



Abstract

The objective of “*Development of Biojet Fuel from North Dakota Crop Oils*” is to support the optimization of a novel process that will product biojet fuel from crop oils (soybean and canola oil). This project will be completed by the SUNRISE Research Group using faculty and students from the University of North Dakota (UND) in partnership with professional staff from SUNRISE Renewables, a new North Dakota corporation formed to commercialize SUNRISE renewable product technologies.

The basic research for our biojet fuel process is complete, patents have been filed, and commercial partnership agreements have been executed to take this technology to the marketplace. The proposed project will allow us to optimize important process conditions at the bench-scale and pilot-scale in order to improve the competitive basis for commercial facilities. We propose to begin this one year project in January, 2009 at a total cost of \$1,070,000, with \$500,000 provided by the ND Industrial Commission, \$544,000 by SUNRISE Renewables, and \$16,000 by UND. Bench-scale work will be performed in SUNRISE laboratories at UND while pilot-scale work will be conducted in SUNRISE’s pilot facility at the UND Center of Excellence in Life Sciences and Advanced Technologies.

The UND biojet fuel process represents a new renewable energy technology and has the potential for substantial economic impact in North Dakota. This technology will utilize multiple different oil seed crops. Since North Dakota is the U.S. leader for many of these crops – canola, sunflower, flax – and a large producer of others (such as soybean), successful deployment in the state will provide an attractive market for North Dakota farmers across the entire state. The first commercial facility will be installed at the Northwood Mills Canola/Soybean Crushing Facility in 2010.

Under N.D.C.C. § 44-04-18.4 trade secrets, proprietary, commercial and financial information is confidential if it is of privileged nature and not previously publicly disclosed.