

Project Information Form

Project Title:	Tailpipe Particulate Matter Organic Composition from Oxidized Recycled Oil Biodiesel
University:	University of Vermont
Principal Investigator:	Joseph Russo Advisor: Britt A. Holmén
PI Contact Information:	Joseph.M.Russo@uvm.edu
Funding Source(s) and Amounts Provided (by each agency or organization):	NCST Graduate Research Assistantship - \$72,600
Total Project Cost:	\$72,600
Agency ID or Contract Number:	
Start and End Dates:	September 1, 2018 – December 31, 2019
Brief Description of Research Project:	Given that today's real-world fuel supply is comprised of biodiesel as a blendstock with petrodiesel, understanding how addition of biodiesel affects exhaust particle properties is critically important. This graduate research assistantship will support research quantifying the organic chemical composition of exhaust particles previously generated in emissions testing of biodiesel fuel in various states of accelerated oxidation. Project work is focused on quantifying the more polar chemical speciation of exhaust ultrafine and nanoparticles that are associated with adverse air quality and health effects. Biodiesel exhaust particle composition will be compared to control studies conducted similarly, but with petrodiesel fuel.
Describe Implementation of Research Outcomes (or why not implemented): Place any photos here	
Impacts/Benefits of Implementation (actual, not anticipated):	
Web Links <ul style="list-style-type: none"> • Reports • Project website 	https://ncst.ucdavis.edu/graduate-student-research/