

UCSI UNIVERSITY

FACULTY OF ENGINEERING, ARCHITECTURE & BUILT  
ENVIRONMENT

PICO HYDRO TURBINE FOR LOW VOLTAGE  
APPLICATIONS

ABULOKWE FRANCIS IKENNA

1000715638

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## Abstract

This thesis discusses the concept and operation of a hydro power generation. A pico hydro power system will be built which uses a pelton wheel as its turbine and a mini generator which converts mechanical energy to electrical energy. The aim of this experiment is to of course generate electricity from flowing water jets and optimize the system by introducing two points of impact (nozzles). A comparison is then made between the output of a single and double nozzle. After the optimization is done, the electricity produced is then used to power a load.