Tara E. Mokhtari

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Permanent Address: 9991 Dell Road, Eden Prairie, MN 55347

Objective

To obtain an internship in a chemistry-related position to enhance experience and knowledge in this field.

Education

Massachusetts Institute of Technology: Cambridge, MA **September 2008—Present**
Department of Chemistry
Bachelor of Science expected June 2012
Current GPA: 4.9/5.0

University of Minnesota: Minneapolis, MN **Fall 2006—Fall 2007**
Non-degree candidate during junior and senior year of high school.
GPA: 4.0/4.0

Harvard College: Cambridge, MA **Summer 2006**
Non-degree candidate
GPA: 4.0/4.0

Breck School: Minneapolis, MN **2006—2008**
High School Diploma
GPA: 4.0/4.0

Experience

Associate Advisor **Fall 2010—Spring 2011**
McCormick Hall
Massachusetts Institute of Technology: Cambridge, MA

Pharmaceutical Development Intern **Summer 2010**
Upsher-Smith Pharmaceuticals
Maple Grove, Minnesota

- *In Vitro* intestinal stability investigation
- Instrumentation and techniques utilized:
  - High-performance liquid chromatography (HPLC)
  - Liquid chromatography-mass spectrometry (LC-MS)

Undergraduate Research (UROP) **Spring 2010—Present**
Laboratory of Stephen J. Lippard
Massachusetts Institute of Technology: Cambridge, MA

- Platinum anticancer agents subgroup member

Research Assistant
Laboratory of Ronald G. Brisbois **Summer 2009**
Macalester College: St. Paul, MN

- Scope and limitations study of copper(I)-catalyzed azide-alkyne "click" chemistry
- Instrumentation and techniques utilized:
  - Proton nuclear magnetic resonance spectroscopy (H^1 NMR)
  - Gas chromatography-mass spectrometry (GCMS)
  - Thin layer chromatography (TLC)
  - Flash-column chromatography

Research Assistant
Laboratory of Walter C. Low **Summer 2007**
University of Minnesota: Minneapolis, MN

- Investigated the role of microRNA in the development of glioblastoma brain tumors
- Techniques utilized:
  - Neural stem cell culturing
  - Glioma cell (GL261) culturing
  - microRNA microarray

Course Tutor and Grader, ***Introduction to Solid State Chemistry*** (3.091) **Fall 2009**
Massachusetts Institute of Technology: Cambridge, MA

MIT Society of Women Engineers, Executive Board **Spring 2010—Present**
Girl Scout Outreach Co-Chair

Relevant Coursework

Biology

- Introductory Biology (7.013) Spring 2009
- Genetics (7.03) Spring 2010

Chemistry

- Introduction to Solid-State Chemistry (3.091) Fall 2008
- Organic Chemistry I (5.12) Fall 2009
- Thermodynamics and Kinetics (5.60) Fall 2009
- Principles of Inorganic Chemistry I (5.03) Spring 2010
- Organic Chemistry II (5.13) Fall 2010
- Biological Chemistry I (5.07) Fall 2010
- Biological Chemistry II (5.08) Spring 2011
- Physical Chemistry (5.62) Spring 2011

Relevant Labwork

Introduction to Experimental Biology and Communication (7.02)

- Block 1: Biochemisty and Recombinant DNA Spring 2010
- Block 2: Yeast Display Technology Spring 2010
- Block 3: Genetics and Development Spring 2010

Introduction to Experimental Chemisty (5.35)

- Module 1: Fundamentals of Spectroscopy Fall 2009
- Module 2: Synthesis of Coordination Compounds and Kinetics Fall 2009
- Module 3: Fabrication of a Polymeric Light Emitting Device Fall 2009

Biochemistry and Organic Laboratory (5.36)

- Module 4: Expression and Purification of Enzyme Mutants Spring 2011
- Module 5: Kinetics of Enzyme Inhibition Spring 2011
- Module 6: Organic Structure Determination Fall 2010

Organic and Inorganic Laboratory (5.37)

- Module 7: Introduction to Organic Synthesis Spring 2011

Activities and Interests

National Society of Collegiate Scholars
MIT Symphony Orchestra, principal violist
MIT Chamber Music Society
Pi Beta Phi sorority, MA gamma
MIT Society of Women Engineers
Aviation, private pilot's license training
Tae Kwon Do, first-degree black belt
Intramural Soccer