

A study for the characterization of biodiesel comparatively with the diesel oil

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Abstract. Fossil fuels as petroleum and diesel oil, used as fuels for automobiles, exhaust after burning in vehicles engines, a large amount of NO_x, SO_x and CO₂ gases. Since these exhausted gases cause global warming, and environmental pollution, reduction of the exhaust amount is an issue to be urgently solved. Biodiesel is produced from a renewable source of energy, is biodegradable, and comparatively with the combustion of diesel fuel, its combustion products have a reduced level of particulate emissions and does not increase the net atmospheric level of CO₂. In this paper there are presented and discussed the characteristics of two biodiesel samples obtained from rapeseed oil in an experimental installation. Comparison with diesel oil characteristics are made. Biodiesel properties fulfill the standard requests. There were not registered significant differences between biodiesel and diesel oil characteristics.

Keywords: biofuels, biodiesel, renewable fuels.
