



Andrew Hiatt

Graduate Student

Department of Mechanical and
Aerospace Engineering



BIO:

Mr. Andrew Hiatt is currently pursuing a Ph.D. in Mechanical Engineering at The University of Alabama in Huntsville with an anticipated graduation date of May 2015. His Ph.D. program research involves laboratory experiments investigating innovative controllable solid propellant technology through ultrasonic and high speed video burn rate measurement techniques with a focus on a real-time x-ray radioscopy system currently being assembled for burning surface visualization. He held an engineering internship during summer 2012 at the Naval Air Weapons Station China Lake, CA researching novel controllable solid propellant technologies involving propellant chemistry and mechanical and physical characteristics through electrochemistry and electrode design parameters and experiments. He was a Space Scholar Intern during summer 2009 at the Air Force Research Laboratory Hanscom AFB, MA researching models of rocket plume chemical interactions with the Earth's upper atmosphere. Formal training includes safety management principles for explosives operations and cryogenic safety.

Contact Information:

University of Alabama in Huntsville
301 Sparkman Drive, Huntsville, AL 35899
ath0004@uah.edu; www.uah.edu/prc

RELEVANT PUBLICATIONS:

1. Frederick, R. A., Jr., and Hiatt, A., "Energetic Materials Diagnostics with Real-Time X-Ray Radioscopy," 2013 UAHuntsville Individual Investigator Distinguished Research Program Proposal, January 2013.
2. Hiatt, A. T., Ikard, R. L., and Frederick, Jr., R. A., "Archiving Propulsion Laboratory Data," AIAA 2010-7010, 46th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, Nashville, TN, July 2010. DOI: 10.2514/6.2010-7010.
3. McLaughlin, C. A., Hiatt, A., and Lechtenberg, T., "Precision Orbit Derived Total Density," *Journal of Spacecraft and Rockets*, Vol. 48, No., 2011, pp. 166-174; also AIAA Paper 2008-6951 at the AIAA/AAS Astrodynamics Specialist Conference, Honolulu, HI, 18-21 August 2008. DOI:10.2514/1.47624.