

## عنوان مقاله:

Modeling and Validation of Some Combustion Parameters in a VCR Engine Fuelled with Argemone Mexicana Biodiesel-Diesel Blends using RSM

## محل انتشار:

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## خلاصه مقاله:

In the present study the methyl ester of argemone oil, prepared by two step transesterification process due to its high acid value was experimented, in a variable compression ratio (VCR) multi-fuel engine to evaluate the combustion parameters like in cylinder pressure (Pr), net heat release rate (NHRR) and cumulative heat release rate (CHRR). For the current analysis engine load, compression ratio and bio-diesel blends are taken as input parameters. The mathematical models were developed and statistical significance was checked using analysis of variance (ANOVA). A second order model is developed and is found to be adequate by ANOVA results. The validation of the model is carried out by comparing the predicated values of output responses with that of experimental results.

## کلمات کلیدی:

,Biodiesel,Combustion,Response Surface Methodology,ANOVA,Sensitivity analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/794395>

