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Plastic Waste Recycling by using Pyrolysis Process

Prof R. N. Pantawane[1], Jayesh Sune[2], Deepika Shukla[3], Sakshi Yende[4], Sakshi Jadhao[5], Nayana Meshram[6],Aniket Jogdand[7], Rushikesh Thakare[8], Yash Yadav[9], M Mujahid M Sajid Shaikh[10]
Assistant Professor, Department of Civil Engineering[1]
Students, Department of Civil Engineering[2,3,3,4,5,6,7,8,9,10]
Jawaharlal Darda Institute of Engineering and Technology, Yavatmal, Maharashtra, India

Abstract: *Plastic is a type of inorganic trash or other material that does not break down quickly. More than 500 years were required for the inorganic waste to decompose effectively. Examples of inorganic garbage include plastic, glass, or glass bottles, aluminum or cans, dust, metal, and other food wrappers. One of the biggest environmental problems we have today is plastic garbage. Urbanization and population growth are to blame for the daily rise in plastic garbage. Waste made of plastic can have a bad effect on the environment and people's health. Plastic pollution occurs when a lot of plastic waste accumulates in one place or when it is handled inappropriately. The sluggish rate at which plastic garbage decomposes is the primary cause of pollution. Although there are several ways to handle and get rid of plastic garbage, each approach has significant drawbacks. The Pyrolysis technique can then be used to recycle plastic waste in this project in order to address these types of challenges. One efficient and environmentally beneficial method for managing and reducing inorganic plastic waste is pyrolysis. With this technique, plastic waste is thermally degraded at high temperatures in an inert environment. When plastic trash is cooked to high temperatures, pyrolytic oil and fumes are produced. After that, this pyrolytic oil is transformed into diesel-like pyrolytic fuel and gasoline. The calorific value of pyrolytic oil is identical to the calorific values of diesel and gasoline, according to the analysis of numerous research papers. We can research the pyrolysis process for recycling plastic waste since it allows us to identify the best alternate fuel and gasoline sources and reduces the environmental impact of plastic waste.*

Keywords: Plastic waste, Pyrolysis process, Plastic waste management, Pyrolytic oil & gasoline

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BIOGRAPHY

- I am Mrs R.N. Pantawane, assistant professor and head of civil department (HOD) at Jawaharlal Darda Institute of Engineering and technology, Yavatmal. I have specialization in environmental engineering. I have presented 9 papers in National/ International conferences and 17 papers in various National/International journals. I am life member of Indian society of technical education.

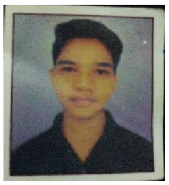
- I am mrsJayeshSune, Under graduate scholar, pursuing Bachelor of Engineering (BE), Department of Civil Engineering JDIET Yavatmal. I completed 12th in 2018 from AMV College Yavatmal. My date of birth is 4th November 2000.

- I am Miss Deepika Shukla, Under graduate Scholar, Pursuing Bachelor of Engineering (BE), Department of civil Engineering JDIET Yavatmal. She has completed Diploma in civil Engineering in 2020 from GPW. She was born on 13 July 2001.

- I am Miss Sakshi Yende, Under graduate scholar, pursuing Bachelor of Engineering (BE), Department of Civil Engineering JDIET Yavatmal. I completed 12th in 2019 from SSJC. My date of birth is 10th August 2001

- I am Miss Sakshi Jadhao, under graduate scholar, pursuing Bachelor of Engineering (BE), department if Civil Engineering JDIET Yavatmal. I completed Diploma in Civil engineering in 2019 from GPY. My date of birth is 7 may 2000.

- I am Miss Nayana Dinesh Meshram, Under graduate Scholar, Pursuing Bachelor of Engineering (BE), Department of civil Engineering JDIET Yavatmal. I am completed Diploma in civil Engineering in 2020 from GPY. My date of birth is 02 July 2001.



- I am Mr AniketJogdand Under graduate Scholar, Pursuing Bachelor of Engineering (BE), Department of civil Engineering in JDIET Yavatmal. My date of birth is 16 Nov 2000.

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- I am Rushikeshthakare, Under graduate scholar, pursuing Bachelor of Engineering (BE), Department of Civil Engineering JDIET Yavatmal. I completed 12th in 2017 from SNVMAS.

- I am MrYash Yadav Under graduate Scholar, Pursuing Bachelor of Engineering (BE), Department of civil Engineering in JDIET Yavatmal. My date of birth is 27 june 2001.

- I am Mr.Mujahid Shaikh Under graduate Scholar, Pursuing Bachelor of Engineering (BE), Department of civil Engineering in JDIET Yavatmal. My date of birth is 5 April 2000