# Ali Zarei

Telephone: 416-821-4848 E-mail: <u>allie.zarei@gmail.com</u> Address: Brampton, ON

# **Product and Materials Failure Engineer**

Chemical Engineering professional and Materials Processing Engineer with Technical application specialist experience and successful project engagements with comminution and particle dynamics, performance and modeling of the Mill, coal beneficiation by simultaneous grinding and oil agglomeration, chemical cleaning of coal to remove organic sulfur, grinding of hemp fiber for use as reinforcing fillers in composite plastics, dry and wet grinding, fine grinding, particle sizing, Continuous Casting, Vacuum Casting, Optimization of industrial casting processes, supperalloys and steels characterization and materials technology

## **AREAS OF EXPERTISE**

Process Engineering
Chemical Engineering
Comminution
Particle Dynamics

Particle Size Reduction
Grinding Materials
Mineral Material Technology
Corrosion

Process Modeling & Simulation Feasibility Studies & Analysis Casting Metals & Characterization Safety & Regulatory Compliance

#### **EDUCATION:**

## M.Sc. Master of Applied Science- Chemical Engineering and Applied Chemistry

THESIS: Characterization of Szego-milled Hemp Fibers *University of Toronto, Canada, 2011* 

#### M. Eng. Master of Materials Process Engineering

THESIS: Detail examination of growth structure of commercial ESR ingot of alloy 718 Royal Institute of Technology (KTH) Stockholm, Sweden, 2008 & University of British Colombia (UBC)

#### **B.Sc. Bachelor of Chemical Engineering in Mineral Material Technology**

THESIS: Cathodes protection of Gas Pipe Line *Azad University of Technical and engineering, Tehran, Iran, 2005* 

#### **PROFESSIONAL SOCIETIES:**

Engineer in Training, Pengnl

## **PUBLICATIONS:**

- 1. Coal beneficiation by selective oil agglomeration, 39th international conference on clean coal, 2014, Florida, USA
- 2. Characterizing Hemp Fibers, Bio composites, 11th International Conference on Bio composites, Toronto, Canada
- 3. Detail examination of growth structure of commercial ESR ingot of alloy 718, (KTH), Stockholm, Sweden, 2009
- 4. Attrition (Erosion), University of British Colombia (UBC), Vancouver, Canada, 2008
- 5. Medical applications of Nickel Titanium alloy Royal Institute of Technology (KTH) Stockholm, Sweden, 2007
- 6. Cathodes protection of gas pipe line (B. Sc thesis) 2005

# Ali Zarei

Telephone: 416-821-4848 E-mail: <u>allie.zarei@gmail.com</u> Address: Brampton, ON

#### **PROFESSINAL EXPERIENCE:**

**Technical Application Specialist,** *General comminution Inc.*, 2017 to 2019

- Consistently meets technical standards for excellence; anticipates, recognizes and resolves technical problems
- Demonstrated success with assay implementations especially for the customer validation and verification
- Ensuring the assay integration process runs smoothly for new customers to be up and running successfully
- Investigated and defined operational issues and prioritize based on severity, risk and strategic business needs
- Maintained direct working relationship with Projects Leads to assure development and attainment of plans
- Ensure integrity of entire material management workflow in relation to individual discipline process and usage

### Chemical Process Engineer, General comminution Inc., Toronto, ON, 2012 to 2016

- Recorded and analyzed data, demonstrated experimental procedures, collected, prepared and/or tested samples
- Conducted research to develop new and improved processes and designing and planning the layout process
- Planed, prioritized, assigned, supervised, and participated in the work of staff for performing lab chemical test
- Reviewed of quality control data, instrument maintenance records, calibration and troubleshooting
- Performed quality control at all stages of the project development and project execution
- Provided technical skill in comminution areas to plan, design, set up, modify, optimize grinding processes

#### Material Process Engineer, University of British Colombia (UBC), Vancouver, BC, 2007 to 2009

- Conducted chemical lab experimental on various equipment such as microscope and electro scan microscope
- Planned, setting up and undertaking collaborative research with faculty on various projects
- Performed experiments and collected samples for various test to analyze and presenting in seminars
- Conducted chemical lab experimental and collecting data required to make improvements and modifications,
- Reviewed of quality control data, instrument maintenance records, calibration and troubleshooting
- Prepared progress reports or other articles and presentations and monitoring performance of processes