

# Shannon M. Morey

smmorey@mit.edu – (586) 588-4727 – 327 Main St. Apt. 2; Medford, MA 02155

## Education

### **Massachusetts Institute of Technology** (2010 – present)

Graduate Student, Department of Chemistry

Master of Science expected Spring 2013

GPA: 4.3/5.0

### **Michigan State University** (2006 – 2010)

Bachelor of Science in Chemistry, High Honors

College of Natural Science, Honors College

2010 MSU Robert Clark Kedzie Award for the Outstanding BS Chemistry Major

GPA: 3.99/4.0

## Professional Experience

### **Graduate Research Assistant** (November 2010 – present)

#### **Massachusetts Institute of Technology, Department of Chemistry**

- National Science Foundation Graduate Research Fellow
- Synthesizing biomimetic materials with applications in drug delivery, tissue engineering, and stem cell development
- Mentor to four undergraduate researchers

### **Women's Programs Graduate Community Fellow** (August 2011 – present)

#### **Massachusetts Institute of Technology, Office for the Dean of Graduate Education**

- Organized the two-day 2011 Path of Professorship workshop for 60 graduate and post-doctoral women interested in pursuing a career in academia - coordinated speakers, reviewed 150 applications, and evaluated the effectiveness of the program
- Planning Team Leader for the 2012 Path of Professorship workshop
- Organized panel discussions on academic publishing and careers in industry, both attended by approximately 50 graduate women

### **Teaching Assistant: General Chemistry Course** (August 2010 – May 2011)

#### **Massachusetts Institute of Technology, Department of Chemistry**

- Prepared and presented live chemical demonstrations for over 100 students
- Led two recitation sections per week where I designed and delivered lectures, taught problem-solving skills, and answered student questions
- Held weekly office hours and review sessions

### **Research Experience for Undergraduates Summer Intern** (June 2009 – August 2009)

#### **Cornell University, Cornell Center for Materials Research**

- Synthesized iron dichloride compounds and studied their electronic properties using Mössbauer spectroscopy

### **Undergraduate Research Assistant** (September 2008 – May 2010)

#### **Michigan State University, Department of Biosystems Engineering**

- Assisted in set-up of a Liquid Chromatography Mass Spectrometer
- Completed simulations of the persistence of commonly applied botanical insecticides

### **Undergraduate Research Assistant** (August 2006 – May 2010)

#### **Michigan State University, Department of Chemistry**

- Aided in construction and characterization of Rapid Freeze-Quench Kinetic System
- Characterized the enzyme TauD using continuous wave and pulsed electron paramagnetic resonance

## Leadership Experience

### **Chembites, Founder and Author** (January 2011 – present)

- Founded Chembites, a blog where a team of fifteen graduate students pick recently published papers from the chemical literature to summarize for an undergraduate audience
- Authored thirty-one articles to date
- Develop and maintain the Chembites website ([www.chembites.org](http://www.chembites.org)), which has published nearly 100 articles to date

### **East Boston High School Mentor** (September 2010 – present)

- Co-developed a battery recycling campaign and Science Carnival program run by AP Chemistry students, which educated over 250 students about recycling and collected over 1000 batteries
- Applied for and received funding from the MIT Committee on Race and Diversity to support the battery recycling campaign
- Mentored three high school students participating in science fair, providing guidance and advise on technical and communication issues

### **Science Theatre** (September 2006 – May 2010)

#### **Student Run Science Outreach at Michigan State University**

**Director:** 2008-2010

**Chemistry Director:** 2007-2008

- Organized and led seventeen performances of interactive science demonstrations at schools and events throughout Michigan as well as participated in dozens of other events
- As Director, quadrupled the number of annual performances and undergraduate volunteers and increased donation receipts fivefold
- Recipient of the 2009 Michigan State University Student Leader of the Year award for leadership of Science Theatre

## Skills

Synthetic chemistry: Three years laboratory research experience

Expertise in the following characterization techniques:

- |                                           |                                   |
|-------------------------------------------|-----------------------------------|
| • Nuclear Magnetic Resonance              | • Gel Permeation Chromatography   |
| • Mass Spectrometry                       | • Circular Dichroism              |
| • Dynamic Light Scattering                | • UV-Visible Spectroscopy         |
| • Liquid Chromatography                   | • Electron Paramagnetic Resonance |
| • Fourier Transform Infrared Spectroscopy | • Mössbauer Spectroscopy          |

Technical and computer skills:

- |                                                     |                                              |
|-----------------------------------------------------|----------------------------------------------|
| • Technical writing (scientific papers and reports) | • Microsoft Office (Word, Excel, PowerPoint) |
| • Instrument specific data analysis packages        |                                              |

## Professional Memberships

- American Chemical Society (2008 – present)
- Materials Research Society (2011 – present)