

# Amanda Lietz

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## Education

<b>University of Michigan</b>	August 2014-present
<ul style="list-style-type: none"><li>- PhD in Nuclear Engineering and Radiological Sciences</li><li>- Advisor: Prof. Mark J. Kushner</li></ul>	
<b>University of Illinois at Urbana Champaign</b>	August 2012-May 2014
<ul style="list-style-type: none"><li>- B.S. in Nuclear Engineering</li><li>- Minor in Physics</li><li>- Concentration in Plasma Engineering and Fusion Science</li></ul>	
	GPA: 3.91

## Research

<b>University of Michigan</b>	August 2014-Present
<ul style="list-style-type: none"><li>- Analyze the effects of humidity and flow rate on discharges in air using a 0-D plasma model (GlobalKin)</li></ul>	
<b>Center for Plasma-Material Interactions</b>	September 2011-June 2014
<ul style="list-style-type: none"><li>- Assisting in the upgrade of a theta pinch device which can be used to test plasma facing components in the presence of high density pulses similar to edge localized modes</li><li>- Designed a new coil configuration using Maxwell simulations for the theta pinch device</li><li>- Designed and constructed atmospheric pressure dielectric barrier discharge torches</li><li>- Conducted various sputtering experiments for industrial equipment</li><li>- Qualified chamber surface treatments for extreme ultraviolet mask blank defect reduction</li></ul>	
<b>NSF International Research Experience for Students -Botswana</b>	May 2013-June 2013
<ul style="list-style-type: none"><li>- Worked on an interdisciplinary and intercultural team in sub-Saharan Africa</li><li>- Optimized a hybrid power supply design for a rural village using renewable sources</li></ul>	
<b>Illinois Biodiesel Initiative - Soap Production Officer</b>	August 2011-May 2012
<ul style="list-style-type: none"><li>- Led a team of 24 students to research soap production from glycerin, a biodiesel byproduct</li><li>- Developed a procedure and testing standards for the soap production</li><li>- Soap will be sold to the dining halls on campus for use on dishes</li></ul>	
<b>General Atomics</b>	May-August 2012
<ul style="list-style-type: none"><li>- National Undergraduate Fellowship program sponsored by Princeton Plasma Physics Lab</li><li>- Modeled the ablation of lithium pellets in a tokamak using Matlab</li><li>- Assisted in assembling the lithium dropper hardware</li><li>- Tested and calibrated the dropper hardware for the DIII-D tokamak</li></ul>	

## Academic Distinctions

- NPRE Outstanding Undergraduate Research Award	2014
- NPRE Outstanding Academic Achievement Award	2014
- Prof. Daniel F. Hang Outstanding Senior Design	2014
- American Nuclear Society Best Paper for Senior Design	2014
- Alpha Nu Sigma Honor Society	2012-2013
- American Nuclear Society Scholarship	2012-2014
- George Miley Low Energy Nuclear Reactions Scholarship	2013

## Activities

<b>Illinois Biodiesel Initiative - President</b>	2011-2013
<ul style="list-style-type: none"><li>- Maintain communication with all University groups, faculty, and staff involved in the project</li><li>- Ensure that the group maintains high standards for safety, environmental compliance, and quality</li><li>- Procured a \$28,000 grant for new equipment and upgrades</li><li>- Developed a sustainable business model with a team of MBA students for a competition</li></ul>	
<b>St. Vincent DePaul Society Volunteer</b>	2010-2011
<ul style="list-style-type: none"><li>- visited homes to assess needs and award vouchers</li></ul>	
<b>Women in Math Science and Engineering Living Learning Community - Peer Leader</b>	2007-2012
<ul style="list-style-type: none"><li>- Planned and led the orientation for incoming freshmen residents</li></ul>	