WODCON XX:

The Technical Sessions: an exceptional concentration of knowledge and experience WODCON XX is showcasing about 95 technical presentations by experts from all over the world. The Technical Sessions run from Tuesday 4 June to Thursday 6 June in two or three parallel tracks.

The Technical Papers Committee has selected the best papers which cover the design and execution of dredging projects and tools from mathematical models to machines – a combination of knowledge and understanding, skill, peer reviewed and published in the congress proceedings.

The published timetable will be strictly adhered to in order to enable delegates to move between sessions.

Tuesday 4 June 2013

| 09:00-10:55 | Opening Ceremony – Plenary in Copper Hall | | |
|-------------|--|--|--|
| 11:00-11:30 | Coffee – exhibition area – sponsored by Brusselle Enterprises | | |
| | Venue: Copper Hall Venue: Silver Hall Venue: The Arc | | |
| 11:30 | SESSION 1 – Developments in dredging equipment / 1 Chair: van Rhee C – Delft University of Technology, the Netherlands | SESSION 2 – WODA Environmental Panel hosted by the CEDA Environment Commission Chair: Laboyrie P – WODA & CEDA Environment Commission / Witteveen+Bos Consulting Engineers, the Netherlands | |
| 11:30 | TSHD dredging pump operation condition analysis Lv YF, Liu JB and Liu YX – Shijiazhuang Kinda Pump Industry Group Co Ltd, Peoples Republic of China | Invited Speaker: WODA technical guidance on underwater sound in relation to dredging Thomsen F – DHI, Denmark | |
| 11:50 | A study on the standard operation of the cutter suction dredger in a dredging project Gao W, Li DY and Liu H – CCCC Tianjin Dredging, Peoples Republic of China; Tian J – China Communication Institute Co Ltd, Peoples Republic of China; Li X – Tianjin Normal University, Peoples Republic of China | Invited Speaker: CEDA information paper on ecosystem services and dredging De Boer P – Ministry of Infrastructure and Environment, the Netherlands | |
| 12:10 | Developments in mining equipment and pumps for subsea and inland submerged deposits Kapusniak S – Soil Machine Dynamics Ltd., United Kingdom; Tenwolde D and Winkelman M – Damen Dredging Equipment, the Netherlands | The Dredging Debate Panelists: CEDA Environment Commission: Harris K–HR Wallingford, United Kingdom; Laboyrie P –Witteveen+Bos Consulting Engineers, the Netherlands; van Raalte G – Royal Boskalis Westminster, the | |
| 12:30 | Solution for the vibration challenges on cutter suction dredgers De Bruin R – Van Oord Dredging and Marine Contractors, the Netherlands; de Bruijn A – IHC Merwede, the Netherlands; van Ramshorst DJ – Loggers, the Netherlands | Netherlands; WEDA Environment Commission: Vogt C– Craig Vogt Inc, Environmental Consulting, United States of America; EADA: Dobson J – Independent Consultant, Australia; PIANC Environment Commission | |
| 12:50 | Development of a new-type plough- shaped tooth Lou QM – CCCC Key Laboratory of Dredging, Shanghai, Peoples Republic of China; Lin F – CCCC Shanghai Dredging, Peoples Republic of China | (invited partner organisation): Koethe H - German Federal Ministry of Transport, Building and Urban Affairs, Germany | |
| 13:10 | | Lunch – exhibition area | |
| 14:40 | SESSION 3 – Modeling Hydraulic transport Chair:De Nijs M – Van Oord Dredging and Marine Contractors, the Netherlands | SESSION 4 – Use of dredged sediments Chair: Costaras M – HR Wallingford, United Kingdom | |
| 14:40 | An overview of theories describing head losses in slurry transport Ramsdell R – Great Lakes Dredge & Dock Company, United States of America; Sape M – Delft University of Technology, the Netherlands | The use of engineered sediments for the construction of a compartment dyke in the Controlled Flooding Area Vlassenbroek Van Renterghem B, Van Nederkassel J and Joos P – Envisan, Belgium; Vermeersch T – Jan De Nul Group, Belgium; Quaeyhaegens H – Waterwegen en Zeekanaal, Belgium | |
| 15:00 | A head loss model for slurry transport based on energy considerations Miedema S – Delft University of Technology, the Netherlands; Ramsdell RC – Great Lakes Dredge & Dock Company, United States of America | Land reclamation using a mixture of dredged soil and converter slag Matsumoto A and Tanaka Y – Penta- Ocean Construction, Japan; Nakagawa M, Yamagoshi Y and Kanno H, Nippon Steel & Sumitomo Metal Corporation, Japan | |
| 15:20 | Numerical simulation of hydrodynamical behaviour of sand water mixtures | rine-grained organic dredged materials for Dike Cover Layers – Material Characterisation and | |

| | Goeree JC - Delft University of | Experimental Results | |
|-------|---|---|-----------|
| | Technology, the Netherlands: van Rhee | Cantré S. Nitschke E. Große AK and | |
| | C = Delft University of Technology the | Saathoff F - Universität Rostock | |
| | Notherlands | Gormony: Honnoborg M. Stoinbais | |
| | Neulenalius | Germany, Heineberg M – Steinbers | |
| | | Transferzentrum Angewandte | |
| | | Landschaftsplanung, Germany | |
| 15:40 | Experimental study on applying | Using waste products as building | |
| | hydrocyclone for improving the | material for landfill closure and | |
| | loading efficiency of TSHD | construction of a sediment treatment | |
| | Zhao TB – CCCC Key Laboratory of | nlant | |
| | Dredging Shanghai Peoples Republic | Pallemans I. Van Zele S and Nachtergaele | |
| | of Chine: Lin E. CCCC Shanghai | K Envison Palgium | |
| | of China, $\lim F = CCCC$ shalighta | K – Elivisali, Belgiulli | |
| | Dredging, Peoples Republic of China; | | |
| | Jiang JA – Shanghai Waterway | | |
| | Engineering, Dredging & Consulting, | | |
| | Peoples Republic of China | | |
| 16:00 | Coffee – e | xhibition area – sponsored by Brusselle Ent | terprises |
| 16:30 | SESSION 5 – Monitoring the | SESSION 6 – Treatment of sediments / | |
| | dredging process | 1 | |
| | Chair: Ni F – Hehai University Peoples | Chair: Mohan R – Anchor OEA United | |
| | Pepublic of China | States of America | |
| 16.20 | Construction of a nonimator bound | States of America | |
| 10:30 | Construction of a perimeter bund | Solindus experimental dredged | |
| | using the PM-CLAY method | material treatment platform: a | |
| | Saitoh T – Toa Corporation, Japan | versatile solution for sediment | |
| | | treatment and clay flocculation | |
| | | Bréquel H, Gineys N and Urbain F – | |
| | | Centre Terre et Pierre, Belgium; | |
| | | Couturier F and Duchadeau A – SNF. | |
| | | France | |
| 16.50 | Innovative free fall sediment profiler | Soil washing techniques for sediment | |
| 10.50 | for proparing and evaluating | dowataring and sand recycling | |
| | due deine energies and determining the | Democrat Course de Valde K. De Democlear | |
| | dredging works and determining the | Pensaert S, van de Velde K, De Bruecker | |
| | nautical depth | T and Lepere X – DEME, Belgium | |
| | Geirnaert K, Staelens P and Deprez S – | | |
| | dotOcean, Belgium; Noordijk A and | | |
| | Van Hassent A – Port of Rotterdam, the | | |
| | Netherlands | | |
| 17:10 | Monitoring the consolidation process | Twenty years of large-scale sediment | |
| | of mud from different European ports | treatment at the METHA-plant. | |
| | in a full scale test facility | Hamburg | |
| | Staalans P. Gairnaart K. and Danraz S. | Detzner HD Hamburg Port Authority | |
| | detOseen Deleium Neendille A and | Compared Automity, | |
| | dolocean, Beigium, Noordijk A and | Germany | |
| | Van Hassent A – Port of Rotterdam, the | | |
| | Netherlands | | |
| 17:30 | Pinpoint underwater grab bucket | High speed dewatering of ultra-fine | |
| | navigation system (PUGNAVI) | sediments | |
| | applied to restoration work of great | Hodges M and Shobrook C – Genesis | |
| | east japan earthquake | Water, United States of America | |
| | Fujiyama E – Shinko Construction | | |
| | Japan | | |
| | Japan | | |

WEDNESDAY 5 June 2013

| 08:00-09:00 | Coffee – exhibition area | | |
|-------------|--|--|--|
| | Venue: Copper Hall | Venue: Silver Hall | Venue: The Arc |
| 09:00 | SESSION 7 – Modeling of dredge pumps Chair: Verkaik KJ – IHC Merwede, the Netherlands | SESSION 8 – Dredging for navigation Chair: Belan Y-P – Cetmef, France | SESSION 9 – Dredging for port development Chair: Dafu C – Chaingjiang Waterway Planning, Design & Research Institute, Peoples Republic of China |
| 09:00 | Numerical simulation of motion trajectory of sediment particles in dredge pump Hong GJ – CCCC Key Laboratory of Dredging, Shanghai, Peoples Republic of China; Jiang JA – Shanghai Waterway Engineering Design & Consulting, Peoples Republic of China; Yu GL – Shanghai Jiaotong University, Peoples Republic of China | Licensing navigation dredging – developing a proportionate, risk-based approach Basford K and Clay N – Royal HaskoningDHV, United Kingdom; Birchenough A – Cefas, United Kingdom | Development of the preliminary dredging plan for the Vale Ponta da Madeira pier IV export facility, Sao Luis, Brazil Nairn R and Dibajnia M – Baird, Canada; Morais M - North Logistic Program – Port Vale, Brasil; Delaure S – WF Baird & Associates, Oman; Fournier CP – Baird, Chile; Lu X - W.F. Baird & Associates Coastal Engineers Ltd., Canada |
| 09:20 | Restratification in hydraulic transport: is it a bend effect? Brouwers RJP, van Fulpen ML and Talmon AM – Delft University of Technology, Faculty 3Me, the Netherlands | Treating the highly contaminated sediments from the industrial canal Ghent-Terneuzen: Towards a cleaner environment with maximum re-use of materials Pynaert K, Van Zele S, Pallemans I and Nachtergaele KI – Envisan, Belgium; David C- DEME Environmental Contractors, Belgium | The expansion of the Botlek Tank Terminal area: a sustainable solution in the Port of Rotterdam Jumelet HD– DEME Group, the Netherlands; Laenen KCJ – Port of Rotterdam, the Netherlands; Plate SE- De Vries and van de Wil |
| 09:40 | Latest developments in dredge pump technology Bugdayci HH – IHC Parts & Services, the Netherlands; Grinwis H and Munts E – MTI Holland, the Netherlands | Recent developments in sediment management in the Port of Hamburg Röper H and Netzband A – Hamburg Port Authority, Germany | |

| 10:00 | Estimating production and booster | Maintenance dredging in Ponta da | Port of Lisbon maintenance dredging |
|-------|---|---|---|
| | pump location for long-distance | Madeira maritime terminal | in a sensitive environmental system |
| | | Gaglianone de Moraes D and Loureiro | Sá Pereira T and Silveira Ramos R – |
| | Kandali K, Yen P and Augur $C - Texas$ | Monteiro RF – Vale SA, Brazil | Port of Lisbon Authority, Portugal |
| | America | | |
| 10:20 | | Coffee – exhibition area | |
| 10:50 | SESSION 10 – Methods & | SESSION 11 – With Nature | SESSION 12 – Environmental |
| | equipment: case studies | Chair: Pennekamp J – Deltares, the | dredging |
| | Chair: Vidal K – Dravosa, Spain | Inetherlands | Zeekanaal Belgium |
| 10:50 | Installing blocks of fish reefs in the | Working with Nature: applying the | A review of lessons learned after |
| | deep sea | philosophy to maintenance dredging | nearly three decades of |
| | Yamamoto K – Tomac Corporation, | Brooke J – Jan Brooke Environmental | environmental dredging in the |
| | Japan | Mersey Docks and Harbour Company | Gardner R Doody I P and Mohan R – |
| | | United Kingdom | Anchor QEA, United States of America |
| 11:10 | The use of encapsulated sand | Building with Nature works! | Environmental dredging of a |
| | elements for beach protection | van Raalte G – Royal Boskalis | chromium contaminated fjord in |
| | Zengerink E and ter Harmsel M – TenCate Geosynthetics, the | Westminster, the Netherlands; Zwemmer DI Hof D and Daan M – Boskalis BV | Valdemarsvik, Sweden Pensaert S. Nollet H. Rombaut F. and |
| | Netherlands; Koffler A – TenCate | the Netherlands | Lepere X – DEME, Belgium |
| | Water en Enviroment region France, | | 1 2 |
| | France | | |
| 11:30 | Study on combined dredging concept | 'Aquapuncture': adaptation and | YH Bay clean-up project involving |
| | dredger with self-propelled barges | their waterfronts | Korea |
| | Yang ZW– China Dredging Association | Waterman R – Ministry of Infrastructure | Kim SH, Choi KY, Kim K and Hong |
| | (CHIDA), Peoples Republic of China; | & Environment, the Netherlands; | GH - Korea Institute of Ocean Science |
| | Fei L and Liu HS – Marine Design & | Brouwer JA – Soeters van Eldonk | & Technology, South Korea |
| | Republic of China: Lin F – CCCC | Architects, the Netherlands | |
| | Shanghai Dredging Corporation, | | |
| | Peoples Republic of China; | | |
| 11:50 | Improving the capacity of Altamira | Flanders Bays on Belgian North Sea | Environmental dredging project |
| | Verdugo I Iribarren IR Atienza R Cal | nourishments to achieve an integrated | Isselmeer, the Netherlands |
| | CB, Pecharroman L and Trejo I – | and sustainable reinstatement of | Dekker JSG – de Vries & van de Wiel, |
| | Siport21, Spain | beach barrier systems | the Netherlands |
| | | Malherbe B and Fordeyn J – Jan De Nul | |
| | | Belgium | |
| 12:10 | Cuttability and abrasivity of rocks in | Dredging for flood management in | Human health risk assessment |
| | capital dredging: applicability to the | river systems: opportunities and | guidance for dredging and disposal |
| | Port Miami dredging 2013-2014 | dilemmas | at sea of marine and estuarine |
| | United States of America: Verna T – | Infrastructure. Ministry of Infrastructure | Droit I – CETMEF, France: Bataille T |
| | US Army Corps of Engineers, United | and Environment, the Netherlands | -Guadeloupe Port Caraïbes, France; |
| | States of America | | Delouis A – GEODE / GPM Nantes |
| 12:30 | | Lunch axhibition area | Saint Nazaire, France |
| 12:30 | SESSION 13 – Modeling optimisation | SESSION 14 – Treatment of | SESSION 15 – Dredging works in the |
| | of equipment | sediments / 2 | Westerschelde / 1 |
| | Chair: Tian J – China Communications | Chair: Netzband A – Hamburg Port | Chair: Sas M – International Marine |
| | Construction Company, Peoples Republic of China | Authority, Germany | and Dredging Consultants, Belgium |
| 14:00 | Half a century of changing the design | Use of fibres waste in sediments | Introduction |
| | of a dredger: market pull or | stabilization / solidification | Meersschaut Y – Maritime Access |
| | technology push? | Levacher D– Caen University, France; | division, Flemish Government, |
| | CI – IHC Beaver Dredgers the | Abitibi-Temiscamingue, Caen | Beigium |
| | Netherlands | University, Canada and France | |
| 14:20 | Study and application for high- | Investigation and implementation of | The AMORAS project: dewatering |
| | precision on elevation by a grab | sediment remediation at the An-Shun | and reuse of the Antwerp Port |
| | Cao XB, Chen L and Liu GS – CCCC | Mastin B – Southern Research Institute. | Van Esbroeck M and Dockx J – Dept of |
| | Guangzhou Dredging, Peoples Republic | Birmingham, United States of America; | Mobility and Public Works, Maritime |
| | of China | Moore D – ENVIRON, United | Access, Flemish Government, Belgium; |
| | | Kingdom; Renfrew D – Weston Solutions, United States of America: | Van de Velde K and Pensaert S – Deme Environmental Contractors Relative |
| | | Chen J, Weston Solutions. Taiwan | Pynaert K, Envisan NV. Belgium: |
| | | · · · · · · · · · · · · · · · · · · · | Horckmans L, VITO NV, Belgium; |
| 14:40 | Optimising drive train design for | Breaking technology for dewatering | The development of a current |
| | TSHDs using dynamic simulation | and valorization of sediment in France | deflecting wall in estuarine conditions (salinity gradients) to |
| | den Boer L, Kuvpers R and van der | France; Levacher D – Normandy | reduce siltation in the tidal |
| | Blom E – IHC Dredgers, the | University, France | Deurganckdok, Port of Antwerp |
| | Netherlands; Gonçalves Castro B and | | Roose F and Meersschaut Y – Maritime |
| | Mestemaker B – MTI Holland, the | | Access division, Flemish Government, Belgium: Sas M – International Marina |
| | remenands | | & Dredging Consultants, Belgium |
| 15:00 | Provision for geologic investigation in | Soil decontamination and soil volume | Monitoring the siltation rate at |
| | capital waterway dredging | reduction technologies for benthic | Deurganckdok, Port of Antwerp, and |
| | engineering in China and its neculiarities | seament in lakes, reservoirs, and other bodies of water | its reduction by a current deflecting |
| | Cai DF, Bei M, Liu HH, Zhou J, Zou Z, | Enomoto T – Toyo Construction, Japan | Decrop B and Sas M – International |

| | Xia W, Li QH and Shao – Chiangjiang Waterway Planning Design & Research Institute, Peoples Republic of China | | Marine & Dredging Consultants, Belgium; Roose F – Maritime Access division, Flemish Government, Belgium | |
|-------|--|--|---|--|
| 15:20 | | Coffee – exhibition area | | |
| 15:50 | SESSION 16 – Methods, equipment and techniques: Dealing with silt Chair: Nakazawa N – The Japan Workvessel Association, Japan | SESSION 17 – Assessment and monitoring / 1 Chair: Doorn Groen S C – DHI Water & Environment (S), Singapore | SESSION 18 – Dredging works in the Westerschelde / 2 Chair: Sas M – International Marine and Dredging Consultants, Belgium | |
| 15:50 | Turbidity caused by spillage from dredging / mining transverse axis cutter Sarkar M and Bose N – Australian Maritime College, University of Tasmania, Australia; Chai S – School of Health Sciences, University of Ballarat, Australia; Dowling K – SAIPEM, United Kingdom | The UK marine aggregate regional environmental assessment: an effective model for regionalised dredging areas worldwide? Lloyd Jones D and Reach I – MarineSpace, United Kingdom; Powell M – South Coast GIS, United Kingdom | Dredging works in the Western Schelde to deepen the navigation channel and to create ecologically valuable areas: status after three years of monitoring Depreiter D and Sas M – International Marine & Dredging Consultants, Belgium; Beirinck K, Flemish Government, Belgium; Liek GJ – Ministry of Infrastructure and the Environment, the Netherlands | |
| 16:10 | The art of screening: effectiveness of silt screens Radermacher M – Delft University of Technology, the Netherlands; van der Goot F and Rijks D – Boskalis, the Netherlands; de Wit L – Svasek Hydraulics, the Netherlands | A method for identifying a new offshore dredging disposal site based on environmental sensitivity Harris K and Eccles D – HR Wallingford, United Kingdom | Long-term modeling of dredging strategies on morpho- and hydro- dynamic developments in the Western Scheldt Dam G, Poortman SE and Bliek AJ – Svašek Hydraulics, the Netherlands; Plancke Y – Flanders Hydraulics, Belgium | |
| 16:30 | Towards a comprehensive design for silt screens in open configuration – from the hydraulics perspective Vu TT – Nanyang Technological University, Singapore | Design and implementation of marine monitoring studies with reference to dredging projects: essentials Lee M, Pendle M, Taylor J and Dearnaley M – HR Wallingford, United Kingdom | Tidal evolution in the Scheldt estuary and its interaction with dredging works Taal M, Wang ZB and Kuijper K – Deltares, the Netherlands; Cleveringa J – Arcadis, the Netherlands; Sas M – International Marine & Dredging Consultants, Belgium | |
| 16:50 | Study on Dredging at head area and utilization of sediment resources in three gorges reservoir Hu XH, Deng YT, Xiao H, Zhou B – Hubai Changjiang Dredging Engineering, Peoples Republic of China | Monitoring system of the environmental quality of the sediments derived from dredging activity Moraes e Sousa MES and Fialho GO – GARTA / COPPE / UFRJ, Brazil | Impact of human interventions on estuarine dynamics – towards a regime shift in the Scheldt? Winterwerp JC – Delft University of Technology, the Netherlands; Wang ZB – Deltares and Delft University of Technology, the Netherlands | |

THURSDAY 6 June 2013

| 08:00-09:00 | Coffee – exhibition area | | |
|-------------|--|---|--|
| | Venue: Copper Hall | Venue: Silver Hall | |
| 09:00 | SESSION 19 – Optimising the dredging processes Chair: Randall B – Texas AM University, United States of America | SESSION 20 – Assessment and monitoring / 2: Plumes Chair: Roukema D – Blue Pelican, the Netherlands | |
| 09:00 | Decision support system for dredging and reclamation environmental monitoring and management plans (EMMPS) Hoa KH – DHI Water & Environment, Australia; Doorn-Groen SM, Forster TM and Truong TT – DHI Water & Environment (S), Singapore | Detailed full scale simulations of near field overflow plume mixing de Wit L and van Rhee C – TU Delft, the Netherlands | |
| 09:20 | Towards a faster and cleaner fairway maintenance of Dutch rivers Talmon A – Deltares and Delft University of Technology, The Netherlands, Sieben J – Rijkswaterstaat, the Netherlands; van der Lugt T- Delft University of Thechnology, The Netherlands | Physical modelling based assessment of some influence factors on overflow plume behaviour Decrop B and Sas M – International Marine & Dredging Consultants, Belgium; De Mulder T – Hydraulics Laboratory, Ghent University, Belgium; Toorman E – Hydraulics Laboratory, KULeuven, Belgium | |
| 09:40 | Optimising manpower and reducing fuel consumption while increasing dredging production Osnabrugge J and Van den Bergh PM – IHC Systems, the Netherlands | Trial monitoring of dredger plumes using a multibeam echosounder Brett C, Lee M, Taylor J and Dearnaley M – HR Wallingford, United Kingdom; Bellamy A- Tarmac Marine Dredging Ltd, United Kingdom | |
| 10:00 | A Validated tool for evaluating the design and predicting the workability of dredgers Hannot SDA and Los JG – MTI Holland, the Netherlands; van Spaendonk BAW – IHC Dredgers, the Netherlands; Krijger ACL, Kruijswijk AB – IHC Beaver Dredgers, the Netherlands | Far-field and long-term dispersion of released dredged material van Kessel T and van Maren DS – Deltares, the Netherlands | |
| 10:20 | | Coffee – exhibition area | |

| 10:50 | SESSION 21 – Numerical simulation of dredging processes Chair: Malharba B. Jan Da Nul | SESSION 22 – Assessment and monitoring /3 Chair: Bose N Australian Marine | |
|-------|---|---|--|
| | Belgium | College, Tasmania Australia | |
| 10:50 | Study on fine silt loading characters of | Development of a numerical modelling | |
| | TSHD based on computerised fluid | module for dredging and relocation in | |
| | Yang ZI and Qin $L - CCCC$ Tianiin | Martens C – Department of Mobility and | |
| | Dredging, Peoples Republic of China; Li | Public Works, Flemish Government, | |
| | ZC and Gao W – CCCC Tianjin Port | Belgium; Breugem A and van Holland G | |
| | and Waterway Research Institute, | – International Marine & Dredging | |
| | Peoples Republic of China | Management Unit of the North Sea | |
| | | Mathematical Models, Belgium; | |
| | | Rocabado I – Antea Group, Belgium | |
| 11:10 | Numerical simulation of the current | Environmental monitoring and control | |
| | suction dredger | reclamation works. Thames, UK | |
| | Xu LQ – Engineering Research Centre, | Leggett DJ and Read K – Dredging | |
| | Dredging Technology, Hebai University, | International United Kingdom, United | |
| | Peoples Republic of China; Zhang PP, Ni V and Ni FS Hohai University | Kingdom; Black K – Partrac, United | |
| | Peoples Republic of China | Kiigdolii | |
| 11:30 | Constructing the shields curve. Part | The application of three-dimensional | |
| | C: cohesion by silt. | geological modeling in a dredging | |
| | Miedema S – Delft University of Technology, the Netherlands | project Wang VO, Gao W CCCC Tianiin | |
| | rechnology, the rechenands | Dredging, Peoples Republic of China | |
| 11:50 | On self-emptying at high discharge | Invited Speaker: WODA's role in | |
| | mixture densities | revising the Dredged Material | |
| | de Nijs M $-$ Van Oord, the Netherlands | Assessment Guidelines of the London Convention and its 1996 Protocol and | |
| | | regional sea conventions. Laboyrie P – | |
| | | Chair CEDA Environment Commission / | |
| | | Witteveen+Bos Consulting Engineers, | |
| 12.10 | Lunch axhibition area | the Netherlands | |
| 13:40 | SESSION 23 – Alluvial and deep sea | SESSION 24 – Management and | |
| | mining | economics | |
| | Chair: Benali A – Atlantic Dredging Maroc, Morocco | Chair: Jensen A – DHI, Denmark | |
| 13:40 | Porosity calculation in discrete | An overall applicable strategy for | |
| | process | works, a case study for the Port of | |
| | Chen X and Miedema SA – Offshore | Bayonne | |
| | and Dredging Engineering, Delft | De Wit K – IMDC, Belgium; Fages S – | |
| | University of Technology, the | Conseil Régional Aquitaine, France | |
| 14:00 | Advances in the modeling of vertical | Development, practical use and | |
| | hydraulic transport by a continuum | implementation of cutter suction | |
| | approach | dredger operator competence & | |
| | van Wijk J – MTI Holland, Belgium; | certification system (DOCS) Reosended LA and Shi W. Training | |
| | Technology, Belgium: Talmon AM – | Institute for Dredging, the Netherlands: | |
| | Deltares, the Netherlands | Zhou LY – Guangzhou Dredging | |
| | | Company, Peoples Republic of China; | |
| | | Ooijens SC – Beaver Dredgers, IHC Merwede, the Netherlands: | |
| 14:20 | Cutting through hard rock-like | Dealing with price fluctuations in | |
| | materials – a review of the process | dredging contracts | |
| | Helmons RLJ and Miedema SA – Delft | Roukema DC – Blue Pelican Associates, | |
| | University of Technology, the Netherlands | the Netherlands; Kinlan DG – Kinlan | |
| 14:40 | System design for sustainable | Carbon neutrality? Blue carbon | |
| | phosphate mining operations at the | provides opportunities for the | |
| | Chatham Rise Steenbrink AC, yen Deerry T, January J | dredging industry | |
| | and van Raalte GH – Roval Roskalis | van der Klis r – van Oord, the Netherlands: Sansoglou P – European | |
| | Westminster, the Netherlands; van | Dredging Association, Belgium; Mink F | |
| | Hoeven B – Boskalis Dolman, the | - Interel European Affairs, Belgium | |
| | Netherlands; Falconer R - Chatham | | |
| | NOCK I HOSPHARE, INCW ZEdlällu | | |
| 15:00 | | Coffee – exhibition area | |
| 15:30 | C | losing Ceremony – Plenary in Copper Hall | |