

Study of the Pyrolysis of Organic Residues and Waste Water, for the Light Obtaining of Petroleum

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Abstract

The present work deals with pyrolysis of mixed samples of residual organic products for the production of volatile substances, like methane, hydrogen, ethane, propylene y propane, among others. The results showed that after the pyrolysis, the sample that was closer to the light oil composition (higher olefin and aromatic content) was that prepared mixing 30% of organic waste, 30% of cracking waste and 40% of fat and oils, pyrolyzed during 1 hour. With the samples prepared mixing 50% of organic waste, 50% of cracking waste, pyrolyzed during 1 and 2 hours, a higher quantity of isoparafins (2,2-Dimethyl Butane), was obtained because they contained a higher proportion of crackng residues than the other samples.

The pyrolysis was carried out to 300° C, since this was the temperature that showed better behavior in degrading the sample.

Keywords: Pyrolysis, Polyaromatics, volatiles, olefins, isoparafins.