Diane Zheng

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**RELEVANT PROJECTS**

**Project1:**

**Project2:**

**Project3:**

**WORK EXPERIENCE**

**Zeptor Co. |**San Jose, California July 2015- Jan 2017

* Create program in python with qt interface to quickly generate plots of cell data. Reduced workload by 2-3 hours a day during high volume cell testing
* Train technicians and new workers in process and machine operations
* Wrote SOPs for various cell assemblies, electrode manufacturing and processing, and slurry coating

**Hydro Quebec** | Quebec, Canada May– August 2013/2014

• Modify and optimize scalable milling process to produce crystalline micro and nano size powder from ingots

• Develop process to maximize the content of active material in electrode; execute chemical characterization and process validation tests

**Lawrence Berkley National Lab** | Berkeley, CA May 2010 – May 2014

• Hold patent US PCT Patent 033059-00016 as co-inventor for novel nanostructures on copper surface to enhance adhesion using biomimcry.

• Collaborate with LBNL industrial partners to help them scale up high-density silicon electrode for manufacturing

• Interface with senior engineers and scientists to ensure compatibility of processing methods

• Maintain lab facilities and equipment

**TECHNICAL SKILLS**

* Computer Programming: MatLab, Aspen, COMSOL, PolyMath, Java, Microsoft: MS Office suit, Visio, Gnatt charts
* Material Identification: nuclear magnetic resonance (NMR), UV-vis, and infrared (IR) spectroscopy
* Material Synthesis: Organic synthesis, retro-synthesis process; solid-state synthesis (e.g. alloy and phase diagrams)
* Material Separation: Thin layer and column chromatography (TLC), gas chromatography and mass spectroscopy (GC-MS), and high performance liquid chromatography (HPLC)
* Material Purification: extractions, reflux, recrystallization techniques
* Industrial Machines: Jaw crusher, roll mill, wet mill, jet mill

**EDUCATION**

**University of California, Berkeley** Graduation Date: May 2015

B.S. Chemical Engineering

**AFFLIATIONS and VOLUNTEER WORK**

* Kappa Alpha Theta: Fundraise and volunteer for CASA to benefit children in foster care system; volunteer at food kitchens; participate in 5k runs to raise money for variety of causes such as breast cancer
* Professional Clubs/Associations: AIChE, LeaderShape, ECS (Electrochemical society)