Synthesis and Application of Post-processing Agent in Tannery Sewage

Wei Kuang 1,*, Lihong Fu1, Xingfang Lu2

¹ School of Light Chemistry and Environmental Engineering, Shandong Institute of Light Industry, Jinan 250353, Shandong, P.R. China

² Zhe jiang Industry & Trade Polytechnic, Wenzhou 325003, Zhe jiang, P. R. China

*Corresponding Author, Email:kkwei261@yahoo.com.cn, Tel: 86-531-89102831

Abstract: The amphoteric sewage disposal agent was successfully prepared with modified maize-starch, acryloyl oxyethyl trimethyl ammonium chloride (DAC) and acrylamide(AM) as raw materials. The effects of monomer dosage, initiator amount, reaction time and temperature on the percent grafting (PG%) and grafting efficiency (GE%) were studied. And the post treatment of coagulation-contact oxidation in tannery sewage disposal was carried out by this graft copolymer as an auxiliary. The results showed that the most of the indexes such as total chrome, dyes, and seston of the tannery waste water were decreased significantly.

Key words: tannery sewage disposal; amphoteric; graft copolymer