

Production of Crude Oil from the Plastic Bags

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Abstract

This paper discuss about the crude oil preparation from the plastic bags. The main of this paper is to convert the waste plastics in to the resources. The plastic consist of the synthetic and organic materials. It has the high molecular mass. The fuel will be produced from the plastic wastes. The conversion of the plastic to the fuel will be dépend upon the level of the plastics. In this it will require feed stocks. It will perform various composite reaction to convert the plastic wastes into crude oil. The conversion of waste plastics into fuel is depend upon the type of the plastic that to be used for the conversion. Based upon the property.

Key Terms : Crude oil, fuel, plastics

I. INTRODUCTION

This paper will be prepared based upon the properties of plastics. The crude oil will be prepared based upon the types of plastics and its properties. The conversion process of the crude oil will be determined by the pretreatment process. Based on the various conversion techniques the crude oil will be extracted from the wastage of plastics. Although the plastic bags are made up of the petroleum product. The process of collecting the plastic bags is known as the pyrolysis. This method will be done basically combusting all the materials into oxygen. When the process is finished it will form the synthetic gas and it will be meant for the distillation process after that it will be converted into petrol or diesel. In this paper it uses the catalytic pyrolysis method is used to convert the plastic into oil.

II. EXISTING SYSTEM

In the system the crude oil will be extracted from the fossil fuels. The process was more tedious and it will be heavy task for the extraction. Since it was not a renewable process it will be used only once. The crude oil will be more costly when it will compare with the economic cost. Also this will produce many adverse effects to the environment which causes pollution. The crude oil will be refined using many processes such as lubrication, wax using the proliferation of the chemical process. Also it will take the several steps for the purification and this process will take more time to convert. This process is also harmful to the environment. While extracting the chemicals from the crude oil it will lot of

radiations therefore the refinery plants cannot be made in the center of the cities where the peoples are living. The reprocessing of the petrol will be similar to the reprocessing of mechanical recycling. Therefore this process will be very tedious for the conversion of crude oil to the petrol and diesel. Rather than using this type of existing process the new technique will be proposed.

III. PROPOSED METHODOLOGY

In this proposed methodology it will extracts the crude oil from the plastic wastes for this it will uses the method of pyrolysis through which it will extract the petroleum from the plastic wastages. The decomposition of plastic will made a greatest issue in this biological world. Each and every individual plastic materials will consist of 53% of polyolefins. The increase in the rate of plastic consumption through the world will be converted to the advantageous effects of the biological world. The composition of plastics will provide the different feed stocks.

IV. CRUDE OIL CONVERSION PROCESS

The conversion process consists of different steps smooth feeding conversion process and effective conversion process. In the smooth feeding conversion process the pretreatment process will be takes place using the subsequent conversion process. In the effective conversion process the machine that produces using the various chemical processes. In this process we can easily transform a kilogram of plastic waste to a liter of oil. Using this conversion it will not emit the carbon dioxide. The scamp plastic these include an ampule supply and this will process a rearrangement of molecules in the plastic wastes. The pyrolysis of HPDE waste from the environment will be resulted in the distillation process and it will use the hydro carbon mixture with the average structure and the paraffin structure. And it will retort the structure of poly phenol will helps to the extraction of the oil from the plastics.



Fig 1: Machine Converter

The thermo chemical methods of plastic to oil will produce the triplicate reaction of pyrolysis. In this the vapors produced as the result of pyrolysis will be condensed with the water as the plastic agent of crude oil. And the range of the pyrolysis temperature will be from the 420°- 440° Celsius. The lubrication base stocks will be lead from the one stage to the other stage. And the thermal cracking product will also increase the pyrolysis component contain 20 products of carbon molecules. The information in that will be analyzed and it will be transformed using the Fourier transform infrared and Nuclear magnetic resonance. Also the increase in the pyrolysis term will be consistent in the form of ethane and ethanol but to that extent it could not increase the liquid fraction.

V. TREATMENT OF PYROLYSIS

The pyrolysis already produced with the crude oil will be mixed with the plastic wastes. At first the plastic waste will be converted to the gas and then the gas will be converted to the crude oil. The comparison of fuel properties and the plastics will yield the better outcome. The gross product yield from pyrolysis will be of 74% from the crude oil fraction and 17% of solid residue and the remaining 6% were gases. At last the testing of the diesel fraction will leads to the ultra low sulfur diesel and the bio diesel fuel.



Fig 2: Plastic Wastes

In the above process the forced air heated with the gas burner will be used indirectly with the oxygen free chamber and it will be utilized under the degrading factor. The process of resolving these ideas in which the chamber will get neutralized. The oil will be chromatographically removed from the plastic wastes. And it will be recycled for the several uses.

Among these fields it will be converted from the plastic wastes and the process will be done according to them.

VI. MACHINE CONVERSION

The machine conversion process will be made of two plastics into one quart of oil. By heating the process in the oxygen free chamber will be procured by adding the new catalyst and it will create the new reactions and that gives the new enzymatic product as the petroleum products. This process take over few hours and it will convert the 1000 kg of mixed plastic to 700 liters of crude oil. In this process it will use the fuel purification device and filtration process and other samples for the addition of new catalyst for providing the better performance. Also there are some hydro carbons which will have the negative boiling point and it will be produced by the high efficiency and the better performance.

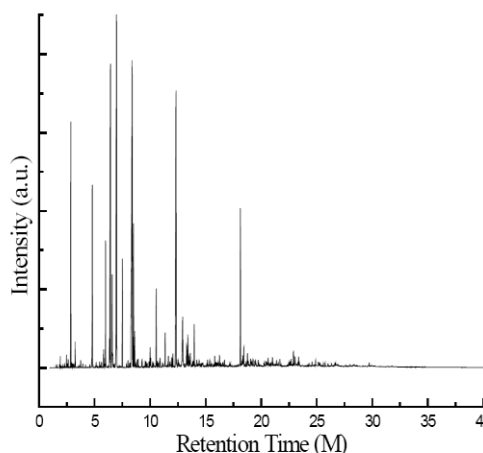


Fig 3: Conversion of Plastic to Crude Oil

After the process it will give the product as the finished product and that will produce the large amount of crude oil which will be renewable resources and gives the product as the chemical components. Also it will endure the product as the environment friendly product which shows the better performance in the field of chemical engineering.

In the pyrolysis treatment based upon the plastic content the oil will be collected and it will be taken. It will have the paraffinic structure with the temperature of 500° to 700° Celsius. It is the chemical decomposition process which will produces the heat in high temperature and the plastic molecules contains larger number of molecular chain. And the chain reaction will be breaked during the cracking of polystyrene pyrolysis process. The functional group which has the alkaline structure will give the higher production of crude oil in tons.

In this process the waste plastic materials will have some non plastic materials that will be

removed from the furnaces. The pyrolysis process yields the chemical compositions which will induce the high catalytic reaction to form the petroleum products. After the process the finished product will be tend to the hydro thermal liquefaction process. This process will be clean up the plastic wastes and separate the crude oil from the sedimentation by the gravity separation process.

At last the crude oil will be extracted from the plastic wastes through various processes. Among that product will be converted by the pyrolysis process which will have the several steps such as condensation, machine conversion process based on the lubrication of crude oil the petroleum products will be defined.

VII. CONCLUSION

This paper provides the solution for the preparation of crude oil from the plastic wastages. Since the plastic is not used for any other process it will provide the harmful effects to the environment. It will be used as the initialized product in this crude oil conversion process. And that will give the finished product as petroleum product will be good for the environment and it will be provide the better performance in the environment. Also it has some toxic components which will produce the new component that will be many useful products for the people as well as to the environment. Also by this process this paper will get the bi-product as the light non condensable off gas which will give the successful product for the future process. In this process it will use the pyrolysis process which will process the hydro carbon fuels. Also the fuel produced from the bio fuel will be considered as the bio fuel in the precious chemical engineering process. This paper will take the several attempts for this process at last it will take the pyrolysis process for the conversion of crude oil from the wastages of the plastic bags.

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