

PERSONAL INFORMATION

Georgios A. Livanos



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Sex Male | Date of birth 13/06/1979 | Nationality Greek

AREA OF EXPERTISE

Design of Machines and Ship Energy Systems

WORK EXPERIENCE

<p>2009 - Today</p>	<p><b>Assistant / Associate Professor, School of Engineering, University of West Attica</b>                  University of West Attica, Campus 1, Agiou Spyridonos, Egaleo, Greece</p> <ul style="list-style-type: none"> <li>Teaching Energy Systems and Design of Machinery in BSc and MSc university programs</li> <li>Research in Energy Systems</li> <li>Analysis of Electricity markets</li> <li>Advisory Services in third parties in the fields of design and optimization of onshore and offshore energy systems</li> </ul> <p><b>Business or sector</b> Academic (teaching and research)</p>
<p>2002 - 2007</p>	<p><b>Research and Development Engineer, Laboratory of Marine Engineering, National Technical University of Athens</b>                  National Technical University of Athens, Zografou Campus, Iroon Polytechniou 9, 157 72, Athens</p> <ul style="list-style-type: none"> <li>Leading Research team of Marine Engine Thermodynamics</li> <li>Develop and test simulation codes for lubrication, friction and wear of Diesel engines major components (pistons, piston rings, bearings, camshafts etc)</li> <li>Design and Conduct experiments on test and marine engines</li> <li>Report in EU officers for the progress of EU funded research programmes.</li> <li>Develop R&amp;D projects proposals</li> <li>Dissemination of R&amp;D results in International Conferences globally.</li> </ul> <p><b>Business or sector</b> Research and Development of Marine Energy Solutions</p>

EDUCATION AND TRAINING

- 2016 **Diploma in Internal Auditing**  
 The Association of Certified Public Accountants (CPA), UK
- 2003 - 2007 **PhD in Engineering**  
 National Technical University of Athens

  - PhD in the scientific area of tribology and lubrication of large marine diesel engines, obtained from the Dept. of Naval Architects and Marine Engineers of National Technical University of Athens
  - PhD Thesis Title: "A Comprehensive Model of Friction in Four-Stroke Marine Diesel Engines".

- 2003 - 2005 **Master in Business Administration (M.B.A.)**  
National Technical University of Athens
  - Specialization on electricity markets development and operation
  - Management of Energy Systems
  - Total Quality Management
  - Contract Negotiations
  - Purchasing Operations
  - Graduation with honours
  
- 1997 - 2002 **Diploma in Naval Architecture and Mechanical Engineering**  
National Technical University of Athens
  - Graduation with honours
  - Specialization on Marine Energy Systems, LNG facilities, strength of machine components

PERSONAL SKILLS

Mother tongue(s) Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

SCHOLARSHIPS

1. EUGENIDES FOUNDATION SCHOLARSHIP FOR POST GRADUATE STUDIES (PhD funding)
2. ONASSIS FOUNDATION SCHOLARSHIP FOR POST GRADUATE STUDIES (M.B.A. Funding)
3. State Scholarships Foundation (IKY) SCHOLARSHIP FOR UNDERGRADUATION STUDIES
4. Graduation with distinction from the National Technical University of Athens.
5. Highest Graduation Grade in the Department of Naval Architecture of the National Technical University of Athens (Graduation Class 2002) – NTUA Pyrforos Medal awarded.
6. Award from the Technical Chamber of Greece (TEE-TCG) for excellent university student performance for 1997-1998
7. Award from the Technical Chamber of Greece (TEE-TCG) for excellent university student performance for 1998-1999
8. Award from the Technical Chamber of Greece (TEE-TCG) for excellent university student performance for 1999-2000
9. Award from the Technical Chamber of Greece (TEE-TCG) for excellent university student performance for 2000-2001
10. Award from the Royal Institution of Naval Architects (UK) for best MSc Thesis in the department of Naval Architecture and Marine Engineering (2002)

## Publications

**Journal Publications:**

- [1] **Livanos G.A.**, Theotokatos G., Kyrtatos N.P., Simulation of Large Marine Two-Stroke Diesel Engine Operation during Fire in the Scavenging Air Receiver, *Journal of Marine Engineering and Technology*, IMAREST, Part A, No A3 (2003), pp. 9-16.
- [2] **Livanos G.A.**, Kanellopoulou E., Kyrtatos N.P., Marine Diesel Engine Transient Operation with Reduced Smoke Emissions. *Journal of the Japan Institution of Marine Engineering*, Vol 41 (2006), pp. 31-38.
- [3] **Livanos G.A.**, Kyrtatos N.P., Friction Model of a Marine Diesel Engine Piston Assembly. *Tribology International*, Elsevier, Vol 40 (2007), pp. 1441-1453.
- [4] **Livanos G.A.**, The Development of a Simplified Test Rig for Measuring the Average Friction Torque of the Piston-Crank-Slider Mechanism of an Internal Combustion Engine. *Scientific Problems of Machine Operation and Maintenance*, Polish Academy of Sciences, 4(160), Vol. 44 (2009), pp. 61-69.
- [5] **Livanos G.A.**, Development of a Simplified Instantaneous Friction Model of the Piston-Crank-Slider Mechanism of an Internal Combustion Engine. *SAE International Journal of Engines*, Vol. 4, Issue 1 (2011), pp.581-596
- [6] Theotokatos G., **Livanos G.A.**, Techno-economical Analysis of Single Pressure Exhaust Gas Waste Heat Recovery Systems in Marine Propulsion Plants. *Journal of Engineering for the Maritime Environment*, IMechE (2013), 227(2), pp. 83-97
- [7] **Livanos G.A.**, Theotokatos G., Pagonis D.N., Techno-economic Investigation of Alternative Propulsion Plants for Ferries and RoRo ships. *Energy Conversion and Management*, Elsevier Vol.79, 2014, pp. 640-651
- [8] Christina Diakaki, Natalia Panagiotidou, Anastasios Pouliezios, Georgios Kontes, George Stavrakakis, Kostas Belibassakis, Theodoros Gerostathis, **George Livanos**, Dimitrios-Nikolaos Pagonis, Gerasimos Theotokatos A decision support system for the development of voyage and maintenance plans for ships, *International Journal of Decision Support Systems*, IJDSS (2014),
- [9] Pagonis, D.N., **Livanos, G.**, Theotokatos, G., Peppas, S., Themelis, N., Open-type ferry safety system design for using LNG fuel, *Journal of Marine Science and Application*, 2016.
- [10] Strantzali E., Aravossis K., **Livanos G.**, 2017, Evaluation of future sustainable electricity generation alternatives: The case of a Greek island, *Renewable and Sustainable Energy Reviews*, Vol. 76, September 2017, Pages 775-787.
- [11] Strantzali E., Aravossis K., **Livanos G.**, Chrysanthopoulos N., 2018, "A Novel Multicriteria Evaluation of Small-Scale LNG Supply Alternatives: The Case of Greece", *Energies*, 11(4), 903; <https://doi.org/10.3390/en11040903>.
- [12] Stoumpos S., Theotokatos G., Boulougouris E., Vassalos D., Lazakis I., **Livanos G.**, 2018, "Marine dual fuel engine modelling and parametric investigation of engine settings effect on performance-emissions trade-offs", *Ocean Engineering*, Volume 157, Pages 376-386

**Conference Papers:**

- [1] Livanos G.A., Kanellopoulou E, Kyrtatos N.P., Marine Diesel Engine Rapid Load Acceptance without Smoke Emissions, Proceedings of the 7th International Symposium on Marine Engineering, Tokyo, October 24th to 28th, 2005
- [2] Livanos G.A., Kyrtatos N.P., A Model of the Friction Losses in Diesel Engines, SAE paper, 2006-01-0888, 2006 Society of Automotive Engineers (SAE) World Congress, Detroit, Michigan, April 3-6, 2006.
- [3] Livanos G.A., Simotas G.N., Dimopoulos G.G., Kyrtatos N.P., Simulation of Marine Diesel Engine Propulsion System Dynamics during Extreme Maneuvering. Paper No: ICES2006-1366, Proceedings of ICE6: 2006 Spring Conference of the ASME Internal Combustion Engine Division, Aachen, Germany, May 7-10, 2006
- [4] Livanos G.A., Simotas G.N., Kyrtatos N.P., Tanker Propulsion Plant Transient Behavior During Ice Breaking Conditions, Paper No: 2006-JSC-364, The 16th International Offshore and Polar Engineering Conference, ISOPE-2006, San Francisco, California, USA, May 28-June 2, 2006
- [5] Livanos G.A., Papalambrou G., Kyrtatos N.P., Christou A., Electronic Engine Control for Ice Operation of Tankers. PAPER NO: 44, Proceedings of the 25th CIMAC World Congress, Vienna, Austria, May 21-24, 2007.
- [6] Theotokatos G., Livanos G.A., Exhaust Gas Waste Heat Recovery in Marine Propulsion Plants, 14th International Congress of the International Maritime Association of the Mediterranean (IMAM 2011), Genoa, Italy
- [7] Livanos G.A., Theotokatos G., Pagonis D.N., Techno-economical Investigation of Alternative Propulsion Concepts of Ferries Operating in Mediterranean Sea – Introduction of LNG as Alternative Fuel. 3rd International Conference on Contemporary Problems of Thermal Engineering (CPOTE), Gliwice, Poland, 18-20 September 2012.
- [8] Livanos G.A., Techno-economical Investigation of Alternative Natural Gas Compression Stations Technologies. 3rd International Conference on Contemporary Problems of Thermal Engineering (CPOTE), Gliwice, Poland, 18-20 September 2012.
- [9] Pagonis D.N. Theotokatos G., Livanos G.A., Determining Instantaneous Engine Speed with High Accuracy Employing an Optical Measuring System. 1st International MARINELIVE Conference on ALL ELECTRIC SHIP, Athens, Greece, June 3-5, 2012

## Publications

- [10] Pagonis D.N. Theotokatos G., Livanos G.A., Accurate Instantaneous Engine Speed Recording by Employing an Optical Measuring System –Application to a Typical Low Power Industrial Engine. SAE paper, 2013-01-0304, 2013 Society of Automotive Engineers (SAE) World Congress, Detroit, Michigan, April, 2013.
- [11] Theotokatos, G., Livanos, G.A., Dimitrellou, S., (...), Peirounakis, D., Mizithras, P., Design of lng storage and feeding system for an open type ferry, Towards Green Marine Technology and Transport -Proceedings of the 16th International Congress of the International Maritime Association of the Mediterranean, IMAM 2015.
- [12] Theotokatos, G., Livanos, G.A., Dimitrellou, S., (...), Peirounakis, D., Mizithras, P., Computational investigation of lng storage tank for open type ferries, Towards Green Marine Technology and Transport -Proceedings of the 16th International Congress of the International Maritime Association of the Mediterranean, IMAM 2015.
- [13] Theotokatos, G., Stoumpos, S., Lazakis, I., Livanos, G, Numerical study of a marine dual-fuel four-stroke engine, Proceedings of 3rd International Conference on Maritime Technology and Engineering, MARTECH 2016.
- [14] E. Strantzali, S. Dimitrellou, K. Aravossis, G.A. Livanos, F. Magana, 2018, " A Methodological Approach for Sustainable Energy Planning in Decentralised Regions: The case of Greek islands", International Congress on Engineering and Architecture (ENAR 2018), 14 –16 November 2018, Alanya, Turkey