Cell: +1 418-262-5802

[Hajar.Yousefian@gmail.com](mailto:Hajar.Yousefian@gmail.com)

05.12.2023

Dear hiring manager

I would like to express my interest in the Chemical Engineering position you may have.

Having contributed to advance the fundamental knowledge in process engineering via experimental and theoretical work as a team member and then project manager, I am now seeking new challenges within an organization in need of someone with research, planning and analytical qualities.

I have extensively worked in gas and petroleum industries as a process engineer from bench to scale up, material processing and characterizations and I believe I would be a good fit for in your group.

Besides my scientific achievements and experiences, I am a fast learner, problem solver and detail-oriented person with good communication (in both English and French) and time management skills. Overall, supporting your group to achieve its objectives is well in-line with my goals. Please find my enclosed résumé, clearly showing my skills, qualifications, and abilities.

Thank you very much for considering my application; I would appreciate any opportunity to discuss my qualifications.

Sincerely,

Hajar Yousefian

**Hajar Yousefian**

Hajar.Yousefian@gmail.com | +1 418 262 5802 | Canadian Citizen

**SUMMARY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

- Chemical engineer with experiences in research and development, material processing and product formulation.

- Experience and background in characterization of polymers, structure property relationship, nanocomposites, biomaterials, foams, quality control, recycling.

- Excellent organizational, communication, problem solving, time management and innovative skills.

**EDUCATION\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Graduate Studies, Chemical Engineering, Laval University, Quebec, Canada 2016**

**M.Sc., Chemical Engineering, Sharif University of Technology, Iran 2006**

**B.Sc., Chemical & Petroleum Engineering, Sharif University of Technology, Iran 2002**

**WORK EXPERIENCE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Senior Process Engineer, Research Institute of Petroleum Industry, Iran 2019-2023**

- Catalyst development for FTS process

- Polymer processing and development

**Research Assistant, Université TÉLUQ, Quebec, Canada 2019-present**

- Supervising a group of undergrad students in Mathematic department on their projects

- Correction of assignments and projects

**Material Composition Engineer, Gracious Living Co., Woodbridge 2018**

- Working with a group of technicians on various blending process on extrusion machine.

- Mechanical/melt optimization and material formulation of composites based on recycled polymers.

- Quality control and assurance of composite materials based on final product specifications.

**Researcher, Laval University, Quebec, Canada 2016-2017**

- Improved thermal/mechanical properties of thermoplastic-elastomers using wood fibers in automotive applications.

- Developed the mathematical models for mechanical properties of wood fiber based thermoplastic elastomer composites, using experimental results.

- Optimized the cost to performance ratio of the thermoplastic-elastomers regarding the derived models and raw materials initial cost.

**Research Assistant, Laval University, Quebec, Canada 2012-2016**

- Successfully formulated highly cellulose reinforced PP and PA6 using extrusion and injection and conducted the relative characterization and quality control based on automotive industries as target.

- Managed thermal and mechanical analysis lab.

- Provided technical reports for the formulation, preparation, and thermal analysis of the liquid solution based on thermoset polymers.

**Senior Process Engineer, Research Institute of Petroleum Industry, Iran 2006-2012**

- Led a multidisiplinary group of 20 engineers and technicians on selectivity study of industrial catalysts.

- Simulated and optimized the Sulfur Recovery Unit of oil and gas refineries.

- Provided process specifications, PFD, P&ID and BOM.

- Implemented a data analysis approach towards troubleshooting.

**Polymer Scientist, Iranian Railway Manufacturer, Iran 2003-2006**

- Verified dynamic, mechanical and thermal properties of a newly developed structural composite based on recycled thermoplastics (PE/PP), glass fiber and recycled tire.

- Industrial scale up of the new thermoplastic-based product into the railway travers.

- Repair and mechanical, thermal and electrical verification of porcelain insulation using polymers.

**SKILLS & QUALIFICATIONS\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

- Material processing: Extrusion, Injection Molding, Compression Molding and Solution Casting.

- Material characterizations: DSC/DTA, TGA, GPC, AFM, TEM, SEM, Rheological analysis, DMA, impact, tension and flexion, XRD, NMR, FTIR, UV-Vis.

- Design of experiments, Statistical Analysis, Simulation, Modeling and Optimization.

- Simulation: Promax, HYSYS, ASPEN.

- Programming: MATLAB, Sigma plot.

- General: LATEX, AutoCAD, Edraw Max, Microsoft Office.

**LANGUAGE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

English, French