

Exhibition is open on Tuesday, Wednesday 08:30 – 18:00, Thursday 08:30 - 15:00

## Tuesday, 5 Nov 2024

### Auditorium A

- 08:00 Registration and exhibition open
- 09:00 **Opening ceremony**  
 Opening addresses:  
**Thomas Dehling:**  
 DHyG (German Hydrographic Society)  
**David Vincentelli:**  
 IFHS (International Federation of Hydrographic Societies)  
**Daniela Kluckert:**  
 BMDV (Federal Ministry for Digital and Transport)  
**Helge Heegewaldt:**  
 BSH (Federal Maritime and Hydrographic Agency)  
**Mathias Jonas:**  
 IHO (International Hydrographic Organisation)
- Keynote: Xavier Lurton: Backscatter measurements by hydrographic multibeam echo sounders
- 10:30 Exhibition opening / break
- 11:10 **Opening talks (1A)**  
**Jacob Geersen:**  
 A submerged stone age hunting architecture from the Western Baltic Sea
- 11:35 **Natalie Cornish:**  
 Nippon Foundation – GEBCO Seabed 2030 and the International Bathymetric Chart of the Southern Ocean
- 12:00 **Holger Klindt:**  
 Marine critical infrastructure – protecting the unseen
- 12:25 Exhibition / break
- 13:30 **Student session (2A)**  
**Kilian Martlage:**  
 Bathymetry estimation using airborne remote sensing RGB image data
- 13:55 tba
- 14:20 **Annika Walter:**  
 Global Lakes and Reservoirs - An investigation to which extent dynamic water body shapes have an impact on the estimates of the total water storage derived from GRACE
- 14:45 **IFHS student award**
- 15:10 Exhibition / break
- 15:50 **Optical hydrography I (3A)**  
**Charles de Jongh:**  
 Airborne LiDAR bathymetry – advantages and challenges
- 16:15 **David Mader:**  
 Full-waveform stacking techniques applied to coastal LiDAR bathymetry data
- 16:40 **Gottfried Mandlburger:**  
 Optical hydrography – the DGPF’s contribution to mapping and monitoring inland coastal waters
- 17:05 **Niels Fuchs:**  
 Bathymetry of sea ice melt ponds reconstructed from aerial photographs using shallow water photogrammetry
- 17:30 End of session

### Auditorium B

- 15:50 **Data fusion and management (3B)**  
**Michael Kowalczyk:**  
 Hydro Portal: Enhancing hydrographic data management in the port of Hamburg
- 16:15 **Jann Wendt:**  
 Cloud and AI technologies are revolutionizing hydrography – The cloud-native TrueOcean platform
- 16:40 **Gunnar Tietze:**  
 Fusing navigation: ECDIS, drones flights and aviation
- 17:05 **Peer Fietzek:**  
 Augmenting ocean data collection operations and enhancing information generation with Blue Insight
- 17:30 End of session

**20:00 - Conference dinner**

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## Wednesday, 6 Nov 2024

### Auditorium A

- 08:30 Registration and exhibition open
- 09:00 **New trends in positioning (4A)**  
**Anja Heßelbarth:**  
 Potential of low-cost GNSS and satellite-based correction data for hydrographic surveying
- 09:25 **Hans Visser:**  
 Fugro Marinestar GNSS PPP service enhancements in 2024
- 09:50 **Fickrie Muhammad:**  
 An appraisal of backscatter removal and refraction calibration models for improving the performance of vision-based mapping and navigation in shallow underwater environments
- 10:15 Exhibition / break
- 10:45 **Harbors and inland waters (5A)**  
**David Rossi:**  
 Mapping arctic lakes: A challenge for the 79°N parallel
- 11:10 **Jannis Gangelhoff:**  
 Ultra-compact bathymetric measurement system with processing chain for surveying shallow water bodies
- 11:35 **Markus Kraft:**  
 Merging underwater MBES pointcloud and 360° camera imagery into georeferenced 3D-Model of urban waterways and harbour infrastructure
- 12:00 **Pawel Pocwiardowski:**  
 CATZOC mapping in layered media
- 12:25 Exhibition / break
- 13:30 **Environmental and habitat mapping (6A)**  
**Xavier Lurton:**  
 Taking into account more simply the environmental impact of hydrographic echo sounders
- 13:55 **Terje Thorsnes:**  
 Hydrographic data from survey design to final habitat maps in the Norwegian seabed mapping programme MAREANO
- 14:20 **Jens Schneider von Deimling:**  
 Unveiling complex seafloor environments: Expanding the potential of multibeam echo sounders (MBES)
- 14:45 **Iason-Zois Gazis:**  
 Machine learning and backscatter for spatial mapping of deep-sea polymetallic nodules
- 15:10 Exhibition / break
- 15:50 **Autonomy I (7A)**  
**Rui Miguel Cândido:**  
 REPMUS: a catalyst for innovation in uncrewed hydrography
- 16:15 **Doreen Thoma:**  
 Maritime innovation and new technologies for future navigation and communication
- 16:40 **Mona Lütjens:**  
 True autonomy in offshore wind operations and maintenance
- 17:05 **Tom Schmidt:**  
 Transfer of autonomous mapping concepts to a small uncrewed surface vehicle
- 17:30 End of session

### Auditorium B

- 08:30 Registration and exhibition open
- 09:00 **Underwater infrastructure and monitoring (4B)**  
**Jannis Gangelhoff:**  
 Advancing underwater inspection: High resolution pulsed time-of-flight laser scanning
- 09:25 **Annika Walter:**  
 Underwater laser scanning: Integration and testing on a survey vessel
- 09:50 **Jens Wunderlich:**  
 Combined technologies for 3D cable tracking: Integrated data acquisition of a 3D sub-bottom profiler and an array of magnetometers
- 10:15 Exhibition / break
- 10:45 **Education (5B)**  
**Denis Hains:**  
 Cat A, Cat B or... next individual certification!
- 11:10 **Alain De Wulf:**  
 Lessons learned from the enhanced Belgian E-Learning-oriented IBSC certified "Hydrographic Surveying Cat. B" Program
- 11:35 **Thomas Kersten:**  
 DVocean Digital – a surveying vessel for simulating bathymetric measurements
- 12:00 **Panel discussion on standards of competence**
- 12:25 Exhibition / break
- 13:30 **OceanCon**  
 5. Rostock Ocean Convention
- 15:10 Exhibition / break
- 15:50 **Water column analysis (7B)**  
**Peter Feldens:**  
 Morphological imprint of fluid seepage in the bodden system of the Baltic Sea
- 16:15 **Malek Singer:**  
 Benthic habitat mapping using airborne topo-bathymetric LiDAR – a case study in Lake Superior
- 16:40 **Katja Richter:**  
 Quantification of water turbidity by volumetric analysis of LiDAR bathymetry data
- 17:05 **Arnau Carrera Vinas:**  
 Using AUVs for measuring sedimentation processes in reservoirs
- 17:30 End of session

19:00 - Buffet reception

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## Thursday, 7 Nov 2024

### Auditorium A

- 08:30 Registration and exhibition open
- 09:00 **Autonomy II (8A)**  
**Knut Hartmann:**  
International cooperations on satellite-derived bathymetry - SDBPT
- 09:25 **Jan Rhomberg-Kauert:**  
Automatic aquatic vegetation detection using airborne bathymetric LiDAR and high dimensional data analysis
- 09:50 **Andreas Hermann:**  
Hydrography on Fishing Vessels (HyFiVe): A new monitoring system enables cost-effective and scalable ocean monitoring
- 10:15 Exhibition / break
- 10:45 **Optical hydrography II (9A)**  
**Ramona Baran:**  
15 years practical experience in airborne laser bathymetry - project examples for continued sensor development and survey demands on data processing
- 11:10 **Peter Grabbert:**  
Satellite imagery for intelligent hydrographic resource planning
- 11:35 **Laure-Anne Gueguen:**  
Lab experiment for simultaneous reconstruction of water surface and bottom with a synchronized camera rig
- 12:00 **Christian Mulsow:**  
Methods for geometric modelling of refraction in photo-bathymetry
- 12:25 Exhibition / break
- 13:30 **Quality aspects of MBES measurements (10A)**  
**Samuel Deleu:**  
The Belgian Kwinte reference area. Part A: a bathymetric reference area for quality control of shallow water multibeam echo sound
- 13:55 **Marc Roche:**  
The Belgian Kwinte reference area. Part B: its use for calibrating backscatter levels of shallow water multibeam echo sounders
- 14:20 **Jean-Guy Nistad:**  
A reevaluation of multibeam beam-steering accuracy
- 14:45 **Bahareh Mohammadivojdan:**  
Enhancing digital bathymetric models by advanced measurement uncertainty analysis
- 15:10 End of session

### Auditorium B

- 10:45 **OceanCon**  
5. Rostock Ocean Convention
- 12:25 Exhibition / break

**15:30 - Closing ceremony**