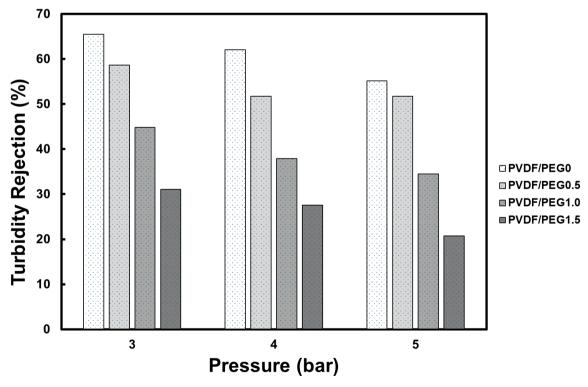


Figure 9 The effect of PVDF/PEG mass fraction and pressure on TSS rejection in the UF process



 $\textbf{Figure 10} \ \textbf{The effect of PVDF/PEG mass fraction and pressure on turbidity rejection in the UF process } \\$

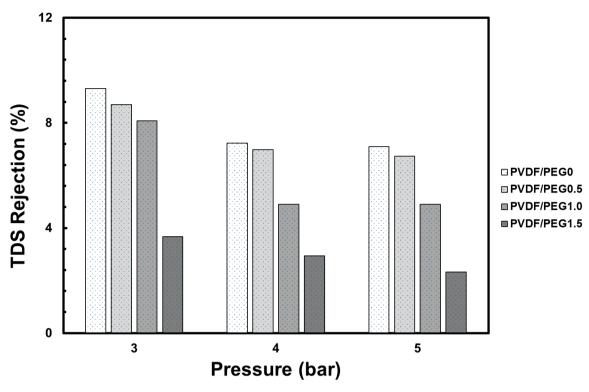
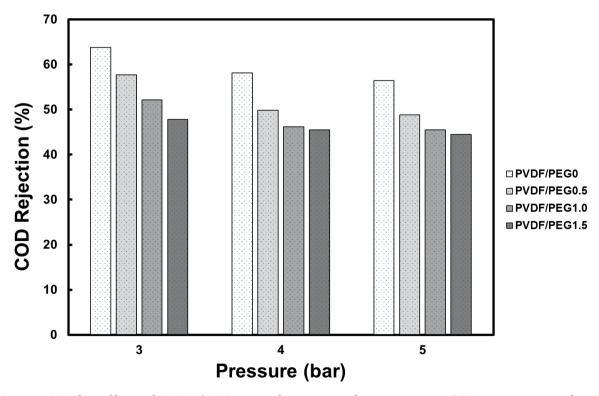


Figure 11 The effect of PVDF/PEG mass fraction and pressure on TDS rejection in the UF process



 $\textbf{Figure 12} \ \textbf{The effect of PVDF/PEG mass fraction and pressure on COD rejection in the UF process}$

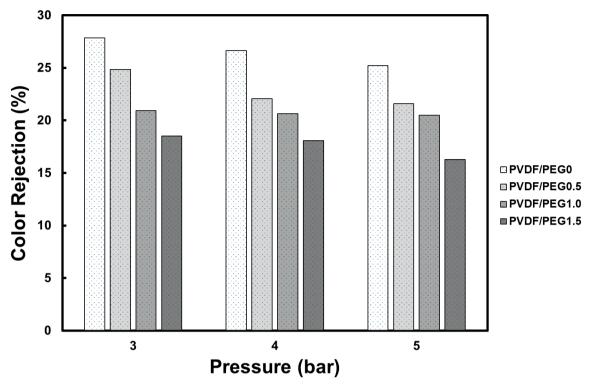


Figure 13 The effect of PVDF/PEG mass fraction and pressure on color rejection in the UF process

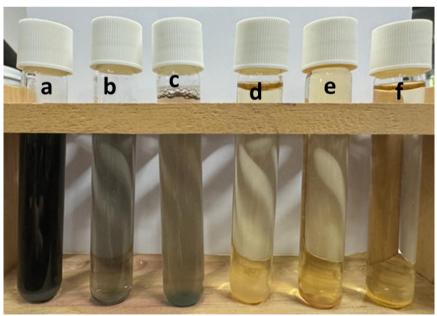


Figure 14 Comparison of batik wastewater (a) initial wastewater; (b) after 5x dilution; (c) after pH 4 setting; (d) after coagulation-flocculation process; (e) after pH 7 setting; (f) PVDF/PEG₀ ultrafiltration at operating pressure of 3 bar

Tabel 3. The characteristics of batik wastewater after UF

| Parameter | After dillution | After coagulation-flocculation | After UF | Government Regulation | Rejection (%) |
|-----------------|--------------------|--------------------------------|-------------|--------------------------|------------------|
| рН | 10.9 ± 0.2 | 4.1 ± 0.2 | 7.3 ± 0.1 | 6 - 9 | 4.4 ± 1.1 |
| COD (mg/L) | 1005 ± 12 | 174 ± 2 | 179 ± 16 | 150 | 59.4 ± 3.8 |
| TSS (mg/L) | 200 ± 5 | 8.0 ± 0.2 | 2.67 ± 1.5 | 50 | 70.4 ± 2.3 |
| TDS (mg/L) | 860 ± 8 | 690 ± 7 | 753 ± 10 | 2000 | 7.9 ± 1.2 |
| Color (Pt-Co) | 2394 ± 15 | 508 ± 5 | 393 ± 7 | NA | 26.6 ± 1.3 |
| Turbidity (FAU) | 190 ± 6 | 23.0 ± 1.0 | 11.3 ± 1.5 | 25 | 60.9 ± 5.3 |