



Separation and Identification of Compounds at Pyrolysis Oil of Bagasse at 300°C and 350 °C by using GC/MS

R. Farsi¹

1. Research Branch and Instructor of Wood and Paper Industrial Engineering Science , Brojerd
Branch (IAU)

Bagasse used in this study was obtained from the Pars Pulp & Paper Industry located in Haft Tape. The objective of this study was separation and identification of compounds produced of pyrolysis of Bagasse at fixed bed reactor under an inert gas atmosphere (nitrogen) at 300 and 350 °C. The pyrolysis temperature was ramped at 30 °C/s to end temperature (300 or 350 °C) and kept for 1 hour at this temperature. Separation and identification of compounds at bio-oil treated with N,o-bis (trimetil sailil) trifloeroasetamid (BSTFA) were done by using gas chromatography/ mass spectrometry (GC/MS) technique. 11 compounds were identified at 300 °C. The most important compound identified in Bagass at this range was Levoglocozan. And at 350 °C was Alpha etenil 1, naphtalen propanol. The other important compounds observed at 300 °C were pregninolone and 6 cloro , 2 metoxi (3 hidroxy propel) amino akridin and Ethanedioic acid and at 350°C were Alpha metilen benzene aseto nitril and Tetra deka metil cyclo hepta silloosan.

Keywords: Pyrolysis, Bagasse, Fixed bed reactor, GC/MS, BSTFA

¹ Corresponding author

Email: ramin_farsi@yahoo.com