

Djamel Eddine Aissaoui

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PROFESSIONAL EXPERIENCE

Research Fellow

ALMA MATER STUDIORUM - University of Bologna (01/09/2024-31/08/2025)

- Conducted computational studies to model nanofiber production by electrospinning processes.
- Investigated polymeric solution jet behavior and related operating conditions to final fiber properties.

Entry-Level Mechanical Engineer

EURL Djelfa Pompes (11/2022–07/2024)

- Managed interdisciplinary feedback to improve pump designs.
- Enhanced customer satisfaction through optimized coverage and technical solutions.
- Introduced SPAIX5 software to streamline pump selection.

Platoon Leader (Military Service)

(09/2021–09/2022)

- Demonstrated adaptability, resourcefulness, and decision-making under pressure.

EDUCATION

PhD in Energy and Nuclear Science and Technology (41st Cycle)

Politecnico di Milano – Milan, Italy (Sep 2025 – Present)

- Research Topic: Multiphase Fluid Dynamics of Bubble Columns: Experimental and Numerical Insights and Advances
- Supervisor: Prof. Giorgio Besagni

Master's Degree in Energy Mechanical Engineering

University of Ziane Achour – Djelfa - Algeria (2019–2021)

- Thesis: Hydrodynamic and thermal study of flow inside a double planetary active mixer using dynamic mesh technique.
- Final mark: 15.66/20, obtained the position of first rank in student ranking.

Bachelor's Degree in Energy Mechanical Engineering

University of Ziane Achour (2016–2019)

- Thesis: Thermodynamic analysis of turbochargers.
- Final mark: 15.23/20, obtained the position of first rank in student ranking.

EXTRACURRICULAR ACTIVITIES

- Programming Competition Participant: Developed algorithms under tight deadlines (2019).

PUBLICATIONS

1. Mostefa, Telha, et al. "Kinematic properties of a twisted double planetary chaotic mixer: a three-dimensional numerical investigation." *Micromachines* 13.9 (2022): 1545. <https://doi.org/10.3390/mi13091545>
2. Naas, T. T., et al. "Performance enhancement of three-stage axial turbine for Clean Organic Rankine Cycle system driven by low-temperature heat source." *Cleaner Engineering and Technology* 5 (2021): 100336. <https://doi.org/10.1016/j.clet.2021.100336>