



The *TranLIVE Spotlight* is a bi-weekly update from the University Transportation Center research collaboration led by the University of Idaho

September 2, 2014

UIDAHO RESEARCHERS WORK TOWARDS MAKING ALGAE FUEL PRODUCTION MORE COMMERCIALY VIABLE

MOSCOW, Idaho – Researchers at the University of Idaho’s National Institute of Advanced Transportation Technology (NIATT) make progress towards developing a new technology that will more efficiently produce biofuel from microalgae. This research is significant given the potential environmental and social benefits of commercializing microalgae as a biofuel feedstock.

According to a recent report produced by Biological and Agricultural engineering researchers B. Brian He and Zheting Bi challenges exist in the conversion of microalgal lipids into algal biofuels due to the unique characteristics of microalgae and the technologies currently used for processing them. He and Bi’s work explores an alternative technology that combines lipid extraction from whole microalgae and lipid esterification/transesterification in a single step or what they term *in situ* transesterification.

The advantages of the proposed one-step, *in situ* transesterification include a simplified process for the conversion of microalgal lipids to algal biodiesel and the reduction of some technological challenges in traditional processes. Funding for the experiments associated with this work is provided by the research collaboration led by the University of Idaho known as Transportation for Livability by Integrating Vehicles and the Environment or TranLIVE. TranLIVE is a multi-year tier one University Transportation Center sponsored by the United States Department of Transportation.

The complete report is available at: <http://bit.ly/tranlive090114>

ABOUT TRANLIVE UNIVERSITY TRANSPORTATION CENTER

TranLIVE is the Transportation for Livability by Integrating Vehicles and the Environment a research collaboration lead by the University of Idaho in partnership with Old Dominion University, Syracuse University, Texas Southern University, and Virginia Polytechnic Institute and State University. TranLIVE works to find solutions to transportation challenges that minimize environmental impacts while educating students to enter the transportation workforce and creating and transferring tools and knowledge to practicing transportation professionals. TranLIVE is sponsored by the United States Department of Transportation (USDOT) University Transportation Centers Program. For more information visit: www.tranliveutc.org