

# Design And Fabricate Of A Rapid Heating Fast Pyrolysis Reactor

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## ABSTRACT

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This report contains a research on Pyrolysis processes in a fabrication of the rig that including reactor and condenser and documents the construction of the working reactor and condenser. The research portion covers the working principles, variations in the designs, advantages and drawbacks and factors that affect the running progress.

Pyrolysis process is one of the processes that are being used to utilise biomass and convert it into liquid fuel. One of the methods which have the target to produce the bio-oil is fast pyrolysis. A step-by-step process on the construction of a working reactor and condenser is presented in the later part of the report. As this process deals with a complex chemical formula with low pH number (acidic mainly), design, material selection and fabrication of a rapid heating fast pyrolysis can help in this utilisation. .