

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590018



**PROJECT REPORT ON
"A COMPARATIVE STUDY BETWEEN ACTIVATED
CARBON TREATED WASTE WATER AND
CONVENTIONAL TREATED WASTE WATER"**

Submitted in partial fulfilment of the requirements for the award of degree

**BACHELOR OF ENGINEERING
IN
CIVIL ENGINEERING**

NAME	USN
M D KEERTHI	4AL14CV045
SIDDESH J SHETTY	4AL14CV086
ASHRAYA SHETTY	4AL15CV019
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**Under the Guidance of
AISHWARAYA LAKSHMI
ASSISTANT PROFESSOR
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**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
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2018-2019

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2019
ET656**

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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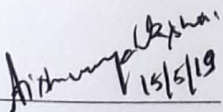
DEPARTMENT OF CIVIL ENGINEERING

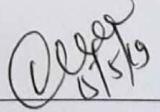
CERTIFICATE


This is to certify that following students

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Has submitted Final report on "A COMPARATIVE STUDY BETWEEN ACTIVATED CARBON TREATED WASTE WATER AND CONVENTIONAL TREATED WASTE WATER" for VIII Semester Bachelor of Engineering in Civil Engineering during the academic year 2018-19. The final report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.


Aishwarya Lakshmi
Project Guide

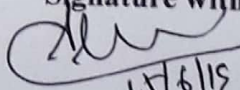
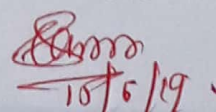

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2. SONIA HADANEER

Signature with Date


15/6/19

15/6/19

ABSTRACT

Water scarcity has become a major issue in today's world. There are lot of advanced technologies developed in purifying and recycling wastewater produced. Activated carbon is commonly used in water treatment to remove water contaminants from tap water and well water. The main aim of the project is to determine effect of various water quality parameters from waste water using activated carbon.

In the present study Activated carbon was prepared from seed shells of *Jatropha curcas*, carbonized in LPG furnace and impregnated with dil.HCL and kept in a hot air oven for 2hours at 250°C. The tests were conducted on various water quality parameters of waste water using activated carbon in order to compare it with conventional treated water. The test were conducted on: pH test, Turbidity, Chlorides, Nitrates, phosphates, COD, total solids and total dissolved solids, Alkalinity, Acidity.

The *Jatropha* seeds which are economical and easily available in any biodiesel plant in large quantity can be converted to activated charcoal in order to treat the waste water.