

# Lauren E. Barney

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## EDUCATION

<b>University of Massachusetts Amherst, Amherst, MA</b>	<b>Fall 2011-present</b>
Graduate Student	
<b>University of Rhode Island, Kingston, RI</b>	Graduated Summa Cum Laude in May 2011
Bachelor of Science in Chemical Engineering	GPA: 3.89/4.00
Concentration: Pharmaceutical Engineering	
<b>Lunenburg High School, Lunenburg, MA</b>	Graduated in June 2007

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## RESEARCH AND WORK EXPERIENCE

**Research Associate, Reactive Innovations, LLC**, Westford, MA June 2010-August 2011

- Design of electrochemical reactor systems for separation and water treatment applications.
- Electrochemical catalyst development and optimization of reactor operating conditions.
- Development of new manufacturing procedures for alternative designs and scaled-up reactors.
- Data analysis to determine the effect of various conditions upon the reactor's performance.
- Preparation of reports to be submitted to government clients.
- Giving presentations on experimental results to evaluate the research progress and to design experiments for continued product development.

**Undergraduate Researcher, URI**, Kingston, RI September 2010-May 2011

Advisor: Dr. David Worthen, URI College of Pharmacy

- Evaluation of foam fractionation as a separation method to purify rebaudioside A from *Stevia* extract.
- Designing experiments and completing assays to optimize the separation technique by altering process conditions.
- Presenting results to colleagues at University events.

**Teaching Assistant, URI Chemical Engineering**, Kingston, RI January 2011-May 2011

- Helping students in the Chemical Reactors and Chemical Kinetics course by answering questions, reviewing concepts, and helping to solve homework problems.
- Assisting with problem solving in class to reinforce concepts and facilitate group work.

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## AFFILIATIONS

<b>Tau Beta Pi Engineering Honor Society</b> , University of Rhode Island	2009-2011
• Secretary, 2010-2011	
<b>American Institute of Chemical Engineers</b> , University of Rhode Island	2007-2011
<b>Phi Eta Sigma Freshman Honor Society</b> , University of Rhode Island	2008-2011
<b>National Honor Society</b> , Lunenburg High School	2005-2007
• Vice President, 2006-2007	
<b>Girl Scouts of the USA</b>	1997-2011
• Camp Counselor	2002-2007

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## RECOGNITIONS

American Institute of Chemists Outstanding Student Award (Undergraduate), 2011

Undergraduate Research Grant, 2010-2011

*The development and optimization of an environmentally friendly, adsorptive bubble purification method for plant-derived, non-caloric sweeteners*

Dean Thomas Kim Scholarship, 2009-2011

Knickle Family Freshman Scholarship in Chemical Engineering, 2008-2009

University of Rhode Island Centennial Scholarship, 2007-2011

Worcester Telegram and Gazette Student Achiever, 2007

Lunenburg High School Golden L Award, 2007