

HYEL 2026 in Trondheim

10th international Conference on Hydroelasticity
in Marine Technology

Trondheim, Norway – 16–18 June, 2026



PROGRAM

Monday, June 15

18:00–20:00 Registration: Hotel Scandic Nidelven (in town, drinks and finger food)

Tuesday, June 16 – Sverresborg Museum

08:00–08:30 Registration

08:30–08:45 Conference start, welcoming remarks

08:45–09:15 Keynote talk: Use of elastic models in hydrodynamic laboratory tests
Ole David Økland, Sintef Ocean

09:15–10:30 Morning I – Aquaculture structures (3) Chair: Yanlin Shao

A Study on the Hydroelastic Responses and Induced Loads of Aquaculture Lice-Skirts Exposed to Current (Proc. 1.1)

Kristiansen, D., Fredriksen, A.G. and Kristiansen, T.

Computational Performance of Finite Elements Used in Hydroelastic Analysis of Aquaculture Nets (Proc. 1.2)

Palaversa, M., Yu, Z. and Sævik, S.

Hydroelastic Behaviour of a Floating Hexagonal Net Cage under Regular Waves (Proc 1.3)

Mohapatra, S.C., Ji, J. and Guedes Soares, C.

10:30–10:50 Coffee break (20 min)

10:50–12:30 Morning II – Slamming problems 1 (4) Chair: Elena Ciappi

Physical and Numerical Experiment with Extreme Hydroelastic Wave Impacts at Scale (Proc. 11.8)

Bockstael, M.M., and Wellens, P.R.

From hydroelasticity to hydro-elastoplasticity and hydroplasticity of structural responses subjected to extreme water impacts (Proc. 11.2)

Yu, Z. and Fimreite, S.B.

Hydroelastoplasticity Effects on Water Impact Loads (Proc 11.5)

Tödter, S., Linde, J., Neugebauer, J. and el Moctar, O.

Mitigation of Hydroelastic Perturbations on Force Measurements During Water Impact Experiments with Pseudo-Rigid Impactors: Solutions and Challenges (Proc. 11.7)

Tassin, A. and Jacques, N.

12:30–13:45 Conference Lunch (Sverresborg Museum)

13:45–15:00 Afternoon I – Floating structures and VLFS (3) Chair: Xiaobo Chen

Hydroelastic response of an articulated VLFS: Experimental, potential flow and CFD insights (Proc. 4.1)

Arredondo-Galeana, A., Brown, S., Ogden, D., Greaves, D. and Brennan, F.

Numerical Analysis of a Barge's Torsional Hydroelastic Response (Proc. 4.2)

Pascoalto, V., Lopes, F.S and Fernandes, A.C.

The Design, Production, and Verification of a Scaled Flexible Model of a Floating Truss Structure for Hydroelastic Experiments (Proc. 4.3)

de Koning, J., Ruesen, J., Hoogendoorn, D. and Grammatikopoulos, A.

15:00–15:20 Coffee break (20 min)

15:20–16:35 Afternoon II – Floating wind 1 (3) Chair: Thomas Sauder

Experimental Study of a Scaled Flexible Riser for Hydrogen Transport from a Floating Wind Turbine Platform to the Seabed (Proc. 5.1)

Guichard, J., Hann, M., Tosdevin, T., and Greaves, D.

Wavelength and Wave-Steepness Effects on the Hydroelastic Response of Flexible Slender Offshore Components (Proc. 5.5)

Zhang, Q., el Moctar, O., Qaimi, S., Galal, G., Brehm, A., Neugebauer, J., and Jiang, C.

International Collaboration Network in Marine Technology, Malenica, S.

16:35–17:00 **Group photo and snacks**

17:00–18:00 **Guided tour at Sverresborg Museum (the venue area)**

18:00–20:00 **Welcome reception at the venue (Sverresborg)**



Wednesday, June 17 – Sverresborg Museum

08:00–08:30 **Coffee**

08:30–09:30 **Keynote lecture: Hydroelasticity of Marine Structures – Odd Faltinsen, NTNU**

09:30–10:45 **Morning I – Floating bridges and plates (3) Chair: Daniele Dessi**

Flexural Gravity Wave Blocking in a Floating-Submerged Plate System Involving Compressive Force (Proc. 14.2)

Boral, S., Sahoo, T. and Basu, B.

Floating bridge global responses with wave-current-structure interaction (Proc. 3.1)

Xiang, X. and Faltinsen, O.M.

Fully Coupled Hydroelastic Analysis of Curved Floating Bridges via DMB Method (Proc. 3.2)

Song, J. and Kim, S.

10:45–11:10 **Coffee break (25 min)**

11:10–12:25 **Morning II – Hydroelastic problems and methods 1 (3) Chair: Alexander Korobkin**

Generalized modal approach for marine and offshore engineering: key aspects and applications (Proc. 7.2)

Jagite G., and Malenica S.

Hydroelastic Problems in Marine Seismic Acquisition (Proc. 7.3)

Tønnessen, R., and Oscarsson-Nagel, M.D.

Recent Developments in Modelling Flow-Induced Motions of Floating Offshore Wind Turbines During Wet-Tow (Proc. 7.6)

Yin, D., Fonseca, N., and Jiang, F., Firoozkoobi, R., Indergård, R., Braaten, H., Lie, H.

12:25–13:45 **Conference Lunch (Sverresborg Museum)**

13:45–15:00 **Afternoon I – Sloshing (3) Chair: Xu Xiang**

Effect of Liquid Materials on Sloshing Flows and Hydrodynamic Impact on a Rectangular Tank (Proc. 12.1)

Park, G., Hwang, J., Park, T. and Kim Y.

Experimental and Numerical Studies on Sloshing Flows in a Rectangular Tank with a Hyper-elastic Baffle (Proc. 12.2)

Park, T., Park, C., Kim Y. and Lee J.

Numerical Study of Hydroelastic Response due to Slosh-Induced Impact (Proc. 12.3)

Yang, K.-K., Kim, D.-H. and Kang, D.-Y.

15:00–15:20 **Coffee break (20 min)**

15:20–16:35 **Afternoon II – Ship loads and responses (3) Chair: John Grue**

Comparative experimental investigation on springing responses of a 14,000 TEU containership (Proc. 10.1)

Ye, Y., Fu, S., Jiang, J., Chen, X., and Huang, W.

Experimental Study on Influence of Bow Flare Shape above Waterline on Whipping Response of 14,000 TEU Container Ship (Proc. 10.2)

Suzuki, K., Takeda, K., Sugimoto, K., Harada, M., Oka, M., and Matsui, S.

Variable-Stiffness Ship Elastic Models for Hydroelastic Digital Twinning (Proc. 10.3)

Dessi, D., Passacantilli, F., Venturi, A., Delgado, D., van Dijke, R., Terroba Ramirez, F., Sbaruffati, C., Bardiani, J., Sandström, J., and Haridas, A.

16:45–17:30 **Standing Committee Meeting (hybrid form)**

20:00–23:00 **Conference Banquet (Ringve Museum)**

Thursday, June 18 – Tyholt T1

08:30–09:00 **Coffee**

09:00–10:40 **Morning I – Wave-energy concepts (4) Chair: Marilena Greco**

Enhancing Floating Breakwater and Wave Energy Converter Performance Using Local Resonators (Proc. 13.1)

Agarwal, S., Liang, C., Faragau, A. and [Colomés, O.](#)

Hydroelastic Response and Power Extraction in Wave-Energy-Integrated Aquaculture Systems (Proc. 13.2)

[Mi, S.](#), Cheng, H., Avital, E.J., Chatjigeorgiou, I.K., Konispoliatis, D.N., Papadakis, G. and Samad, A.

Preliminary investigation into fully coupled solvers for flexible wave energy converters (13.3)

[Capasso, S.](#), Moretti, G., Rizzello, G., Flaßkamp, K., Martínez-Estévez, I., Altomare, C., Crespo, A. and Suzuki, T.

Wave energy conversion by a 3-raft piezoelectric system (Proc. 13.4)

[Dessi, D.](#)

10:40–11:00 **Coffee break (20 min)**

11:00–12:15 **Morning II – Hydroelastic problems and methods 2 (3) Chair: Pan Zhiyuan**

Data-driven prediction of design global bending loads in ships from model tests (Proc. 7.1)

[Drummen, L.](#), Kaydihan, L., Düz, B., and Kurnia, R.

Inverse Wave Force Estimation Using Frequency- and Time-Domain Hydroelastic Models (Proc. 7.4)

[Van Zijl, C.](#), Jovanova, J., and Grammatikopoulos, A.

New hydro-structure interface model based on Super Green functions accounting for forward-speed effects (Proc. 7.5)

[Chen, X.](#), De Lauzon, J., Nguyen, M., Cao, K., Jagite, G., and Malenica, S.

12:15–13:15 **Conference Lunch (Catering at Tyholt campus)**

13:15–14:55 **Afternoon I – Ice-body-water interactions (4) Chair: Sime Malenica**

Analysis of Vertical Mode Expansions for Hydroelastic Waves in Viscoelastic Floating Ice Plates (Proc. 8.1)

[Shishmarev, K.](#), Ni, B.-Y., Khabakhpasheva, T., and Korobkin, A.

Ice Sheet Response to a High-Speed Vessel Moving in Open Water along the Ice Edge (Proc. 8.2)

[Korobkin, A.](#), and Khabakhpasheva, T.

Nonlinear Interaction Between an Ice Cover of Variable Thickness and a Bottom Obstruction in Channel Flow (Proc. 8.3)

Liang, C., Ni, B.Y., Khabakhpasheva, T.I., and [Semenov, Y.A.](#)

Wave Scattering by a Submerged Porous Circular disc with Radially Varying Porosity below an Ice-Covered Surface (Proc. 8.4)

[Gayen, R.](#), and Hoque, A.

14:55–15:15 **Coffee break (20 min)**

15:15–16:30 **Afternoon II – Floating wind 2 (3) Chair: Apostolos Grammatikopoulos**

On Wave Load Mapping for Substructure Strength Assessment of FOWTs (Proc. 5.2)

[Zhiyuan, P.](#), Wenzhe, Z., Alexandre, A., Won-Ho, L. and Caiwei, S.

Simulation of a SPAR-type deformable floater for offshore wind turbines: comparison with experimental and numerical data (Proc. 5.3)

[Halbout, C.](#), Robaux, F., Ouvrard, T., and Peyrard, C.

Sum-frequency second-order wave loads and elastic response of the INO OptiFLEX 22 MW floating wind turbine (Proc. 5.4)

Rajasree, V.R.N., Rogne, Ø.Y., Abdelmoteleb, S.E., Bachynski-Polić, E.E. and [Sauder, T.](#)

Thursday, June 18 – Tyholt T2

08:30–09:00

Coffee

09:00–10:40

Morning I – Marine membrane structures (4) Chair: Peter R. Wellens

Assessing large hydroelastic parameter spaces through a table-top Faraday experiment (Proc. 9.1)

[Pot, H.](#), [Christiaens, B.](#), [Wellens, P.](#), and [Schreier S.](#), [Westerweel J.](#)

Effect of damping of floating flexible membrane exposed to water waves (Proc. 9.2)

[Maugsten, O. P.](#), and [Grue, J.](#)

Non-linear hydro-elastic analysis of a vertical pre-tensioned membrane in waves (Proc 9.3)

[Moreau, M.](#), and [Kristiansen, T.](#)

Surge Motion and Hydroelastic Response of a Membrane-Based Floating Solar Island: An Uncertainty Study (Proc. 9.4)

[Skare, A.](#) and [Kristiansen, T.](#)

10:40–11:00

Coffee break (20 min)

11:00–12:15

Morning II – Bio-inspired concepts (3) Chair: David Kristiansen

Analytical Solutions of Two-Way Coupled Wave-Flexible Seagrass Interaction (Proc. 2.1)

[Wei, Z.](#), [Boyer, R.](#) and [Shao, Y.](#)

Bending Modes and Fluid–Structure Interaction in Fish-Inspired Swimmers: Implications for Flexible Underwater Robot Design (Proc. 2.2)

[Norvik, C.](#), [Greco, M.](#) and [Lugni, C.](#)

Experimental Characterization of Hydroelastic Dynamics in Biomimetic Caudal Fins (Proc. 2.3)

[Costantino Muniz, G.](#), [Paifelman, E.](#), [Aloisio, G.](#), [Sellini, M.](#) and [Ciappi, E.](#)

12:15–13:15

Conference Lunch (Catering at Tyholt campus)

13:15–14:55

Afternoon I – Slamming problems 2 (4) Chair: Ingo Drummen

Hydroelastic impacts with aerated water (Proc. 11.3)

[Wellens, P.R.](#), and [Bockstael, M.M.](#)

Hydroelastic simulation for water entry slamming of a flat plate based on two-way CFD-FEM method (Proc. 11.4)

[Wang, Z.](#), [Wang, J.](#), [Xiao, J.](#), [Wan, D.](#)

Investigation of the Dynamic Response of Elastic Circular Cylinders Subjected to Water Impact (Proc. 11.6)

[Taussé Kamdoun, F.L.](#), [Hascoët, R.](#), [El Malki Alaoui, A.](#), and [Jacques, N.](#)

Decomposition of Structural Response to Slamming Loads Based on Rigid Body Motions (Proc. 11.1)

[Ying-xu, M.](#), [Sun, Z.](#), [Korobkin, A.](#), and [Khabakhpasheva, T.](#)

14:55–15:15

Coffee break (20 min)

15:15–16:30

Afternoon II – Hydrofoils and plates (3) Chair: Trygve Kristiansen

A BEM-FEM model for the hydro-elastic analysis of passively controlled flexible foil-thrusters for ships and underwater vehicles (Proc. 6.1)

[Anevlavi, D.](#), [Belibassakis, K.](#)

Comparative study of energy dissipation under capillary-gravity wave scattering by submerged porous, poroelastic, and porous piezoelectric plates (Proc. 14.1)

[Singh, M.](#)

Hydroelastic Consequences of Passive Vortex-Generator Control in Cavitating Flexible Hydrofoils (Proc. 6.2)

[Lin, Y.](#), [el Moctar, O.](#), [Jiang, C.](#)

16:30–16:35

Concluding remarks
in T2

