

# M.A. SIMONA WALKO

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## CAREER OBJECTIVE

To obtain a full-time, entry-level position in the steel industry which requires the use of exceptional organizational and problem-solving skills and affords me the opportunity to work as part of a team to satisfy specific technical objectives.

## EDUCATION

**CARNEGIE MELLON UNIVERSITY**

BACHELOR OF SCIENCE IN MATERIALS SCIENCE AND ENGINEERING

**MAY 2012**

PITTSBURGH, PA

## TECHNICAL EXPERIENCE

**ATI ALLEGHENY LUDLUM, INC.**

SENIOR CAPSTONE PROJECT: RECYCLING OF TITANIUM WASTE IN STEEL PRODUCTION

**September – December 2011**

PITTSBURGH, PA

- ♦ Lead and direct a 4-person student research team with the goal of developing a process of recovering titanium fines lost during the stainless steel manufacturing process
- ♦ Coordinate meetings with company and faculty co-managers to ensure proper project execution

**CARNEGIE MELLON UNIVERSITY – DR. HENRY PIEHLER**

FAILURE ANALYSIS CASE STUDY: INDEPENDENT STUDY

**January – May 2011**

PITTSBURGH, PA

- ♦ Read and interpreted 6 government and industry reports concerning the BP Deepwater Horizon disaster
- ♦ Developed a detailed timeline highlighting events leading up to mechanical failure
- ♦ Prepared 5 lectures and discussions highlighting managerial failures and organizational shortcomings of BP
- ♦ Incorporated timeline, lessons, and discussions into a lesson plan for Dr. Piehler, to be used by Dr. Piehler while teaching *27-405: Analysis and Prevention of Product Failures* in the Fall 2011 semester

**CARNEGIE MELLON UNIVERSITY – DR. RICHARD FRUEHAN**

FUNDAMENTALS OF STEELMAKING: INDEPENDENT STUDY

**January – May 2010**

PITTSBURGH, PA

- ♦ Learned the fundamentals of the oxygen and electric arc furnace steelmaking processes
- ♦ Composed an in-depth systems outline of relevant chapters of Steelmaking and Refining Volume of the 11<sup>th</sup> Edition of the Making, Shaping, and Treating of Steel (AISE) for hypothetical steel manufacturing processes which were presented and discussed with Dr. Fruehan
- ♦ Utilized strong problem-solving skills to perform thorough kinetics and thermodynamic calculations for final steel chemical compositions

## WORK EXPERIENCE

**CREW MEMBER**

CHIPOTLE MEXICAN GRILL

**April 2011 – Present**

PITTSBURGH, PA

- ♦ Relay customers' needs and desires to upper management level
- ♦ Responsible for training new personnel in daily operations, inventory procedures, and company protocols

**SCIENCE EDUCATION INTERN – GIRLS IN MATH & SCIENCE PARTNERSHIP**

CARNEGIE SCIENCE CENTER

**June – August 2011**

PITTSBURGH, PA

- ♦ Supervised a class of 25 students during daytime education sessions
- ♦ Created lesson plans to teach specific technical objectives to students
- ♦ Within a fixed budget, designed and implemented technical demonstrations
- ♦ Assisted junior interns with educational techniques and technical demonstrations

**SALES ASSOCIATE**

CARNEGIE MELLON UNIVERSITY BOOKSTORE

**May – September 2010**

PITTSBURGH, PA

- ♦ Interfaced with customers, both in-person and over the phone, regarding store products and policies
- ♦ Performed store inventory duties and was responsible for a balancing cash drawer daily

## VOLUNTEER ACTIVITIES

**STUDENT MEMBER OF MATERIAL ADVANTAGE**

PREVENTION POINT PITTSBURGH

**September 2011 – Present**

**August 2009 – Present**

**ALPHA PHI OMEGA SERVICE FRATERNITY – KAPPA CHAPTER**

**September 2006 – December 2008**