

Vitor Augusto Regert dos Santos

Curriculum Vitae (July 2026)

1. Personal Information

Surname, Name	Regert dos Santos, Vitor Augusto
E-mail	vitoraugusto.regert@polimi.it
Nationality	Brazilian

2. Education

09/2025 – ongoing	PhD in Energy and Nuclear Science and Technology Department of Energy, Politecnico di Milano, Italy Research project: “Bubble Column Fluid Dynamics: A Multi-Scale Perspective for Flow Regimes and Scaling-Up Purposes” Supervisor: Prof. Giorgio Besagni
02/2023 – 07/2025	MSc Energy Engineering (grade: 98/110) Politecnico di Milano, Italy Thesis: “Numerical Investigation of Bubble Column with Ionic Liquids for CO ₂ Absorption” Supervisor: Prof. Giorgio Besagni
09/2019 – 12/2020	UAS7 Exchange Program Heinrich Blasius Institute, Hochschule für Angewandte Wissenschaften Hamburg, Germany
02/2016 – 09/2022	BSc Mechanical Engineering (grade: 7.43/10) Universidade do Vale do Rio dos Sinos, São Leopoldo, Brazil

3. Professional Experience

05/2021 – 12/2021	Manufacturing Engineering Intern General Motors – Press Shop, Gravataí, Brazil Main activities: - Project management using Microsoft Project. - Support to in-house projects with CAD (Computer Assisted Design) modelling and FEM (Finite Element Method) analysis. - Internship project: implementation of an Intelligent Proximity Alert System (IPAS) on forklifts and cranes, autonomously managed from the communication with the suppliers to the installation and testing within the Press Shop. The project was awarded “Best Intern Project of
-------------------	---

	2021" at General Motors.
09/2019 – 12/2020	Research Assistant Heinrich Blasius Institute – Hochschule für Angewandte Wissenschaften Hamburg, Germany Main activities: - Contributed to research on the measurement of lung cancer biomarkers in breath via Quartz Enhanced Photo-acoustic Spectroscopy (QEPAS), as part of the UAS7 exchange program. - Improved the experimental setup and designed and constructed an acoustic detection module based on the QEPAS approach. - Integrated a PI temperature controller into the laser modulator of the setup.

4. Teaching Experience

4.1. Academic activity

09/2025 – 12/2025	Teaching assistant (40 hours) Course: CFD for Energy Engineering (097359), 8 CFU, SSD: ING-IND/10 Master of Science in Energy Engineering, Politecnico di Milano, Italy Lecturer: Fabio Inzoli Main activities: ex-cathedra lectures, management of the laboratory activities, support to the students in the development of their project works, practical and theoretical training.
-------------------	---

5. Conference Contributions

Regert dos Santos, V. A., Varallo, N., & Besagni, G. (2026). Numerical investigation of mass transfer in bubble column with ionic liquid. 27th International Congress of Chemical and Process Engineering (CHISA 2026), Prague, Czech Republic, August 22–28, 2026. (Accepted)

Regert dos Santos, V. A., Varallo, N., & Besagni, G. (2026). A comprehensive investigation of predictive models for the flow regime transition in bubble columns. 17th International Conference on Gas-Liquid and Gas-Liquid-Solid Reactor Engineering (GLS-17), Goa, India, December 7–10, 2026. (Submitted)



Vitor Augusto Regert dos Santos

I authorize the processing of my personal data pursuant to GDPR 2016/679 of 27 April 2016 (European Regulation on the protection of natural persons with regard to the processing of personal data)

I authorize the publication of this Curriculum Vitae on the institutional website of Politecnico di Milano (Amministrazione Trasparente section) in compliance with Legislative Decree no. 33 of 14 March 2013 (as amended)