PRELIMINARY PROGRAMME AND REGISTRATION

# Dredging in a Changing World

Leading science and business in the dredging industry

27-29 MAY 2024 | WTC ROTTERDAM | ROTTERDAM, THE NETHERLANDS



ORGANISED BY





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CEDA Dredging Days is the flagship conference of CEDA and is the main event on the dredging industry calendar in the CEDA (EMEA) region. It is widely considered to be the primary forum for leading researchers and industry experts to share ideas, discuss challenges and consider potential solutions. The conference is well-attended by professionals representing the entire cross-section of the dredging field, from across the CEDA region and beyond. As such, it is also appreciated for the exceptional networking opportunities it offers.

## WHAT CAN YOU EXPECT FROM THE NEW CEDA DREDGING DAYS?

One of the main features of the revamp is the addition of the central Clubhouse, which has a strong focus on networking in an intimate setting, and serves as the central meeting place for coffee breaks, lunches and social events. The Clubhouse creates an informal networking area, with a mix of lounge furniture, where attendees can relax and enjoy a moment to engage in informal conversations with their peers at any time during the conference.

CEDA Dredging Days 2024 offers a 3-day event, dedicated to the dredging industry, with a widely varied programme – parallel sessions featuring the latest technical developments, learning from other industries, innovation pitches, panel discussions and much more – interesting for a broad audience and promoting attendee interaction.

### INTRODUCTION TO THE CONFERENCE

The world is changing. Global warming is a physical change (of climate), but also societies are changing. Sustainability is becoming a firm driver for decision makers, financiers and technological developments. Across the world, and across all generations, people become increasingly convinced that the exploitation of earth's resources must be limited and become sustainable soon. A further change is that globalisation (growing international trade and global logistic chains) is reconsidered. And geopolitics has become an important factor yet again. The challenges, but also the prospects for the industry in the years and decades ahead, will be huge. During the CEDA Dredging Days 2024 conference, the manner in which the dredging industry acts and reacts on changes will be presented in a variety of sessions, with lots of room for interaction and discussion.



Date: 27-29 May 2024 Location: Postillion Hotel & Convention Centre WTC Rotterdam, Rotterdam, The Netherlands

### SOCIAL PROGRAMME

- Monday, 27 May 2024
   Conference (walking) dinner,
   Clubhouse
- Tuesday, 28 May 2024
   Reception by invitation of the City of Rotterdam, City Hall

DREDGING IN A CHANGING WORLD THIRD ANNOUNCEMENT					
PRELIMINARY PROGRAMME			EXTENDED ABSTRACT		
MONDAY, MAY 27TH 2024					
ΤΙΜΕ	ROTTERDAM HALL	MEES ROOM I	MEES ROOM II	PENN ROOM I	
12:30 - 14:00	Registration - Clubhouse				
14:00 - 15:30	SESSION I: Opening and Keynotes Moderator: Mike Van der Vijver – MindMeeting, the Netherlands				
	Opening by Polite Laboyrie, CEDA President, Witteveen+Bos, the Netherlands				
	<i>Keynote address</i> : Lara Muller, Director Public Sector, Invest International, the Netherlands: Money makes the world go green				
	<b>Keynote address</b> : Egbert van der Wal, Director Port Development, Port of Rotterdam, the Netherlands: Shaping the energy transition – an outlook on Port of Rotterdam in 2050				
15:30 - 16:00	Coffee Break - Clubhouse				
16:00 - 17:30	SESSION 2: The Future of AI in Dredging Chairs: Annouk Rey – Boskalis, the Netherlands and Kirsten Orsel – Royal IHC, the Netherlands				
	Explore the future of dredging with AI during the Young CEDA session. What are the				
	effects of AI on the dredging sector in the near future, and what will the far future look like? Participate in interactive group sessions and contribute to shaping the future of				
	dredging together with a panel of AI experts within and outside the dredging sector. A special appearance will be made by ChatGPT on the expert panel.				
7:30 -  7:45	Handing over Presidency				
17:45 - 20:30	Drinks, followed by walking dinner - Clubhouse				
TUESDAY	TUESDAY, MAY 28TH 2024				
TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROOM II	PENN ROOM I	
08:00 - 09:00	P Morning Coffee - Clubhouse				
09:00 - 10:30	SESSION 3: Sustainability Managers Debate				

TUESDAY	TUESDAY, MAY 28TH 2024				
TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROOM		
08:00 - 09:00	P Morning Coffee - Clubhouse				
09:00 - 10:30	10:30 SESSION 3: Sustainability Managers Debate				
	Sustainability Managers will be invited to discuss the latest topics in relation to sustainable project development in the dredging industry. The session will be introduced by invited speakers related to the industry, whereafter the panel can reflect, with active participation from the audience.				

ΤΙΜΕ	ROTTERDAM HALL	MEES ROOM I	MEES ROOM
10:30 - 11:00	Coffee Break - Clubhouse		
11:00 - 12:30	SESSION 4: Reservoir Dredging: Addressing Decades of Neglect Join us for a transformative session on the Guideline on Reservoir Dredging. Explore solutions to decades of neglect in managing reservoir sedimentation, crucial for sustainable dam systems. Discover innovative approaches from initial survey, dredging methods to material management, addressing water storage loss, hydro-power impacts, flood control, and ecosystem health. Engage in lively discussion to shape a sustainable future for global reservoirs.	<ul> <li>SESSION 5: Coastal and Inland Flood Protection</li> <li>Chair: Boudewijn Decrop – IMDC, Belgium</li> <li>Beach nourishment as protection against flood, wave overtopping, and erosion; experiences from coastal flood protection projects in Denmark from start till end Schlaer S and Bundgaard K – NIRAS, Denmark</li> <li>Nature Based Solutions: Coastbusters and Bankbusters proof of concept pilot projects for ecosystem based engineering</li> <li>Sterckx T – DEME/Jan De Nul, Belgium; Huygens M and Mascart T – DEME, Belgium</li> <li>Can sandy Nature-Based Solutions protect the Flemish coast against 3m sea level rise?</li> <li>Bolle A, Verheyen B and Van Caster N – IMDC, Belgium; Valckaert A and Hauquier F – Arcadis, Belgium</li> <li>Five years of Prins Hendrik Zanddijk</li> <li>Fordeyn J, Vanwesenbeeck G and Foré K – Jan De Nul, Belgium</li> </ul>	SESSION 6: Maintenance Dr Environmental Aspects of Dr Chair: Said Alhaddad – Delft Univ Technology, the Netherlands Effectiveness of environmental m mitigation measures – the Addu Fonias E, van Eekelen E, Shanavas AK an Van Oord Dredging and Marine Contracto Bridging the depths: lessons lear mining for advancing dredging an management in deltas Ali W, Kirichek A, Helmons R and Chasso University of Technology, the Netherlands Sediment management in a circu de Boer PD – Rijkswaterstaat, the Numerical assessment of turbidi by cutter suction dredgers Mahgoub M, Alhaddad S and Keetels GF Technology, the Netherlands
12:30 - 13:30	Lunch - Clubhouse		
13:30 - 15:00	<ul> <li>SESSION 7: Energy Transition and Decarbonisation (1)</li> <li>Chair: Giulia Sforzi – HR Wallingford, United Kingdom</li> <li>Open innovation towards zero emission dredging de Jong A, van Melis T and de Geus M – ZEDhub, the Netherlands</li> <li>Looking forward to the net zero future of dredging vessels Vercruijsse PM and Gabriel J – DEME, Belgium</li> <li>Sequential dredging and reclamation for the construction of the Princess Elisabeth island, the world's first offshore energy island</li> <li>Van Doorslaer K – DEME, Belgium; Jacobs A – Jan De Nul, Belgium; Guillermin P-Y – Elia Asset, Belgium; Brouwer M – Royal HaskoningDHV, the Netherlands; Bijl E – CDR, the Netherlands</li> <li>Towards climate neutral and circular dredging; the role of clients in the transition of dredging industry</li> <li>Zondag H, Stofbergen E and Lauwereijsen Ch – Rijkswaterstaat, the Netherlands; Hupkes E – Port of Rotterdam, the Netherlands</li> </ul>	<ul> <li>SESSION 8: Dredging Technologies and Processes</li> <li>Chair: Rick van de Wetering – Royal IHC, the Netherlands</li> <li>NPSH<sub>R</sub> scaling for centrifugal pumps de Hoog E and Hofstra CF – Royal IHC, the Netherlands; in 't Veld JM – IQIP, the Netherlands; Talmon AM – Deltares, the Netherlands</li> <li>Mechanical excavation of clayey soils, a review of the physical phenomena occurring</li> <li>Winkelman MQ, Schott DL and Helmons RLJ – Delft University of Technology, the Netherlands</li> <li>Continued</li> </ul>	SESSION 9: Natural Resourd Reservoir Dredging Chair: Annelies Bolle – IMDC, Be A dredging dilemma: screening r sandeel Kyle-Henney M, Reach I, Barr N, Warne Jones D – MarineSpace, United Kingdom Underwater remote mining: a n mining for sustainable diamond of Boomsma W – Royal IHC, the Netherlan Risk profile for reservoir dredgin Sarkar S – ABL, United Kingdom; Excavation & Equipment Manufacturing,

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#### MASTER CLASS: Production Estimation 13:00 - 15:30

Separate registration required

TUESDAY, MAY 28TH 2024 (cont.)				
TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROOM II	PENN ROOM I
13:30 - 15:00		Continued		
		Inline real-time process monitoring based on ultrasonic measurement and tomography		
		Maas $R$ and Boerma $M$ – Rhosonics Analytical, the Netherlands		
		Behavior and erosion capacity of an inclined plunging jet Keij RM and Talmon AM – Delft University of Technology,		
		the Netherlands; Nobel AJ – Boskalis, the Netherlands		
15:00 - 15:30	Coffee Break - Clubhouse			_
5:30 -  6:45	SESSION 10: Safety			
	Safety is an increasingly important topic and during this session we seek to share safety			
	culture perspectives and information, raise awareness, and facilitate collaboration between safety and operations professionals worldwide.			
16:45 - 17:00	Wrap-Up of the Day			
7:00 -  7: 5	Gathering Participants - Clubhouse			
17:15 - 17:30	Walk to City Hall Rotterdam			
17:30 - 19:00	Y Reception - City Hall Rotterdam			

TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROOM II	PENN ROOM I
08:00 - 09:00	P Morning Coffee - Clubhouse			
09:00 - 10:30	SESSION 11: Decarbonisation: Chicken and Egg Dilemma			
	How to overcome the chicken and egg dilemma in decarbonisation and step into the			
	future as first mover? What are the options and hurdles for contractors, shipbuilders,			
	fuel suppliers, clients and their consultants and financiers? Can supply of post-fossil			
	fuels be guaranteed, and if so what would be the effect of using these on project costs?			
	What are views from society on the pathway to net-zero and the related costs? Take			
	up the role of one of the stakeholders and participate actively to embody the collective			
	challenges and opportunities on the path of decarbonisation.			

10:30 - 11:00 📃 Coffee Break - Clubhouse

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WEDNESI	WEDNESDAY, MAY 29TH 2024 (cont.)				
TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROO		
11:00 - 12:30	<ul> <li>SESSION 12: Land Reclamation, Beneficial Use and Dredging for Civil Infrastructure</li> <li>There: Thomas Vijverberg – Boskalis, the Netherlands</li> <li>Senar © and ten velden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands; van der the Veden D – the Veather Makers, the Netherlands; van der the Netherlands</li> <li>Image: Construction of the Veden D – the Veather Makers, the Netherlands; van der the Veden D – the Veatherlands</li> <li>Image: Construction of the Veden D – the Veatherlands</li> <li>Image: Construction of the Veden D – the Veatherlands</li> <li>Image: Construction of the Veatherlands</li> &lt;</ul>	SESSION 13: Early Contractor Involvement	SESSION 14: Data-Driven Adaptive Management Chair: Suman Sapkota – Damen Equipment, the Netherlands Application of machine learnin parameters of dredging vessels Goeree JC and Alvarez Grima M – Royo Adaptive Management for envi dredging and reclamation proje pro-active Decrop B – IMDC, Belgium; et al.		
12:30 - 13:30	Lunch - Clubhouse				
13:30 - 14:40	<ul> <li>SESSION 15: Energy Transition and Decarbonisation (2)</li> <li>Chair: Martijn Kom – Boskalis, the Netherlands</li> <li>The electrical grid as enabler for decarbonization of the dredging industry Oskam B, de Ronde JK, Walraven T and Ammerlaan R – Bakker Sliedrecht, the Netherlands</li> <li>Future fuels strategies Rascioni S – Wärtsilä, Italy; Heidelberg D – Wärtsilä, the Netherlands</li> <li>Evaluating the potential of fuel cells for the dredging industry Mestemaker BTW – Royal IHC, the Netherlands; van Biert L – Delft University of Technology, the Netherlands</li> </ul>	SESSION 16: In Loving Memory of prof.dr.ir. Cees van Rhee and prof.ir. Wim Vlasblom By: Rudy Helmons – Delft University of Technology, the Netherlands and Johan Pennekamp – Deltares, the Netherlands			
14:40 - 15:10	Coffee Break - Clubhouse				
15:10 - 16:25	SESSION 17: Young CEDA Pitch Talks Chair: Jan-Berend Koster – Dutch Dredging, the Netherlands Sustainable reservoir sediment management using fully automated dredges Gehrmann L – Hülskens Sediments, Germany Continued				

THIRD ANNOUNCEMENT

EXTENDED ABSTRACT

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n Technology and	
en Dredging	
ning in determining design sels Royal IHC, the Netherlands environmental aspects of rojects: reactive and	
	MASTER CLASS: Hydraulic Transport 12:30 - 15:00 Separate registration required

WEDNES	WEDNESDAY, MAY 29TH 2024 (cont.)				
TIME	ROTTERDAM HALL	MEES ROOM I	MEES ROOM		
15:10 - 16:25	Continued				
	Decreasing CO2 emissions within the Dutch dredging sector Nooren M – Permian Global, the Netherlands How to measure the strength of very soft clays? A building material in the making				
	Jaksic L, Konstantinou M, van Kessel T, Talmon A and Meshkati E $-$ Deltares, the Netherlands				
	Towards minimal environmental impact of flatfish trawling by utilizing dredging-related knowledge Bult S – Delft University of Technology, the Netherlands				
	Laboratory experiments to explore the effect of flocculation on sediment dispersion Wahab S, Chassagne C and Helmons $R$ – Delft University of Technology, the Netherlands				
	Scaling up deep sea exploration & monitoring with pink robots Rutten S – Lobster Robotics, the Netherlands				
	Integrated approach for sustainable sediment-based building blocks: circular sediment management and construction practices Pal D and Derksen G – Royal IHC, the Netherlands				
16:25 - 16:35	Wrap-Up of the Conference				
16:35 - 16:45	IADC Young Pitch Talk Award				

#### 16:35 - 16:45 IADC Young Pitch Talk Award

#### 16:45 Closing

The CEDA Dredging Days 2024 Technical Papers Committee reserves the right to adjust the programme as appropriate.

BOOK YOUR PLACE NOW Registration fees					Registration fees
		y Bird by rch 2024	15 Ma	After rch 2024	The fees are exclusive of Dutch VAT (21%)
Members of CEDA, EADA and WEDA*	€	995	€	45	*All individual members and employees
Non-members	€	1245	€	1395	of corporate members of CEDA are eligible for registration at the member's
Speakers	€	795	€	795	rate
PhD students	€	795	€	795	**Student registration is only accepted on receipt of letter of endorsement and a
Students **	€	249	€	249	copy of the student card

### IADC AWARD

The International Association of Dredging Companies' Young Pitch Talk Award will be presented to an author, under 35 years of age, for the best presentation in the Young CEDA Pitch Talks session.

### PROCEEDINGS

The proceedings, containing the conference papers and extended abstracts, will be available via CEDA's website www.dredging.org.

	THIRD ANNOUNCEMENT
_ PAPER	EXTENDED ABSTRACT

#### M II

PENN ROOM I

### **ROYAL IHC MASTERCLASSES**

Together with CEDA corporate member Royal IHC gives you the opportunity to attend one of their dredge masterclasses organised during the Dredging Days. Expand your knowledge and gain clear insight in dredging and dredging technology. For more information and registration, please visit the programme pages on our website.

#### THIRD ANNOUNCEMENT



### ENQUIRIES

Sylvia Minten CEDA Dredging Days 2024 Conference Secretariat Rotterdamseweg 183c 2629 HD Delft, The Netherlands

E **sylvia@mintenprojectmanagement.nl** T +31 (0)616 603 947

## ACCOMMODATION

A block of hotel rooms has been reserved at a special conference rate for delegates and speakers in the adjacent Postillion Hotel. Details on cost and reservation can be found on the conference website.

**Important**: reservations should be made in good time, as there will be many visitors in Rotterdam in this period of the year.

