
QUALIFICATION

Self-Motivated Lab Technician with 5 years lab experience. Well-rounded background in Science, Engineering, Research and Leadership. A data-driven thinker who thrives under multi-task. Self-driven high achiever with proven leadership experiences. Work productively both independently and in teams. Excellent communication and organizational skills. Willing for relocation.

EUCATION

- M.S. in Chemical Engineering, 2014, University of Michigan - Ann Arbor, Ann Arbor, MI GPA = 3.51
- B.S. in Chemistry, 2012, Beijing University of Chemical Technology, Beijing, China GPA = 3.69
- Study abroad program in Chemistry, 2011, Technical University of Denmark, Copenhagen, Denmark GPA = 3.75

**WORK
EXPERIENCE**

UNIVERSITY OF MICHIGAN, Ann Arbor, MI, Research Assistant 09/2012-current

- Implemented simulation by diversified materials to enhance battery efficiency.
- Comprehensively evaluated existing battery components and demonstrated the necessity to develop new materials.

SABIC INNOVATIVE PLASTICS, Mt. Vernon IN, Process Engineer Intern 05/2013-08/2013

- Prepared scientific reports and protocols for testing procedures and managed daily technical data analysis.
- Advanced analysis method and optimized condition of polymer characterization to strength the manufacture industry.
- Supported automakers with engineering thermoplastics of improved properties (flowability, compacted density, etc.).

SINOPEC, Beijing, China, Field Engineer Intern 04/2011-08/2011

- Provided project management and field service with upstream O&G processes.
- Directed planning and design of an environmental health & safety project and demonstrated atmospheric pollution PM_{2.5} < 20 µg/m³ per day in a safe range, which was highlighted in a local newspaper.

NOVO NORDISK PHARMACEUTICALS Co., Ltd., Copenhagen, Denmark, Intern 10/2010-11/2010

- Proposed use of a polymer in drug delivery system to control a new drug release time.
- Demonstrated new drug inhibitor effect of protein hydrolysis by analyzing clinical samples.

SKILLS

Aspen Plus, Fortran, C++, Minitab, IP21, Battery Design, Matlab, Mathematica, QICPIC, Ring Shear Tester, MS Office

PUBLICATION

(Z)-N-{3-[(2-Chloro-1,3-thiazol-5-yl)-methyl]-1,3-thiazolidin-2-ylidene}-cyanamide.
Yue-Ming Li, Jian-Ye Li, **Qian Wang**, Ai-You Hao* and Tao Sun. Acta Crystallographica. (2011). E67, o3303.

RESEARCH

The Synthesis of An Innovative Flame Retardant 01/2012-07/2012

- Reduced reactant cost by introduction of lignin processed from paper manufacturing waste.
- Demonstrated the new product with improved performance of flame retardancy, in the aspect of oxygen index(22%), burning residual mass(80%) and flame out time(10s).
- This improvement is currently under a patent application.

Research on the Yield Increase of Phenanthrene and Stilbene 09/2011-12/2011

- Quantitatively optimized process condition of stilbene with ideal yield increase.
- Synergized phenanthrene production by metal catalysis reaction.
- Distinguished product isomer and minimized the amount of isomer as a by-product.

The Synthesis of Pesticide 06/2010-08/2010

- Improved separation process using column chromatography which significantly increased yield purity to 53.7%.
- Discovered the key functional group for the pesticide effect by measuring the conformation, bond length and displacement parameters.

AWARDS

Outstanding Graduate, Beijing University of Chemical Technology, China 05/2012
ChE competition prize, National Mathematical contest for Modeling, China 06/2009
Silver Award, National Challenge Entrepreneurship Competition, China 11/2009

HONORS

The People's Scholarship, 2008 - 2012
Outstanding Student Leader, 2007-2009
Beijing 2008 Olympic Games Outstanding Volunteer, 2008