass covers at the IJssel and Vecht rivers with the wave overtopping and impact simulators.
- 2018-pres. Partner in a 12-years research project on measuring wind, waves and wave overtopping in the Eems-Dollard Estuary.
- 2017 Advisor for design and model testing of a new design for the 32 km long Afsluitdijk.
- 2016 Expert in dispute resolution of applying small underlayers under rock armour layers.
- 2015-2017 Set-up and guidance of model testing on underlayers as filters for coastal protections by rock layers. Development of new design rules.
- 2013-2015 Advisor to Witteveen & Bos for the design of the improvements of the Afsluitdijk to become an overtopping resistant flood defence. The Afsluitdijk is a 32 km long closure dam.
- 2008-2015 Peer reviewer of the SBW project "Residual strength of dikes" of Deltares.
- 2012-2014 Design and construction of the Wave Impact Simulator and the Wave Run-up Simulator and destructive testing of dikes/levees at Vechtdijk (2012), Oosterbierum (2012, 2014), Nijmegen and Millingen (2013) and Zeelandbrug (2014), all in the Netherlands. WTI-2017 project of Deltares and the Dutch Public Works Department.
- 2014 Expert in dispute resolution between client and contractor about application of filter criteria for a rock armoured structure.
- 2012-2014 Advisor to Port of Rotterdam for wave reflection reduction systems at quay wall, including physical model tests.
- 2011-2013. Review Committee for breakwater of IJmuiden.
- 2010-2012. Co-author of the ENW Technical Report "Strength of grass covered dikes by wave attack and wave overtopping" (in Dutch).
- 2006-2011 Design and construction of the Wave Overtopping Simulator and destructive testing of inner slopes of real dikes/levees at Delfzijl (2007), Boonweg, St Philipsland and Katendijke (all 2007), Afsluitdijk (2009) and Vechtdijk, Zwolle (2010), Tholen (2011) all in the Netherlands. SBW-project (Strength and Loads on Water Defences) of Deltares and the Dutch Public Works Department.
- 2008-2010 Feasibility study on indestructible dikes.
- 2007-2009 Analysis of waves, wave run-up and overtopping measured in a field campaign during storms at the Pettemer Seadike.
- 2007 Expert advice for ENW on emergency measures for the Pettemer sea dike.
- 2007 Design conditions for dike improvements at Ameland and Terschelling.
- 2007 Development of fragility curves for safety assessment of dikes.
- 2006-2007 Development of a research programme for testing dikes by remote sensing and internal techniques for damage assessment and monitoring.
- 2006-2007 Development of the Rich Dike. Ecological optimisation integrated in civil engineering design.
- 2004-2005 Member review team for the breakwater of IJmuiden, NL.
- 2004-2005 Development safety assessment rules for pitched natural rock (Noorse steen).
- 2004-2005 Development method of "proven strength" on pitched natural rock slopes.
- 2002-2005 Member Quality team for VNK-study on safety of Dutch polders against flooding by means of full probabilistic calculations.
- 2000-2005 Wave boundary conditions, required heights of seawalls, environmental impact assessment, supervision of design and planning of reinforcement of seawalls in city of Harlingen
- 2001-2003 Member Review team, planned extension of 1000 hectares for Port of Rotterdam.
- 2000-2002 TAW Guideline on vertical structures: chapter on Required Height
- 1996-2002 Main author of Dutch Guideline on wave run-up and overtopping at dikes, including:
- Definition report for PC-OVERSLAG

- Review and testing of program PC-OVERSLAG
- Report on influence factors of roughness on run-up
- 1999-2002 Safety assessment of dikes around Marker lake with respect to geotechnical stability and proven strength from history.
- 1999-2000 Development of model for failure mechanism (erosion) of a dike until breaching.
- 1997-2000 Bi-modal wave spectra:
 - Report on effects on required of dikes
 - Analysis of extensive research data of HR Wallingford on wave overtopping
- 1997-2000 Probabilistic program HYDRA-M:
 - Description of low-crested dams and foreshores
 - Verification of wave boundary conditions along the Markermeer
- 1999 Evaluation of safety in design procedures for placed block revetments
- 1999 Design report for single-layer armour units.
- 1998-1999 Expert on conceptual design of breakwaters for Main Port Rotterdam, extension of Maasvlakte II
- 1996-1998 Project Manager of extensive study on safety aspects and risk analysis of two great lakes in The Netherlands, the IJsselmeer and Markermeer
- 1985-1998 Applied and fundamental research on wave run-up, run-down, reflection and transmission concerning rock structures and dikes, using physical model tests and mathematical models.
- 1983-1992 Applied and fundamental research on rubble mound breakwaters:
 - interlocking and friction of armour units
 - new design formula for breakwater armour units: Cubes, Tetrapods and Acropode
 - scaling strength of concrete armour units
 - hydraulic behaviour of armour units
 - impact velocities of rocking armour units.
- 1983-1988 Fundamental research on the stability of coarse material under wave action. A five year programme, including more than 400 small scale tests and 20 large scale tests (Delta flume). Topics:
 - stability formula for statically stable slopes (breakwaters)
 - description profile of dynamically stable slopes (rock and gravel beaches)
 - evaluation of scale effects.
- 1987 Development and installation of wave basin with short-crested waves.
- 1990 Development of computer program BREAKWAT (design of breakwaters)
- 1991 Model investigation on the influence of oblique and short-crested waves on wave run-up and overtopping.
- 1987-pres. Guidance of MSc-students at Delft University of Technology on various subjects.

List of publications divided into subjects

Most of them can be downloaded from www.vandermeerconsulting.nl

Special topics

1. **Risk assessment**
2. **Design conditions**
3. **Stability of coastal structures**
 - a. Dikes, levees and embankments and the Wave Overtopping Simulator
 - b. Rock slopes
 - c. Breakwater armour
 - d. Berm breakwaters
 - e. Low-crested structures
 - f. Vertical structures
 - g. Toe structures
4. **Functional design of coastal structures**
 - a. Wave overtopping
 - b. Wave transmission
 - c. Wave reflection
5. **Other subjects**

Special topics

- 2018 EurOtop (2018). Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application. Van der Meer, J.W., Allsop, N.W.H., Bruce, T., De Rouck, J., Kortenhaus, A., Pullen, T., Schüttrumpf, H., Troch, P. and Zanuttigh, B., www.overtopping-manual.com
- 2016 Van der Meer, J.W and S. Sigurdarson. Design and construction of berm breakwaters. World Scientific. Advanced Series on Ocean Engineering, Volume 40. ISBN 978-981-4749-60-2. Available online and for free: www.vdm-c.nl
- 2014 Van der Meer, J.W. From test to practice. Inaugural address as professor of Coastal Structures and Ports at UNESCO-IHE, Delft.

1. Risk assessment

- 2018 Dugor, J., H. Rault, E. Tirard, D. Rihouey, J. Baills and J.W. van der Meer. Développement d'un outil d'aide à la gestion des digues de l'île de Ré. XVèmes Journées Nationales Génie Côtier – Génie Civil. La Rochelle, FR, DOI:10.5150/jngcgc.2018.089.
- 2016 Dugor, J., D. Rihouey and J.W. van der Meer. Modélisation du risque de submersion marine intégrant les défaillances d'ouvrages. Application à l'île de Ré. XIVèmes Journées Nationales Génie Côtier – Génie Civil, Toulon, FR.
- 2008 Van der Meer, J.W. Coastal flooding: a view from a practical Dutchman on present and future strategies. Keynote paper at FloodRisk, Oxford, UK. Flood Risk Management: Research and Practice – Samuels et al. (eds.) ISBN 978-0-415-48507-4; pp 3-10.
- 2008 Van der Meer, C. Cooper, M.J. Warner, H. Adams-Morales and G.J. Steendam. The success of the hurricane protection around Chevron's refinery at Pascagoula, MS, during Katrina. PIANC Conference, Mobile, AL, USA.
- 2008 Van der Meer, J.W., W.L.A. ter Horst and E.H. van Velzen. Calculation of fragility curves for flood defence assets. Proc. FloodRisk, Oxford, UK. Flood Risk Management: Research and Practice – Samuels et al. (eds.) ISBN 978-0-415-48507-4; pp 567-573
- 2008 Allsop, N.W.H., T. Bruce, T. Pullen and J.W. van der Meer. Direct hazards from wave overtopping – the forgotten aspect of coastal flood risk assessment? DEFRA, Proc. Flood and Coastal Management Conference, Manchester, UK.

- 2005 Van der Meer, J.W., S. Nurmohamed, L.A. Philipse, G.J. Steendam and J. Wouters. Stability Assessment of single layers of orderly placed and of pitched natural rock. Proc. Second International Coastal Symposium, Höfn, Iceland.
- 2005 Van der Meer, J.W., A. Benaïssa and P. Weidema. Risk-based management of flooding in the Haute Gironde. Proc. Third International Symposium on Flood Defence, Nijmegen, NL.
- 2003 Takahashi, S., M. Hanzawa, S. Sugiura, K. Shimosaka and J.W. van der Meer. Performance design of maritime structures and its application to armor stones and blocks of breakwaters. ASCE, Proc. Coastal Structures 2003, Portland, Oregon, pp. 14 - 26.
- 2001 Van der Meer, J.W., R. Stroeve and R. Sies. Integral optimisation design techniques and neural networks. Proc. Int. Workshop on Advanced design of maritime structures in the 21st century (ADMS21), Japan.
- 1998 De Loeff, H. and Van der Meer, J.W. Assessment of safety against flooding in the Netherlands. Proc. MAFF conference, Keele, UK.
- 1998 Van der Meer, J.W., Tönjes, P. and de Waal, J.P. A code for dike height design and examination. Coastlines, Structures and Breakwaters. ICE, pp. 5-19. Ed. N.W.H. Allsop, Thomas Telford, London, UK.
- 1998 Van der Meer, J.W., de Loeff, A.P. and Glas, P. Integrated approach on the safety of dikes along the great Dutch lakes. ASCE, proc. 26th ICCE, pp. 3439-3452. Copenhagen, Denmark.
- 1988 Van der Meer, J.W. Book review of: Design and Construction of Mounds for Breakwaters and Coastal Protection (Per Bruun, ed.). Journal of Coastal Engineering, Elsevier, 12, pp. 107-108.

2. Design conditions

- 2020 Lashley, C., J.D. Bricker, J.W. van der Meer, C. Altomare and T. Suzuki. Relative magnitude of infragravity waves at coastal dikes with shallow foreshores: a prediction tool. ASCE, J. Waterway, Port, Coastal, Ocean Eng. DOI: 10.1061/(ASCE) WW.1943-5460.0000576. © 2020 American Society of Civil Engineers.
- 2020 Lashley, C., B. Zanuttigh, J.D. Bricker, J.W. van der Meer, C. Altomare, T. Suzuki, V. Roerber and P. Oosterlo. Benchmarking of numerical models for wave overtopping at dikes with shallow mildly sloping foreshores: Accuracy versus speed. Elsevier, Environmental Modelling and Software 130 (2020) 104740.
- 2019 Lashley, C., J.D. Bricker, J.W. van der Meer, C. Altomare and T. Suzuki. Infragravity-wave dominance at sea-dikes fronted by very and extremely shallow foreshores. Proc. ISOPE, Honolulu, Hawaii, USA. ISBN 978-1 880653 85-2; ISSN 1098-6189.
- 2018 Oosterlo, P., J.W. van der Meer, B. Hofland and G. van Vledder. Wave modelling in a complex estuary: study in preparation of field measurement campaign Eems-Dollard estuary. ASCE, proc. ICCE 2018, Baltimore, USA.
- 2002 Van der Meer, J.W., J.W. Langenberg, M. Klein Breteler, D.P. Hurdle and F. den Heijer. Wave boundary conditions and overtopping in complex areas. ASCE, Proc. 28th ICCE, Cardiff, UK, pp. 2092-2104.
- 1999 Klopman, G. and Van der Meer, J.W. Random wave measurements in front of reflective structures. Journal of WPC and OE, ASCE, Volume 1, No. 1, pp. 39-45. New York.
- 1999 Otta, A.K. and Van der Meer, J.W. Wave height distribution over a shallow fore-land from Boussinesq modelling. Proc. Coastal Structures '99, Santander, Spain. Losada (ed.), Balkema, Rotterdam, pp. 47-55.

3. Stability of coastal structures

a. Dikes, levees and embankments and the Wave Overtopping Simulator

- 2020 Van der Meer, J.W., G.J. Steendam, C.A. Mosca, L. Bolatti Guzzo, K. Takata, Ng Say Cheong, Eng, Chua Kok Eng, L. Ang LJ, G.P. Ling, C.W. Siang, C.W. Seng, M. Karthikeyan, F. Yap SC and V. Govindasamy. Wave overtopping tests to determine tropical grass species and topsoils for polder dikes in a tropical country. Coastal Engineering Proceedings, (36v), papers.31. <https://doi.org/10.9753/icce.v36v>.
- 2018 Van der Meer, J.W., A. van Hoven, G.J. Steendam and G. Hoffmans. Hydraulic simulators on real dikes and levees. 3rd Int. Conf. on Protection against Overtopping, June 2018, UK.
- 2018 Steendam, G.J., J.W. van der Meer, P. van Steeg and R. Joosten. Wave impacts at small and real scale for the stepped sloped seawall design at Den Oever. ASCE, Proc. ICCE 2018, Baltimore, USA.
- 2018 Oosterlo, P., R.T. McCall, V. Vuiik, B. Hofland, J.W. van der Meer and S.N. Jonkman. Probabilistic Assessment of Overtopping of Sea Dikes with Foreshores including Infragravity Waves and Morphological Changes: Westkapelle Case Study. J. Mar. Sci. Eng. 2018, 6, 48; doi:10.3390/jmse6020048.
- 2018 Hoffmans, G., A. van Hoven, G.J. Steendam and J.W. van der Meer. Summary of research work about erodibility of grass revetments on dikes. 3rd Int. Conf. on Protection against Overtopping, June 2018, UK.
- 2017 Van der Meer, J.W. Simulators as Hydraulic Test Facilities at Dikes and other Coastal Structures. Chapter 1 in Series of Coastal and Ocean Engineering Practice, Vol.2. Design of Coastal Structures and Sea Defences. Ed. Y.C. Kim.
- 2016 Bijlard, R., G.J. Steendam, H.J. Verhagen and J.W. van der Meer. Determining the critical velocity of grass sods for wave overtopping by a grass pulling device. ASCE, Proc. ICCE 2016, Antalya. Turkey.
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