

## عنوان مقاله:

Application of enzymatic method for production of biofuel from domestic oily seed resources

## محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

In this study, the enzymatic transesterification of castor oil with methanol in a solvent free media is carried out using lipase catalyst. The influence of several operation conditions (i.e. the amount of enzyme, molar ratio of methanol to castor oil, reaction temperature and reaction time) on the production of biodiesel was analyzed. It is observed that with increase in molar ratio, reaction time and enzyme amount, the amount of product (biodiesel) increased. When reaction temperature increased, the amount of biodiesel increased firstly and then decreased. The optimum value for amount of enzyme, molar ratio of methanol to oil and temperature was 300 mg, 9:1 and 55°C, respectively. The .maximum concentration of methyl ester was 2298 ppm after 72 hours

## کلمات کلیدی:

Enzyme- Methanol -Castor oil –Lipase –Biodiesel- Transesterification

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/77883>

