Biodiesel production from canola oil by enzyme

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The optimal conditions for biodiesel production from canola oil were obtained. The reaction for transesterification was performed in batch reactor using lipase. Novozym 435 as biocatalyst was used and the condition for maximum conversion was predicted through response surface methodology (RSM). When the water content increased, the conversion rate decreased. Maximum conversion rate of 70% was predicted (temp.: 35° C, oil:methanol molar ratio=1:2.7132). This result may have potential application as valuable data for the basic design of biodiesel production from biomass.