

Laird Fellow Update November 2014

## Nicole Kotulak is Awarded NRC Postdoc Position



After a very busy summer of lab work and writing, Nicole successfully defended her PhD dissertation in Electrical Engineering on August 21, 2014. Her work, “Developing Novel Hybrid Heterojunctions for High Efficiency Photovoltaics,” was an investigation into the combined use of organic molecules and inorganic semiconductors (in this case, silicon), to turn light directly into electricity using simple, cost-effective processing methods. Theoretical modeling of device performance, device fabrication, and surface chemistry were important aspects of this work, and she was fortunate to have collaborators from many different backgrounds. Nicole is looking forward to walking in December at the Doctoral Hooding Ceremony, and bringing to a close this challenging and incredible chapter in her life.

While finishing her dissertation, she was awarded a National Research Council Postdoctoral Associateship to work at the U.S. Naval Research Laboratory in Washington, D.C., where she recently started work. Nicole has been placed in the Optoelectronics and Radiation Effects Branch of the Electronics Science and Technology Division, still with a focus on photovoltaics. She will be working on many different types of photovoltaic devices, looking at material growth, device development, and the theory and characterization of both materials and devices. These devices are very different from those she studied during her PhD work, and she is looking forward to the chance to expand her knowledge base.

Nicole’s first month at NRL has been a wonderful experience, and she is looking forward to all that she will be able to learn from the many incredible scientists and engineers there. Nicole feels that the next few years will be a chance to really find what her niche is, and determine where her career might take her next – staying in a government lab, or moving to teaching or industry. Whatever she discovers, she is looking forward to the journey.