

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

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*A Project Report On*

**“FEASIBILITY OF CASHEW NUT SHELL AS A  
SOURCE OF BIO-DIESEL AND SOLID BRIQUETTES”**

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## **ABSTRACT**

Biodiesel is an alternative diesel fuel that is produced from vegetable oils and animal fats. It consists of the monoalkyl esters formed by a catalyzed reaction of the triglycerides in the oil or fat with a simple monohydric alcohol. The reaction conditions generally involve a trade-off between reaction time and temperature as reaction completeness is the most critical fuel quality parameter. Much of the process complexity originates from contaminants in the feedstock, such as water and free fatty acids, or impurities in the final product, such as methanol, free glycerol, and soap. Processes have been developed to produce biodiesel from high free fatty acid feedstocks, such as recycled restaurant grease, animal fats, and soapstock.