

Indian Institute Of Technology

Hyderabad



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REPORT ON : “Treatment of

Pharma effluent”

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INTRODUCTION

Treatment of pharma effluent is very much important in today's world. The treatment of the pharma effluent is carried in three major categories and they are :

- ***Biological treatment***
- ***Non-biological treatment***
- ***Electrical treatment***

I was assigned to study about non biological treatment and to conduct following test on it.

Basic pH test, COD ,acidity and alkanity and later determining the treatment to decrease the COD value.

NON- BIOLOGICAL TREATMENT

- ***_Simple coagulation.***
 - ⇒ ***FeSO₄***
 - ⇒ ***Alum***

- *Fenton's oxidation*

SIMPLE COAGULATION

There were two basic coagulation and was done to decrease the COD value of the raw sample (pharma effluent) and there few basic combination with respect to pH , concentration of coagulant and time period of mixing.

FENTON'S OXIDATION

It was done using oxidation of effluents present in it as oxidizing agent was H_2O_2 and normal coagulant $FeSO_4$ and then the COD was found and was compared to simple coagulation. And in result it was found that fenton's oxidation is very much better than using simple coagulation for treatment of pharma effluent.