

Ana Paula Alves Amorim

ana-paula.alves-amorim@univ-lyon1.fr 
+33 0638034670 
36 Rue des Antonins, Villeurbanne - France 

SUMMARY

Ph.D. candidate at Laboratory of Catalysis, Polymerization, Process and Materials (CP2M) in Villeurbanne, France. Master's degree in Industrial Engineering at the Federal University of Bahia in Brazil with an intership at Brandenburg University of Technology Cottbus-Senftenberg in Germany. Graduated in Chemical Engineering at the Catholic University of Salvador in Brazil with academic honors. Participated in the Reliability and Risk Research Group at the Catholic University of Salvador. Specialist in Lean Six Sigma Green Belt for the project developed in the service sector of the Diretoria da Previdência de Salvador (FUMPRES) in Brazil. Knowledge in Matlab, Excel, Hysys, Mosaic, AutoCAD, Aspen Plus, MiniTab, Visual Basic (VBA), C, GAMS, R, and Python languages.

EDUCATION

Université Claude Bernard Lyon 1

Laboratory of Catalysis, Polymerization, Process and Materials (CP2M)

Sep 2022 – Sep 2025

Ph.D. candidate

- *Systematic Comparison of Slurry and Gas Phase Process – Physical aspects, Thermodynamics and distribution of alkyl alumina*

Universidade Federal da Bahia

Master's degree – Industrial Engineering

Sep 2020 – Apr 2023

- *Optimizing Microgrid Design and Operation in Brazil: A Decision-Making Framework for Residential Distributed Energy Systems*

Brandenburgische Technische Universität Cottbus-Senftenberg

Master's Internship

Feb 2022 – Aug 2022

Universidade Católica do Salvador

Bachelor of Chemical Engineering

Jul 2017 - Dec 2019

Centro Universitário Jorge Amado

Bachelor of Chemical Engineering (interrupted)

Feb 2014 - Jul 2017

CERTIFICATION

Green Belt in Lean Six Sigma

December 2019

EMPLOYMENT & EXPERIENCE

Laboratory of Catalysis, Polymerisation, Process and Materials (CP2M)

Villeurbanne, France

Internship

Aug 2021 – Feb 2022

- Experiments in polymerization reactions
- Modeling polymerization reactions using MATLAB

FUMPRES

Salvador, Brazil

Project Analyst

May 2019 – Oct 2020

- Development of Green Belt projects in Lean Six Sigma
- Monitoring of process modeling and automation using the BPM methodology
- Consultancy in process improvement projects;
- Management assistance in projects for RPPS management certification.

Agendei Saúde - Startup

Salvador, Brazil

Head P&D

Mar 2019 – Oct 2020

- Responsible for managing the team;
- Realization of benchmarks for new features and / or applications;
- Formulate the team's strategic goals;
- Assess the team's performance and propose improvements.

Inovar Tintas

Vitória da Conquista, Brazil

Internship

Jan 2019 – Feb 2019

- Monitoring of production
- Conducting quality tests

LANGUAGES

Portuguese

Native language

French

Pre Intermediate – A2

English

Upper intermediate-B2

German

Pre Intermediate – A2

- Product development
- Update and automation of spreadsheets

Contemper

Vitória da Conquista, Brazil

Voluntary Internship

Jan 2018 – Feb 2018

- Assistant at the company's Cipa (Internal Commission for the Prevention)
- Formulation and implementation of safety action plans

PUBLICATIONS

1. AMORIM, ANA PAULA ALVES AMORIM; SHEIBAT-OTHMAN, NIDA; DO ROSÁRIO, ROBERTA LOPES; MCKENNA, TIMOTHY F. L. Impact of Internal Particle Morphology during gas phase ethylene polymerization: A new particle model approach. *In preparation*.
2. AMORIM, ANA PAULA ALVES; DORNEANU, BOGDAN; PONTES, KAREN VALVERDE; ARELLANO-GARCIA, HARVEY. A framework for decision-making to encourage utilization of residential distributed energy systems in Brazil. *Computer Aided Chemical Engineering*, v. 52, p.3019-3024, 2023.
3. MRAD, AMEL BEN; OTHMAN-SHEIBAT, NIDA; AMORIM, ANA PAULA ALVES; DO ROSÁRIO, ROBERTA LOPES; MCKENNA, TIMOTHY F. L. Polyethylene Slurries: Swelling and Solubility. *Macromolecular Reaction Engineering*, v. 17, n. 3, 2023.
4. AMORIM, ANA PAULA ALVES; FIGUEIROA FILHO, CELSO LUIZ SANTIAGO; ASSIS, EDILSON MACHADO DE. An INRS cause tree method assessment for complex accidents analysis: Application to the Fukushima Nuclear Power Plants accident. *Engineering Failure Analysis*, v. 120, p. 105062, 2021.
5. AMORIM, ANA PAULA ALVES; PONTES, KAREN VALVERDE. Optimization of a microgrid for the new post-covid-19 pandemic energy demand using PV-wind-biogas in Brazil. In: 2021 IEEE PES Innovative Smart Grid Technologies Asia (ISGT Asia), 2021, Brisbane. 2021 IEEE PES Innovative Smart Grid Technologies - Asia (ISGT Asia), 2021. p. 1.
6. AMORIM, ANA PAULA ALVES; PONTES, KAREN VALVERDE. Desafios e oportunidades no projeto de uma microrrede no Brasil: uma revisão do estado da arte. In: ENEGEP 2021 Encontro Nacional de Engenharia de Produção, 2021, Online, 2021.
7. AMORIM, ANA PAULA ALVES; ROSA, LICIANNE PIMENTEL SANTA. Calculation of thermodynamic and transport properties for systems containing liquid urea. In: IJCIEOM 2020 International Joint Conference on Industrial Engineering and Operations Management, 2020, Online Platform, 2020. v. 26.
8. AMORIM, ANA PAULA ALVES; FIGUEIROA FILHO, CELSO LUIZ SANTIAGO; ASSIS, EDILSON MACHADO DE; ROSA, LICIANNE PIMENTEL SANTA. O legado do acidente de Fukushima: uma análise das causas para aprendizado da engenharia. In: SEMOC - Semana de Mobilização Científica, 2019, Salvador. 22ª SEMOC. Salvador: Universidade Católica do Salvador, 2019. v. 22.
9. AMORIM, ANA PAULA ALVES.; SILVA, INGRID, GUEDES SANTOS DA; AZEVEDO, LARISSA GUIMARAES; BARBOSA, LÍVIA CRISTINA OLIVEIRA. Alternativas de captação e reuso da água: aplicada a universidade católica do Salvador campus pituaçu. In: SEMOC - Semana de Mobilização Científica, 2018, Salvador. 21ª SEMOC. Salvador: Universidade Católica do Salvador, 2018. v. 21. p. 1673-1680.