## Proceeding Book of ISESER 2019

## O 117. INVESTIGATION OF FUEL PRODUCTION FROM PLASTIC WASTES IN PULPER

Fadim Yemiş<sup>1</sup>, Yunus Karakış<sup>1\*</sup>, Nilgün Yenil Harmancı<sup>1</sup>

<sup>1</sup>University of Celal Bayar, Faculty of Sciences and Arts, Department of Chemistry, 45030, Muradiye, Manisa

## E-mail: nilgun.yenil@cbu.edu.tr

**ABSTRACT:** Industrialization is growing rapidly in both the world and our country. This situation brings accompanying an environmental problem created by industrial wastes. Pollutants formed by industrial wastes constitute non-recyclable permanent environmental damages, if not interfered. Therefore, the recovery planning of these wastes is an important detail for the protection of the environment. In this case, it is significant that the industrial wastes are evaluated by turning into new and different products. Hence, it is possible to get useful products from paper industry. Any paper factory applies the recycling process for the collected wastepaper. The separation of these waste papers is made by using Pulper machine. The waste mixture obtained from the Pulper machine includes plastics contaminants also. Pulper waste is a kind of plastic waste that takes its name from this machine. In this study, pyrolysis of pulper waste and research on the production of liquid fuel with this pyrolysis method were carried out. Pulper's pyrolysis allows the production of gasoline, diesel and heating fuel. With this study, it is aimed to contribute to the national economy by recycling plastic which is one of the most harmful wastes for the environment and gaining new products in this way.

Keywords: Pyrolysis, pulper, plastic wastes, fuel-oil, environment