Université des Sciences et de la Technologie
d'Oran Mohamed Boudiaf

USTO-MB

Laboratoire des Sciences & Ingénierie Maritimes

# Publications de l'équipe : Propulsion Marine

1. **Fenouche, R., Ouadha, A., Addad, Y.** (2025). Numerical simulation of flow boiling heat transfer of ammonia in a horizontal stainless-steel tube. Numerical Heat Transfer, Part A: Applications, 1–17. https://doi.org/10.1080/10407782.2025.2515208
2. **Ramzi Fenouche, Ahmed Ouadha, Yacine Addad**, Numerical analysis of flow boiling heat transfer characteristics of alternative refrigerants in minichannels, Thermal Science and Engineering Progress, Volume 63, 2025, 103701, ISSN 2451-9049, https://doi.org/10.1016/j.tsep.2025.103701.
3. **Djermouni, M., Ouadha, A.** Evaluating Ammonia and Methanol as Lower-Emission Alternatives to liquefied natural gas for Medium-speed Marine Engines: A Thermodynamic Analysis. J. Marine. Sci. Appl. (2024). https://doi.org/10.1007/s11804-024-00600-5
4. **Mehtali Ketfi, Mohamed Djermouni, Ahmed Ouadha**, Thermodynamic-based comparison of ORC, TFC and OFC systems for waste heat recovery from a marine diesel engine, Journal of Maritime Research, Vol. 21, No. 1, 2024. https://www.jmr.unican.es/index.php/jmr/article/view/762
5. Khadidja Safer, Meriem Safer, Fouzi Tabet, **Ahmed Ouadha**, A numerical investigation of oxygen-enriched biogas counter-flow diffusion flames, Combustion Science and Technology, Vol. 196, No. 8, 2024. https://doi.org/10.1080/00102202.2022.2112955
6. **Fenouche, R., Ouadha, A**. (2023). Flow and heat transfer features during propane (R290) and isobutane (R600a) boiling in a tube. International Journal of Thermofluids, 20, 100428. https://doi.org/10.1016/j.ijft.2023.100428
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8. **Djermouni, M., Ouadha, A**. (2023). Thermodynamic analysis of methanol, ammonia, and hydrogen as alternative fuels in HCCI engines. International Journal of Thermofluids, 19, 100372. https://doi.org/10.1016/j.ijft.2023.100372
9. **Khaled Said, Ahmed Ouadha, Amina Sabeur**, CFD-based analysis of entropy generation due to mean and fluctuating fields during turbulent natural convection in a square enclosure, Heat Transfer Journal, Volume 52, Issue1, January 2023. https://doi.org/10.1002/htj.22686

10. **Khaled Said, Ahmed Ouadha, Amina Sabeur**, Turbulent double-diffusive convection and implementation of entropy production rate due to the mean and the fluctuating flow field, International Communications in Heat and Mass Transfer, 139 (2022), 106462. https://doi.org/10.1016/j.icheatmasstransfer.2022.106462

11. **Khaled Said, Ahmed Ouadha, Amina Sabeur**, Turbulent double-diffusive natural convection and entropy generation within an inclined square cavity, Fluid Dynamics & Materials Processing, Vol. 18, Issue 2, pp. 1619-1629, 2022. doi:10.32604/fdmp.2022.022220

12. M. Djermouni & A. Ouadha, Comparative Thermodynamic Analysis of LNG, LPG, Methanol, Ethanol, Biodiesel, and Hydrogen as Alternative Fuels in HCCI Engines. Int. J. Thermodynamics 24(4), 111–123 (2021). https://dergipark.org.tr/en/pub/ijot

13. **Razali M., Ouadha A., Baghdad M., Addad Y**., Effect of corrugating the cold orifice of a vortex tube on its flow and energy separation features, International Journal of Fluid Mechanics Research, 48(4): 45-64 (2021). DOI: 10.1615/InterJFluidMechRes.2021038749

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15. **Selmane, F., Djermouni, M. , Ouadha, A**. Thermodynamic Modeling of a Turbocharged Diesel–Hydrogen Dual-Fuel Marine Engine. J. Inst. Eng. India Ser. C 102, 221–234 (2021). https://doi.org/10.1007/s40032-020-00633-z

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17. **Selmane F., Djermouni M., Ouadha A.** (2021) Thermodynamic Study of a Turbocharged Diesel-Hydrogen Dual Fuel Marine Engine. In: Khellaf A. (eds) Advances in Renewable Hydrogen and Other Sustainable Energy Carriers. Springer Proceedings in Energy. Springer, Singapore. https://doi.org/10.1007/978-981-15-6595-3_29

18. **Mohammed Baghdad , Ahmed Ouadha & Yacine Addad** (2021) Effects of kinetic energy and conductive solid walls on the flow and energy separation within a vortex tube, International Journal of Ambient Energy, 42:3, 297-313, DOI: 10.1080/01430750.2018.1550013

19. **Oumayma Bounefour, Ahmed Ouadha, Yacine Addad**, An exergy analysis of various layouts of ORC-VCC systems for usage in waste heat recovery onboard ships. Mar Syst Ocean Technol 15, 26–44 (2020). https://doi.org/10.1007/s40868-020-00072-6.

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22. **Ahmed Razali, Mohammed Baghdad, Ahmed Ouadha**, CFD-Exergy analysis of the flow in a small-sized venturi. MATEC Web of Conferences 307, 01037 (2020).

23. **A. Remache, Y. Addad, A. Sabeur-Bendehina, A. Ouadha**, Thermal design optimization of passive cooling capability in a dry-storage system by adding wall undulations or semi-circular fins, Nuclear Engineering and Design, 347, 2019, pp. 140-150.

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25. **Mohammed Djermouni, Ahmed Ouadha**, Comparative assessment of LNG and LPG in HCCI engines, Energy Procedia, 139, 2017, pp. 254-259.

26. **Oumayma Bounefour, Ahmed Ouadha**, Performance improvement of combined Rankine-vapor compression cycle using serial cascade evaporation in the organic cycle, Energy Procedia, 139, 2017, pp. 248-253.

27. **M. Boussoufi, A. Sabeur-Bendehina,** M. El-Ganaoui, **S. Morsli, A. Ouadha**, Numerical simulation of the flow field in the mixing twin jets, Energy Procedia, 139, 2017, pp. 161-166.

28. K. Safer, **A. Ouadha**, F. Tabet, Entropy generation in turbulent syngas counter-flow diffusion flames, International Journal of Hydrogen Energy, Volume 42, 2017, Pages 29532-29544.

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