

1. PERSONAL DETAILS

Full name: Nitai Drimer

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Web site: <https://meeng.technion.ac.il/en/member/nitai-drimer/>

ORCID: 0000-0002-6054-083X

2. ACADEMIC DEGREES

D.Sc. 1994, Civil Engineering, Technion – Israel Institute of Technology

M.Sc. 1991, Civil Engineering, Technion – Israel Institute of Technology

B.Sc. 1989, ***Summa cum Laude***, Mechanical Engineering, Naval Architecture Major, Technion IIT

3. ACADEMIC APPOINTMENTS

October 2012, Associate Professor, Faculty of Mechanical Engineering, Technion IIT.

4. PROFESSIONAL EXPERIENCE (outside academia)

NAMCO – Naval and Mechanical Engineering Company, Haifa, Israel

1998-2013 Owner, Director, Designer

1994-1997 CO-Director, Designer

1989-1991 Designer

CAMERI – Coastal & Marine Engineering Research Institute, Technion, Haifa, Israel

2001-2013 Director and Research Engineer

1998-2000 Deputy director and Research Engineer

1994-1998 Research Engineer

Military service in the Israeli Navy

1978-1984 Naval Officer Courses and service. Major (reserve).

5. RESEARCH INTERESTS (briefly)

Engineering Design, Analyses, Innovative concepts and methods, in the aspects:

Wave–Structure Interaction

Naval Architecture, Offshore aquaculture engineering

Structural analysis

6. TEACHING EXPERIENCE

1. Water Waves, graduate, Civil Engineering (016210)
2. Coastal and Harbor Engineering, graduate, Civil Engineering, course developed by me (016209)
3. Dynamics of Marine Structures, graduate, Mechanical Engineering, course developed by me (036027)
4. Analysis of Structures, undergraduate, Mechanical Engineering, existing course, New course program 2024 (035062)
5. Advanced Structural Design and Analysis, graduate, Mechanical Engineering, New course developed by me (036064)
6. Finite Elements for Engineering Analysis, undergraduate, Mechanical Engineering, existing course, further developed by me (035022)
7. Engineering Drawing, undergraduate, Mechanical Engineering, existing course, further developed by me (034042)
8. Introduction to Ocean Engineering, graduate, Interdisciplinary Program in Marine Engineering, New course developed by me (528001)

7. TECHNION ACTIVITIES

2019- Current, [Chairman of the Interdisciplinary program in Marine Engineering](#).

8. DEPARTMENTAL ACTIVITIES

2013-Current, [Coordinator of the teaching direction in Naval Architecture and Ocean Engineering](#).

Supervision of ME Students

1. Alexey Sokolsky, Completed December 2013, Plastic dynamic analysis of energy absorber for crew seat at impact events and comparison with load experiment.
2. Daniel Schwarzmann, Completed September 2014, Design of bottom panel for a fast boat, made of advanced composites.
3. Menahem Bengio, Completed November 2014, Design and analysis of cardan guard for fast boats.
4. Andrei Gerbenko, Completed October 2016, Design and analysis of a pressure hull of a small submarine.
5. Felix Fisher, Completed August 2018, Design of Driveline and auxiliary systems for a SWATH.
6. Yuval Shur, Completed February 2017, Development of a prototype of an innovative flexible connector for cage aquaculture
7. Hai Algawi, Completed February 2017, Nonlinear Analysis of ROPS (Roll Over Protective Structure)
8. Rezik Avramov, Completed December 2022, Improving new methods for Planning Hull Design and studying advanced hull geometries

Supervision of Undergraduate Senior Projects

1. Yehuda Barak, 2013, Pressure distributor and controller for the activation of flexible propulsion fin.
2. Jonathan Mendelson, 2013, Experiments of a new type of hydraulic muscle
3. Gil Lampert, 2014, Hydraulic motor for a robotic ray-fish.
4. Ron Lifshitz and Liron Gutman, 2014, Rational design of a Barge for Open Sea.
5. Barak Keren, 2014, Efficient (low hysteresis) Elastomers for hydraulic muscle – rheological model and experiments.
6. Guy Benun, 2014, General Arrangement design for an Autonomous Underwater Vehicle.
7. Roi Steinetz and Zvika Barasz, 2015, Duck Dive Boat – Demonstration Model.
8. Daniel Tamarkin, 2015, Fatigue Experiments of Marine Aluminum and Applications to Fast Boat Design.
9. Michael Milich, 2015, Analysis in AQUASIM of flexible structures at open sea and verifications.
10. Roey Hakmon, 2016, Processing Sea Trials of Impact Load apply to Fast Boat.
11. Ilya Volovik, 2016, Parametric Structural Model of Fast Boat Hull.
12. Roey Hakmon, 2016, Processing Sea Trials of Impact Load apply to Fast Boat.
13. Tal Fridman, 2017, Preliminary Design of Fast Boat.
14. Daniel Gil Rodan, 2018, Concept Design of an Advanced Marine Vehicle.
15. Nimrod Lustegraten, 2018, Open Sea Aquaculture.
16. Avihai Malka, 2018, Open Sea Aquaculture.
17. Manor Shlaien, 2019, Open Sea Aquaculture.
18. Guy Mont, 2019, Open Sea Aquaculture.
19. Lior Goldberg, 2019, Concept Design of a Semi SWATH.
20. Ofer Rott, 2020, Concept Design of a Semi SWATH.
21. Anton Yelsukov, 2020, Concept Design of a Landing Vessel.
22. Idan Katz, 2020, Concept Design of a Landing Vessel.
23. Moam Sharoni, 2021, Concept Design of a Semi SWATH.
24. Dor Vider, 2021, Stern launching ramp mechanism for a patrol vessel
25. Ayelet Elbaz, 2021, Obtaining Hydro-Elastic Wave-Body Solution by AQWA and Source Post Processor Code

11. FELLOWSHIPS, AWARDS AND HONORS

- 2017, Hershel Rich Technion Innovation Award
- 1993, Israel Ministry of Science honor for excellence in research (D.Sc. research)
- 1991, Wolf Foundation Scholarship (M.Sc. research)
- 1989, ***Summa cum Laude*** in mechanical engineering graduation

12. GRADUATE STUDENTS

PhD Completed Theses (2)

1. Gil Wang, "Design Guidelines and Regulatory Framework for Offshore Floating Structures for Urban Use", June 2020, Civil Engineering, [RC6, RC7, J12, J13, J15], Co-Advisor with Yiska Goldfeld Civil Engineering.
2. Roy Gafter, appointment January 2017, approved topic "A Feasibility Study of a New Concept of VLFS" (VLFS - Very Large Floating Structure), [J10, C5, J16, J17]. February 2022.

MSc Completed Theses (9)

1. Yahav Moskovits, "A Design Method for Planing Hulls, Considering Hydro-Elasticity, Dynamics and Nonlinear Structural Response", December 2015, [J7, C5, C6]
2. Jonathan Mendelson, "Hydo-elastic model for a flexible fin", January 2016, [J6, C4].
3. Or Neuberg, "Limit state design of fast boat hull", June 2016, [J7, J8, C5, C6, RC5].
4. Roy Gafter, "Delta type VLFS (Very Large Floating Structure) for open sea", November 2016, [C3, C7, J10].
5. Michael Milich, "Hydrodynamic-Structural Analysis of Offshore Aquaculture Cages", May 2018. [J11].
6. Roey Hachmon, "Verifying a New Hydro-Elastic Design Method for Planing Boats by Full Scale Sea Trials", May 2020. [RC5, J14]. ***Summa cum Laude***
7. Elad Mazaltrim, "Design of fast boat hull made of composite materials considering hydro-elasticity", September 2020.
8. Daniel Bar, "Preliminary Design Tools for Hydrodynamic aspects of Submerged Impermeable Breakwaters", February 2023. [J18].
9. Guy Mont, "The hydrostatic buckling of SPM system of fish cages and a design method to prevent it", September 2024. [J19, C13].

PhD Theses in Progress (2)

1. Yuval Gur, appointment January 2020 (MSc), December 2020 (Direct PhD), topic "Design of artificial platform for algae cultivation based on ecological balance and efficiency". Architecture. Co-Advisor with Ezri Tarazi Architecture.
2. Daniel Drori, appointment September 2025, topic "Wave Energy Convertors".

MSc Theses in Progress (5)

1. Adi Tal, starting August 2018, Appointment October 2018, topic "A New Concept of Docking Vessel".
2. Ofer Rott, starting December 2019, Appointment October 2019, topic "Efficient Naval Architecture for Submerged Vessel".
3. Manor Shlaien, Starting December 2020, topic "A preliminary design method for mooring of Open Sea Aquaculture Systems", currently BRAKIM student ME – a special B.Sc. & M.Sc. program for distinguished students.
4. Eyal Doppelt, Starting September 2021, topic "A new concept of Underwater Vehicle"
5. Tom Danan, Starting January 2022, topic "Geometrical design of planing hulls in the aspects of seakeeping"

13. SPONSORED LONG-TERM VISITORS AND POST-DOCTORAL ASSOCIATES

1. Roy Gafter starting January 2024, Topic: "Conceptualization design and analysis of floating structures for open sea"

14. RESEARCH GRANTS

(RPI - Responsible Principal Investigator, PI - Principal Investigator)

January 2013 – The Technion Autonomous Systems Program (TASP), "[Unmanned vehicle similar in appearance and propulsion to a ray](#)", \$100,000 for one year, RPI Nitai Drimer, PI Associate Prof. Gil Iosilevskii, Technion AE.

August 2013 – MEYMAD program Ministry of Industry Trade and Labor (MAGNET administration), "[Development of Aluminum-Polyurea panels for the production of advanced fast boats](#)", Total R&D budget including industry NIS 5,000,000 for 30 month, Technion budget Year 1 NIS 481,000, RPI Nitai Drimer, PI Prof. Daniel Rittel Technion ME.

October 2013 – The Technion Autonomous Systems Program (TASP), "[Autonomous duck dive to exit through surf zone](#)", \$100,000 for one year, RPI Nitai Drimer, PI Prof. Michael Lindenbaum Technion CS.

October 2014 – Rafael Advanced Defense Systems, "[Active ride control for Planning USV based on sea surface prediction](#)", \$100,000 for 2 years, RPI Nitai Drimer.

October 2014 – MEYMAD program Ministry of Industry Trade and Labor (MAGNET administration), "[Development of Aluminum-Polyurea panels for the production of advanced fast boats](#)", Technion budget Year 2 NIS 483,000, RPI Nitai Drimer, PI Prof. Daniel Rittel.

August 2015 – H2020 SME instrument as part of Horizon 2020 – The EU Framework Program for Research and Innovation, "[Single Point Mooring Flexible Submerged System for Open Sea Aquaculture](#)", Technion budget NIS 700,000, 2017-2018, RPI Nitai Drimer.

January 2016 – MEYMAD program Ministry of Industry Trade and Labor (MAGNET administration), "[Development of Aluminum-Polyurea panels for the production of advanced fast boats](#)", Technion budget Year 3 NIS 117,000, RPI Nitai Drimer, 2016-2019.

May 2017 – The Israel Ports Development & Assets Company Ltd. (IPC). "[A new concept of VLFS \(Very Large Floating Structure\) for Mediterranean Sea conditions offshore Israel](#)", Technion budget NIS 433,000, 2017-2020.

July 2018 – The Israel Ministry of Defense. "[Advanced Marine Technologies](#)", Technion budget NIS 750,000, 2018-2020.

January 2021 – 2023 The Israel Ports Development & Assets Company Ltd. (IPC). "[NumFlumeGeotubes A Numerical Wave Flume for Nonlinear Simulations of Shoaling and the hydrodynamic examination of Submerged Sand Filled Geotextile-Tubes](#)", Technion budget NIS 270,000, 2021-2022.

January 2024 – The Israel Ports Development & Assets Company Ltd. (IPC). "[Floating Future](#)", Technion budget NIS 315,000, 2024-2025.

October 2024 – The Council for Higher Education (CHE), Planning & Budgeting Committee (PBC). "Bridging the variability gaps to resolve the long-term impacts of climate change on the SE Levantine basin: Development and networking of advanced marine research infrastructures". PI of Network Component IV - [Wave Energy Platforms](#) Budget for 4 years: NIS 666,000.

15. PUBLICATIONS

Theses

M.Sc. Floating breakwaters in water of finite depth, Technion I.I.T. March 1991.

Supervisors: Prof. Michael Stiassnie & Prof. Yehuda Agnon.

D.Sc. The interaction of gravity waves with marine structures, Technion I.I.T. May 1994.

Supervisors: Prof. Yehuda Agnon & Prof. Michael Stiassnie.

Refereed papers in professional Journals

Published papers (Names of graduate students are underlined)

1. **N. Drimer**, Y. Agnon and M. Stiassnie. A simplified analytical model for a floating breakwater in water of finite depth Applied Ocean Research, vol. 14 (1992) No. 1 p33-41, Elsevier Applied Science.
2. **N. Drimer** and Y. Agnon. A hybrid boundary element method for second order wave-body interaction. Applied Ocean Research, vol. 16 (1994) No. 1 p27-45, Elsevier Applied Science.
3. M. Stiassnie and **N. Drimer**. On a freely floating porous box in shallow water waves. Applied Ocean Research, vol. 25 (2003) p262–268, Elsevier Applied Science.
4. **N. Drimer** and Y. Agnon. An improved low-order boundary element method for breaking surface waves. Wave Motion 43 (2006) p241–258, Elsevier Applied Science.
5. M. Stiassnie and **N. Drimer**. Prediction of Long Forcing Waves for Harbor Agitation Studies. Journal of Waterway, Port, Coastal, and Ocean Engineering, vol 132 (2006) No. 3 p166-171, ASCE.
6. **N. Drimer**, J. Mendelson and A. Peleg. A New Type of Hydraulic Muscle, Actuators (2016) 5, 3, MDPI.
7. **N. Drimer**, Y. Moskovits and O. Neuberg. A design method for planing hulls, considering hydro-elasticity and nonlinear dynamic structural response. Ships and Offshore Structures (2016), DOI: 10.1080/17445302.2016.1187362.
8. **N. Drimer**. First Principle Approach to the Design of an Open Sea Aquaculture System. Ships and Offshore Structures (2016), DOI: 10.1080/17445302.2016.1213491.
9. O. Neuberg, **N. Drimer**, Fatigue Limit State Design of Fast Boats, Marine Structures (2017), DOI: 10.1016/j.marstruc.2017.05.002.
10. **N. Drimer**, R Gafter. Delta Type VLFS – Hydrodynamic aspects. Ships and Offshore Structures (2017), DOI: 10.1080/17445302.2017.1384440.
11. M. Milich, **N. Drimer**. Design and Analysis of an Innovative Open-sea Aquaculture System, IEEE Journal of Oceanic Engineering (2018), DOI: 10.1109/JOE.2018.2826358.
12. Gil Wang, Yiska Goldfeld, **Nitai Drimer**. Expanding coastal cities – Proof of feasibility for Modular Floating Structures (MFS). Journal of Cleaner Production (2019). DOI: 10.1016/j.jclepro.2019.03.007.
13. Gil Wang, Yehiel Rosenfeld, **Nitai Drimer**, Yiska Goldfeld. Occupant Comfort Analysis for Rigid Floating Structures – Methodology and Design Assessment for

Offshore Dwelling Module. Ships and Offshore Structures (2020), DOI: 10.1080/17445302.2020.1718267.

14. Roey Hakmon, **Nitai Drimer**. Verifying a new hydro-elastic design method for planning boats by full scale sea trials. Ships and Offshore Structures (2020), DOI: 10.1080/17445302.2020.1781327
15. Gil Wang, **Nitai Drimer**, Yiska Goldfeld. Modular Floating Structures (MFS) for Offshore Dwelling a Hydrodynamic Analysis in the Frequency Domain. Ocean Engineering (2020). DOI: 10.1016/j.oceaneng.2020.107996
16. Roy Gafter, **Nitai Drimer**. A Design Method to Assess the Primary Strength of the Delta-Type VLFS. Journal of Marine Science and Engineering (2021). DOI: 10.3390/jmse9091026
17. Roy Gafter, **Nitai Drimer**. Nonlinear Hydrodynamic Analysis of Ships Moored in a VLFS Service Basin in the East Mediterranean Sea. Journal of Marine Science and Engineering (2022). DOI: 10.3390/jmse10030382
18. Daniel Bar, **Nitai Drimer**. Preliminary Design Tools for Hydrodynamic aspects of Submerged Impermeable Breakwaters. Journal of Marine Science and Engineering (2023). DOI: 10.3390/jmse11020236
19. Guy Mont, **Nitai Drimer**. The hydrostatic buckling of SPM system of fish cages and a design method to prevent it. Journal of Marine Science and Engineering (2023). DOI: 10.3390/jmse11030538
20. Ofer Berman; Andrey Zavadsky; **Nitai Drimer**; Nadav Shashar; Gil Wang; Ezri Tarazi A pure ceramic 3D printed artificial reef - stability and response. Journal of Cleaner Production (2025). DOI: 10.1016/j.jclepro.2025.146380

Submitted papers

1. Y. Gur, A. Israel, N. Drimer, E. Terazi. Design Thinking and Computational Innovation for Seaweed Cultivation: Introducing the Culture Pod System.
2. A. Tal and N. Drimer. A New Concept of Docking Vessel.

Papers in preparation

1. D. Drori and N. Drimer. A New Concept of Wave Energy Converter.

Refereed papers in Conference proceedings

1. F. Dicastro, N. Drimer, M. Glosman, P. Harari, Y. Keren, M. Radomir, A. Sheremet, M. Stiassnie, & J.A. Zwamborn. A Numerical model for studying the motion of berthed ships in harbours. Coastal Engineering 97, La Coruna, Spain.
2. N. Drimer, Floating structures in waves – loads and motions, Workshop on Offshore Technologies for Aqua-culture, October 1998, Haifa, Israel
3. N. Drimer, M. Glosman, M. Stiassnie, & G. Zilman. Forecasting the motion of berthed ships in harbours. 15th International Workshop on Water Waves and Floating Bodies. Caesarea Israel 2000.
4. N. Drimer, M. Glosman. A computerized system for real time forecasting of operability of marine installations. International Harbour Masters Association Congress, Cape Town, South Africa, May 2002.

5. N. Drimer, O. Neuberg, Y. Moshkovich & R. Hakmon. Rational design of fast boat hull. The seventh Conference on Computational Methods in Marine Engineering Marine 2017, Nantes, France, May 2017.
6. Gil Wang, Yiska Goldfeld, Nitai Drimer, Multidisciplinary Analysis for Urban Development Offshore. IASS Annual Symposium 2018 Creativity in Structural Design, MIT, Boston, USA July 2018.
7. Gil Wang, Nitai Drimer, Yiska Rosenfeld, Yechiel Goldfeld, Urban Development on Modular Floating Structures for Disaster Mitigation in Coastal Cities, 17th World Conference on Earthquake Engineering (17WCEE), Sendai, Japan, September 2020.
8. Roy Gafter, Nitai Drimer, A Feasibility Study of a New Concept of VLFS, 15th International Symposium on Practical Design of Ships and Other Floating Structures (PRADS 2022), Dubrovnik, Croatia, October 2022.
9. Katherine Álvarez Castillo¹, Roy Gafter, Gil Wang, Nitai Drimer and Sebastian Schreier, Experimental Assessment of Connector System of a Modular Floating Structure, The 5th World Conference on Floating Solutions (WCFS 2025), Espoo, Finland, September 2025.

Patents

1. Katz Giora, Brook Noam, Goral Giora, Drimer Nitai: Unmanned vessel. RAFAEL Armament Development Authority Jun, 15 2006: WO 2006/061841N.
2. Sarid Ofir, Kraier Alberto, Drimer Nitai, Feiglin Tehila, Rakhman Moshe: Underwater Storage system. SEAGEN Systems Nov, 5 2009: WO 2009/133563
3. Drimer Nitai: RHICS – Rigid Hull Inflated Cross Structure Boat, Technion Patents Committee decision to apply for provisional 31 January 2013
4. Drimer Nitai: ICON – Inflated Connector, Technion Patents Committee decision to apply for provisional 06 March 2013 (Application Receipt State of Israel Patents Office 31 July 2013). US Patent 10000937 Issued 19.06.2018.
5. Drimer Nitai, Peleg Amitai: HELM – Hydraulic Equal Strain Linear Muscle, Technion Patents Committee decision to apply for provisional 03 October 2013 (Application Receipt State of Israel Patents Office 26 December 2013).
6. Danino Benjamin, Rittel Daniel, Drimer Nitai: Poly-urea Coating of Surfaces for Leak Protection, Provisional Patent US 04 December 2016.

Research reports or Case reports

163 research reports with CAMERI – Coastal & Marine Engineering Research Institute, between 1994 and 2012.

At the Technion:

1. Technion Autonomous Systems Program (TASP). Unmanned vehicle similar in appearance and propulsion to a ray. Interim Report 31 July 2013 (30 pages).
2. Technion Autonomous Systems Program (TASP). Unmanned vehicle similar in appearance and propulsion to a ray. Interim Report 27 November 2013 (16 pages).

3. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 28 November 2013 (29 pages).
4. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 27 February 2014 (22 pages).
5. Technion Autonomous Systems Program (TASP). Unmanned vehicle similar in appearance and propulsion to a ray. First Year Report 31 March 2014 (51 pages).
6. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 30 July 2014 (44 pages).
7. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Yearly Report 31 July 2014 (30 pages).
8. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 30 November 2014 (31 pages).
9. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 26 February 2015 (29 pages).
10. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 30 May 2015 (40 pages).
11. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Interim Report 07 September 2015 (40 pages).
12. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Yearly Report 02 December 2015 (29 pages).
13. H2020 SME instrument as part of Horizon 2020 – The EU Framework Program for Research and Innovation, Single Point Mooring Flexible Submerged System for Open Sea Aquaculture. Interim Report 01 December 2015 (34 pages).
14. Technion Autonomous Systems Program (TASP). Autonomous Duck Dive (ADD) to exit through surf zone. Final Report 10 April 2016 (25 pages).
15. MEYMAD Program of the Israeli government Ministry of Economy. Development of Aluminum-Polyurea panels for the production of advanced fast boats and other products. Final Report 15 July 2016 (90 pages).
16. H2020 SME instrument as part of Horizon 2020 – The EU Framework Program for Research and Innovation, Single Point Mooring Flexible Submerged System for Open Sea Aquaculture. Interim Report 20 July 2016 (10 pages).
17. H2020 SME instrument as part of Horizon 2020 – The EU Framework Program for Research and Innovation, Single Point Mooring Flexible Submerged System for Open Sea Aquaculture. Interim Report 03 February 2017 (36 pages).

18. The Israel Ports Development & Assets Company Ltd. (IPC). A new concept of VLFS (Very Large Floating Structure) for Mediterranean Sea conditions offshore Israel. Scientific Report Year 1, 17 January 2018 (32 Pages).
19. H2020 SME instrument as part of Horizon 2020 – The EU Framework Program for Research and Innovation, Single Point Mooring Flexible Submerged System for Open Sea Aquaculture. Interim Report 04 and Final Report May 2018 (40 pages).
20. The Israel Ports Development & Assets Company Ltd. (IPC). A new concept of VLFS (Very Large Floating Structure) for Mediterranean Sea conditions offshore Israel. Scientific Report Year 2, 26 December 2018 (49 Pages).
21. The Israel Ministry of Defense. Advanced Marine Technologies Scientific Report 1, March 2019 (24 Pages).
22. The Israel Ports Development & Assets Company Ltd. (IPC). A new concept of VLFS (Very Large Floating Structure) for Mediterranean Sea conditions offshore Israel. Final Scientific Report, 31 December 2020 (77 Pages).
23. The Israel Ministry of Defense. Advanced Marine Technologies Final Scientific Report, 27 December 2020 (292 Pages).
24. The Israel Ports Development & Assets Company Ltd. (IPC). A Numerical Wave Flume for Nonlinear Simulations of Shoaling and the hydrodynamic examination of Submerged Sand Filled Geotextile-Tubes. Final Scientific Report, 30 June 2022 (40 Pages).
25. The Israel Ports Development & Assets Company Ltd. (IPC). A Numerical Wave Flume for Nonlinear Simulations of Shoaling and the hydrodynamic examination of Submerged Sand Filled Geotextile-Tubes. Final Scientific Report, 28 December 2022 (47 Pages).

16. CONFERENCES

(Names of graduate students are underlined, speaker appears first)

1. N. Drimer, Accelerations and stresses in head seas – the dominant design load for fast unmanned boat. AUVSI Association for Unmanned Vehicle Systems International, Marine Robotics Systems, October 2013, Tel-Aviv, Israel
2. N. Drimer, Design and re-commissioning of Eilat undersea observatory. Naval architecture conference, June 2014, Haifa, Israel
3. Roy Gefter and N. Drimer, Delta type VLFS for open sea. Naval architecture conference, June 2014, Haifa, Israel
4. Jonathan Mendelson and N. Drimer, A Hydro-Elastic model for a flexible fin, The 33rd Israeli Conference on Mechanical Engineering (ICME 2015), March 2015, Tel Aviv, Israel
5. N. Drimer, Y. Moskovits and O. Neuberg, A design method for planing hulls, considering hydro-elasticity and nonlinear dynamic structural response. Naval architecture conference, July 2015, Haifa, Israel
6. O. Neuberg, Y. Moshkovich, N. Drimer, Limit State Rational Design of Fast Boats, The 34th Israeli Conference on Mechanical Engineering (ICME 2016), November 2016, Haifa, Israel
7. R. Gafer, N. Drimer, The Delta type VLFS - Hydrodynamic Aspects, The 34th Israeli Conference on Mechanical Engineering (ICME 2016), November 2016, Haifa, Israel

8. N. Drimer, O. Neuberg, Y. Moshkovich, R. Hakmon, R. Abramov, E. Mazaltrim, Rational Limit State Design of Fast Boats. Naval Architecture Conference, University of Haifa Israel, July 2019.
9. N. Drimer, Concept design of fish farms at open sea, Marine Design Technology 2021 Annual Conference on Marine Technological Innovations May 2021, Haifa, Israel.
10. N. Drimer, Naval Architecture of Open Sea Aquaculture Systems. Naval Architecture conference, July 2021, Haifa, Israel
11. R. Gafer, N. Drimer, A feasibility study of a new concept of a Very Large Floating Structure (VLFS), Marine Design Technology 2022 Annual Conference on Marine Technological Innovations June 2022, Haifa, Israel.
12. N. Drimer, A new concept of Docking Vessel. Naval Architecture conference, June 2022, Haifa, Israel
13. N. Drimer, G. Mont, The Hydrostatic Buckling of SPM fish farm and a design method to prevent it. Naval architecture conference, July 2023, Haifa, Israel
14. N. Drimer, Rational Design for Blue Economy Solutions, Keynote Invited talk, Naval Architecture conference, July 2024, Haifa, Israel
15. N. Drimer, Blue Economy Engineering, Keynote Invited talk, RACADEMY2025, September 2025, RAFAEL, Israel

Participation in organizing conferences

Naval Architecture Conference, Technion Haifa Israel, 29 June 2014, Principal organizer in cooperation with the Israeli Navy and the Association of Engineers, Architects and Graduates in Technological Sciences in Israel.

Naval Architecture Conference, Technion Haifa Israel, 21 July 2015, Principal organizer in cooperation with the Israeli Navy.

The 34th Israeli Conference on Mechanical Engineering (ICME 2016), Technion Haifa Israel, November 2016, Organization of Naval Architecture and Ocean Engineering Session.

Naval Architecture Conference, University of Haifa Israel, 2 July 2019, Principal organizer in cooperation with the Israeli Navy and the University of Haifa.

Marine Design Technology 2021 Annual Conference on Marine Technological Innovations, Technion Haifa Israel, 19 May 2021, In cooperation with: Haim Parnas, Ezri Tarazi, Michelle Portman.

Naval Architecture Conference, Technion Haifa Israel, 6 July 2021, Principal organizer in cooperation with the Israeli Navy and the University of Haifa.

Marine Design Technology 2022 Annual Conference on Marine Technological Innovations, Technion Haifa Israel, 6 June 2022, In cooperation with: Haim Parnas, Ezri Tarazi, Michelle Portman.

Naval Architecture Conference, University of Haifa Israel, 13 July 2023, Principal organizer in cooperation with the Israeli Navy and the University of Haifa.

17. SIGNIFICANT DESIGN and RESEARCH PROJECTS before joining the Technion

With **NAMCO – Naval and Mechanical Engineering Company** (Years. Client. Project)

1987 – 1994. ZIM. Development and Programing of a New Software for Stability of Containers Ships, and preparation of new Stability Booklets for about 20 Ships.

1989 – 1992. Coral World Eilat. Development & Design of Undersea Observatory.

2002 – 2012. RAFAEL. Development & Design of PROTECTOR - Unmanned Boats.

2002 – 2012. SUBFLEX. Development of a new concept of offshore Aqua-culture system.

2005 – 2006. MCE. Development and design of UAV (Unmanned Aerial Vehicle) Launcher.

2000 – 2002. Libis Engineering. Special flexible vessel for sea transportation of fresh-water.

1999 – 2001. Israel Ports Authority. Roll on - Roll off Link-span at the port of Haifa.

1996 – 1999 Petroleum & Energy Infrastructures. Analysis of hydrodynamic stability of an offshore pipeline. Analysis of lateral buckling of an offshore pipeline due to thermal load.

With **CAMERI – Coastal & Marine Engineering Research Institute** (Years. Client. Project)

2010-2012. Israeli Ports Company. Models for wave propagation, flow, and sand transport to assess impact of sand borrow pits for the Haifa Bay Port 2015 development project.

2010. HPA Engineers. Stability models for Breakwaters and Seawalls for the Haifa Bay Port 2015 development project.

2007 – 08. Ashdod Port Company. Models for harbor agitation and motion of berthed ships.

2005 – 07. Ministry of Defense. New Harbor at Haifa. Coastal and Harbor Engineering Models: Stability of Breakwater, Agitation, Sand Transport.

2004 – 06. Ministry of Infrastructures. Artificial Islands Project. Sand transport model.

2004. Via Maris, Palmachim desalination plant. Hydraulic model for brine disposal.

2004. VID, Ashkelon desalination plant. Hydraulic model for brine disposal.

2003. Marina Herzelia. Sand transport model.

2002 – 03. Ministry of Defense. Towing Tank study of a special surface/submerged vehicle.

2001 – 02. Mekorot. Ashdod desalination plant – Hydraulic model for brine disposal and contamination transport.

2001. Ministry of Infrastructures. Pre-feasibility Study of offshore wind farms (wind energy).

2000. Technital. Special stability model of a composite vertical breakwater for HAYOVEL port.

2000. Ministry of Infrastructures. Hydrodynamic model for an innovative breakwater.

1998 – 99. Technital. Special stability model for the design of the main breakwater of HAYOVEL port (Ashdod).

1994 – 04. Israel Ports and Railways Authority. Harbors 2000 – Agitation models in a wave basin for the development of the ports of Haifa and Ashdod.

1994 – 99. Israel Ports and Railways Authority. Harbors 2021 – Numerical agitation models for the development of the ports of Haifa and Ashdod.